

## CONTENTS

INTRODUCTION	v
QUESTIONS AND ANSWERS ABOUT <b>Educational Programs That Work</b>	vii
NATIONAL DIFFUSION NETWORK (NDN) FACILITATORS	xi
A. NDN-FUNDED DEVELOPER DEMONSTRATOR PROJECTS	A
SECTION A-1, Adult Education	A-1
SECTION A-2, Alternative Schools/Programs	A-2
SECTION A-3, Bilingual/Migrant Education	A-3
SECTION A-4, Career/Vocational Education	A-4
SECTION A-5, Early Childhood/Parent Involvement	A-5
SECTION A-6, Environmental Education/Science/Social Science	A-6
SECTION A-7, Organizational Arrangements/Administration	A-7
SECTION A-8, Preservice/Inservice Training	A-8
SECTION A-9, Reading/Language Arts/Mathematics/Writing	A-9
SECTION A-10, Special Education/Learning Disabilities	A-10
SECTION A-11, Arts/Communication/Technology	A-11
SECTION A-12, Gifted and Talented/Health/Physical Education/Special Interests	A-12
B. OTHER PROJECTS APPROVED BY JDRP	B
SECTION B-1, Adult Education	B-1
SECTION B-2, Alternative Schools/Programs	B-2
SECTION B-3, Bilingual/Migrant Education	B-3
SECTION B-4, Career/Vocational Education	B-4
SECTION B-5, Early Childhood/Parent Involvement	B-5
SECTION B-6, Environmental Education/Science/Social Science	B-6
SECTION B-7, Organizational Arrangements/Administration	B-7
SECTION B-8, Preservice/Inservice Training	B-8
SECTION B-9, Reading/Language Arts/Mathematics/Writing	B-9
SECTION B-10, Special Education/Learning Disabilities	B-10
SECTION B-11, Arts/Communication/Technology	B-11
SECTION B-12, Gifted and Talented/Health/Physical Education/Special Interests	B-12
C. APPENDIXES	C
Exemplary Projects Approved Since 1981 Edition	C-1
Programs That Utilize Technology	C-2
Joint Dissemination Review Panel Approved Projects with Limited Availability	C-3
ESEA Title I Exemplary Projects	C-6
Follow Through Projects	C-9
Handicapped Children's Early Education Outreach Programs	C-11
D. INDEXES	D
Exemplary Projects by State	D-1
Section Cross-Reference Index	D-9
Exemplary Projects, Alphabetical	D-17

Master Copy

# Educational Programs That Work

A CATALOG OF EXEMPLARY PROGRAMS  
APPROVED BY THE  
JOINT DISSEMINATION REVIEW PANEL

Ninth Edition  
1983

Prepared for the  
National Diffusion Network Division  
U.S. Department of Education  
by

© FAR WEST LABORATORY FOR EDUCATIONAL RESEARCH AND DEVELOPMENT

**Educational Programs That Work** was written largely by the staffs of the projects described, without whose cooperation the program outlines could not have been produced.

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## INTRODUCTION

The National Diffusion Network Division, Department of Education, is pleased to present the ninth edition of **Educational Programs That Work**, the annual National Diffusion Network catalog of exemplary educational programs. Current descriptions of all the programs described in previous editions are included, together with 51 new programs approved for national dissemination since publication of the eighth edition in 1981.

The term **exemplary** is conferred only after a project has been reviewed by the Department of Education's Joint Dissemination Review Panel. This panel examines objective evidence of effectiveness presented by each project. Positive endorsement of a project's claims of effectiveness by a majority of the attending Panel members constitutes approval, and a date of validation is assigned. Projects that continue development and submit additional evidence of effectiveness to the Panel carry two validation dates. All projects that are approved after publication of this edition of **Educational Programs That Work** will be described in the next edition.\*

The staff at the National Diffusion Network are dedicated to helping local school districts, intermediate service agencies, state departments of education, and postsecondary institutions in their continuing efforts to improve educational opportunities and achievement for all. To promote the transfer of successful programs from the development sites, the Department of Education, through the National Diffusion Network Division, supports the National Diffusion Network (NDN), a nationwide system established to help those involved in education acquire the materials and assistance they need to incorporate improved practices into their own programs.

The NDN operates through two kinds of projects -- Developer Demonstrators and Facilitators. Developer Demonstrators are exemplary projects that provide training, materials, and technical assistance to those who adopt their programs. NDN Facilitators (one or more in every state) are the principal link between Developer Demonstrators and those seeking new programs. They help to identify suitable NDN programs and assist with adopting, training, and operation. Many Facilitators also help local school districts with other planning. A list of NDN Facilitators follows this introduction. Facilitators should be contacted for additional information on any program described in this catalog.

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\*For further information about the Joint Dissemination Review Panel, contact the Executive Secretary, Joint Dissemination Review Panel, U.S. Department of Education, Room 722 Brown Building, 1200 - 19th Street, NW, Washington, DC 20036.

Currently, 99 of the JDRP-approved projects are NDN-funded Developer Demonstrators. Others receive funds from the Department of Education's Division of Follow Through and Office of Special Education to provide dissemination and adoption services. Adoption sites of many projects also provide assistance.

Numerous federal, state, intermediate, local, and postsecondary agencies share responsibility for improving education through nationwide dissemination. A major goal of the NDN is to promote cooperation among the many public agencies that provide educational services to the nation's children. The Department of Education encourages the broadest possible use of programs that proved successful, and this catalog is one means to that end.

QUESTIONS AND ANSWERS --  
**Educational Programs That Work**

The series of questions and answers that follow will help you to become more familiar with the ninth edition of **Educational Programs That Work**. A few minutes spent reviewing these questions and answers will enable you to appreciate its full potential.

- Q. WHAT IS THE PURPOSE OF **Educational Programs That Work**?
- A. **Educational Programs That Work**, an overview of all educational programs approved for national dissemination by the federal Joint Dissemination Review Panel, provides basic information on new methods and programs to those who wish to improve their educational programs and services. It introduces the National Diffusion Network (NDN), its Facilitators and Developer Demonstrators, and their services to schools, institutions, and agencies that want to implement these programs, and it enables the U.S. Department of Education to acknowledge the achievements of their developers.
- Q. WHAT IS IN **Educational Programs That Work**?
- A. **Educational Programs That Work** describes all programs approved by the JDRP since its inception in 1972. Programs fall into three categories: active projects that receive funds from the National Diffusion Network to support dissemination efforts; active projects that do not receive funds from the NDN to support dissemination efforts; and inactive projects that offer only limited services. This edition of **Educational Programs That Work** identifies all 362 programs approved by the JDRP between 1972 and October 1982.
- Q. HOW IS **Educational Programs That Work** ORGANIZED?
- A. This catalog is divided by two categories -- programs funded by NDN and programs not funded by NDN. The descriptions of the funded programs appear in the front part of the book on white paper and the nonfunded program descriptions appear in the second part on blue paper. Within these two categories, the projects are grouped by section and then arranged alphabetically by project title.
- Q. HOW ARE THE PROGRAM DESCRIPTIONS ARRANGED IN THE 12 SECTIONS?
- A. Within each of these two parts, the projects are divided into 12 sections and then arranged alphabetically by project title. Each section groups active projects with a common focus:

- Section 1, Adult Education
- Section 2, Alternative Schools/Programs
- Section 3, Bilingual/Migrant Education
- Section 4, Career/Vocational Education
- Section 5, Early Childhood/Parent Education
- Section 6, Environmental Education/Science/Social Science
- Section 7, Organizational Arrangements/Administration
- Section 8, Preservice/Inservice Training
- Section 9, Reading/Language Arts/Mathematics/Writing
- Section 10, Special Education/Learning Disabilities
- Section 11, Arts/Communication/Technology
- Section 12, Gifted and Talented/Health/Physical Education/  
Special Interests

Q. IS EACH PROGRAM REPRESENTED IN ONLY ONE SECTION?

- A. Each program description is placed in only one of the 12 sections, as determined by content. Because many programs could well have been placed in two or more sections, a sectional cross-reference index listing all programs under all appropriate headings is provided on page D-9.

Q. HOW CAN I LOCATE A DESCRIPTION FOR A GIVEN PROGRAM IF I KNOW ONLY THE NAME OF THE PROGRAM?

- A. The alphabetical index on pages D-17 through D-22 lists all JDRP-approved programs by title.

Q. HOW CAN I LOCATE A DESCRIPTION FOR A GIVEN PROGRAM IF I KNOW ONLY THE STATE IN WHICH IT IS LOCATED?

- A. The index of exemplary projects by state on page D-1 lists all JDRP-approved programs by the state in which they are located.

Q. IS THERE ANY OTHER HELPFUL INFORMATION I SHOULD BE AWARE OF BEFORE I BEGIN TO USE THE CATALOG?

- A. The catalog contains five appendixes which provide the following information:
- The list of Exemplary Projects Approved Since Fall 1981 Edition, on page C-1, identifies new projects.
  - The list of Programs Utilizing Technology is found on page C-2.
  - The list of JDRP-Approved Projects With Limited Availability, pages C-3 through C-5, identifies inactive projects.
  - The list of ESEA Title I Exemplary Projects, pages C-6 through C-8, identifies projects that received funds for development under Title I of the Elementary and Secondary Education Act [recently replaced by Chapter I of the Education Consolidation and Improvement Act (ECIA)].

- The list of Follow Through Projects, pages C-9 and C-10, identifies projects that received funds for development from the U.S. Department of Education's Division of Follow Through.
- The list of Office of Special Education (OSE) Handicapped Children's Early Education Outreach Programs, page C-11, identifies projects that receive dissemination funds from the U.S. Department of Education's Office of Special Education.

Q. IF I WANT ADDITIONAL INFORMATION, SUCH AS DETAILS ON COSTS OF INSTALLING AN NDN PROGRAM IN MY SCHOOL, HOW DO I OBTAIN IT?

A. All entries include the name of a contact person who can answer questions about the program. A mailing address and a telephone number are included in the contact statement. NDN Facilitators can also give detailed information.

Q. HOW CAN I GET MORE INFORMATION ABOUT THE NDN?

A. Contact your state or regional NDN Facilitator to learn more about the NDN and its programs. A description of the Facilitator's role and a list of Facilitators begins on page ix. You may also contact the federal office that administers the National Diffusion Network:

National Diffusion Network Division  
 U.S. Department of Education  
 1200 - 19th Street, NW  
 Room 714 F  
 Washington, DC 20036

Division telephone numbers:

For questions about Developer Demonstrator projects,  
 (202) 653-7003  
 For questions about Facilitator projects,  
 (202) 653-7006



All programs described in **Educational Programs That Work** have been approved by the Department of Education's Joint Dissemination Review Panel. Approval by the Panel means that panel members have examined objective evidence of effectiveness submitted by the developer of the program and are convinced that the program has met its stated objectives at the original development or demonstration site. In addition, the program developer has demonstrated the likelihood that the program will meet the educational needs of others in similar locations.

Programs described in the first section of this book are funded as Developer Demonstrator projects in the National Diffusion Network. These Developer Demonstrator projects will provide technical assistance for staff members in both public and private schools that choose to install any one of the 99 programs in the NDN. Local districts must pay for installation and operational costs.

Programs described in the second section have been approved by the Joint Dissemination Review Panel but are not funded as Developer Demonstrators in the NDN.

Some programs funded by the NDN are in the affective domain. Because of sincere differences of opinion among educators as to whether or not schools should be installing these programs, potential users are strongly urged to examine these programs carefully (including the instructional materials) and to obtain the approval of the appropriate local decision-making body before the program is installed. Local school boards, or other local decision-making administrators, should be given sixty days to review a program before deciding whether or not to adopt it.

The National Diffusion Network was established upon the belief that there are few problems encountered by schools that have not been solved successfully in some other location. NDN's role is to find those successful solutions and to bring them to the attention of potential users who may then choose from the array of programs that particular program that meets the school district's need, philosophy, and resources.

## **NATIONAL DIFFUSION NETWORK (NDN) FACILITATORS**

To help public and private schools and districts identify suitable National Diffusion Network programs, the National Diffusion Network Division, federal sponsor of the NDN, supports Facilitator projects in every state, the District of Columbia, the Virgin Islands, and Puerto Rico.

Facilitators work with schools and institutions to define their problems, determine which NDN programs hold promise for solving those problems, and help with formal adoption of NDN programs. Facilitators can supply additional information on all of the programs described in this catalog, and they can arrange for demonstrations. When a school or institution decides to adopt an NDN program, Facilitators can make arrangements for training. Many Facilitators also provide follow-up and perform or oversee monitoring and evaluation at adopter sites.

NDN Facilitators are based in local school districts, intermediate service agencies, state education agencies, and private nonprofit organizations. The funds that Facilitators can draw on vary from state to state, and their funding policies vary as well. In some states, schools and districts that adopt NDN programs can be reimbursed by the Facilitator for such start-up costs as instructional materials and teacher training. In other states, the costs of travel to awareness conferences or demonstration sites can be covered by the Facilitator. Readers are encouraged to telephone or visit their NDN Facilitators to learn what services are available.

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**NDN FUNDED DEVELOPER DEMONSTRATOR PROJECTS**

- SECTION A-1: ADULT EDUCATION
- SECTION A-2: ALTERNATIVE SCHOOLS/PROGRAMS
- SECTION A-3: BILINGUAL/MIGRANT EDUCATION
- SECTION A-4: CAREER/VOCATIONAL EDUCATION
- SECTION A-5: EARLY CHILDHOOD/PARENT INVOLVEMENT
- SECTION A-6: ENVIRONMENTAL EDUCATION/SCIENCE/  
SOCIAL SCIENCE
- SECTION A-7: ORGANIZATIONAL ARRANGEMENTS/ADMINISTRATION
- SECTION A-8: PRESERVICE/INSERVICE TRAINING
- SECTION A-9: READING/LANGUAGE ARTS/MATHEMATICS/WRITING
- SECTION A-10: SPECIAL EDUCATION/LEARNING DISABILITIES
- SECTION A-11: ARTS/COMMUNICATION/TECHNOLOGY
- SECTION A-12: GIFTED AND TALENTED/HEALTH/PHYSICAL  
EDUCATION/SPECIAL INTERESTS

SECTION A-1: ADULT EDUCATION\*

ADULT PERFORMANCE LEVEL PROJECT (APL) -- Texas . . . . . A-1.3  
project CLASS (Competency-based Live-Ability Skills) -- California . . . . . A-1.4

\*See Sectional Cross-Reference Index, p. D-9, for related programs.

## **PROJECT** ADULT PERFORMANCE LEVEL PROJECT (APL)

A competency-based system of education that combines the diagnosis, prescription, teaching, evaluation, and credentialing of life-coping skills.

**target audience** Approved by JDRP as a program for general English-speaking population over 18. Curriculum materials for undereducated adults also have implications for elementary and secondary curricula, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** Project research measured specified minimum competencies an adult must possess to function successfully.

Based on the objectives identified by APL research, a complete curriculum applies reading, writing, speaking-listening-viewing, computation, problem-solving, and interpersonal relations skills to the content areas of consumer economics, occupational knowledge, health, community resources, and government and law. For example, adults learn how to read job descriptions or open savings accounts. The curriculum provides the activities and materials needed to teach toward each of the APL life-coping skills objectives. Printed materials are supplemented with cassette tapes. A pre/post diagnostic instrument for each objective is also included.

The APL competency-based high school diploma program offers adults a relevant alternative to the conventional four-year high school program and to the General Educational Development Test (GED). Adults can earn a regular high school diploma by demonstrating competencies gained through life skills-oriented adult education programs in combination with those gained through experience. The basic steps to the competency-based diploma are: placement tests, the competency-based curriculum described above (if indicated by scores on placement tests), a series of life-skills activities, and demonstration of an entry-level job skill or postsecondary education skills or skills in home management/maintenance.

APL staff offer awareness, training, and follow-up technical assistance to adopters.

**evidence of effectiveness** Program graduates demonstrate functional competence by scoring at APL level 3 in every objective within the five APL Content Areas, and by showing 100% competence in Life Skills Activities. Six-month follow-up surveys of graduates indicate higher levels of self-satisfaction. Graduates frequently recommend the program to others.

**implementation requirements** The APL curriculum can be adopted by a unit as small as a single teacher. The APL Diploma Program can be adopted by a unit as small as two persons performing counseling, teaching, and assessing functions. Preimplementation training conducted by APL staff is required. Reassignment of existing personnel usually suffices.

**financial requirements** Materials: Assessment materials available from Media Systems, Inc. The full APL curriculum is available from Harcourt Brace Jovanovich, Inc.

**services available** Awareness materials are available at no cost. Visitors are welcome anytime by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (adopter pays only its own costs). Training is also available at adopter site (trainer travel and per diem must be paid). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** Elaine Shelton, 3-D Project; Adult Performance Level Project; University of Texas at Austin; College of Education; Annex S-21; Austin, TX 78712. (512) 471-4623.



**PROJECT** PROJECT CLASS (Competency-based Live-Ability Skills)

A series of competency-based modules for teaching survival skills to adults of low-level reading ability.

**target audience** Approved by JDRP for adults reading at 0-8 grade levels. This program has been used in high schools for basic skills remediation; in continuation schools, middle schools, and correctional institutions; and by programs for the mentally and physically handicapped, community outreach programs, and the military, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** Adult students often have difficulty in transferring academic learning from classroom settings to situations encountered outside school. To address this problem, Project CLASS has developed two series of competency-based modules -- one for use with teacher-directed instruction, one for independent study -- providing instruction in survival skills to adult students at low (0-8 grade equivalent) reading levels. In classroom situations, students learn survival skills while improving their reading, writing, and math. Students who read at a higher level may use independent modules to meet course requirements or to earn elective credit.

The modules, which address useful topics in consumer economics, community resources, health, government and law, interpersonal relationships, and occupational knowledge, contain between one and nine objectives (average: four). Objectives are clearly stated, taught, and tested and show participating teachers, students, and others what the student has accomplished. Sixty modules have been developed, divided equally between APL level I (0-4 grade equivalent) and II (5-8 grade equivalent). To enable students to learn concepts at their own reading level, level I modules include two versions of the same concepts, one written at grade 0-2 reading level, the other at grade 3-4 level. Level II modules cover different objectives. Each module includes a teacher's guide (containing objectives, concepts, skills, teaching/learning strategies, resource list, evaluation report, annotated bibliography, answer keys, and specially written teacher's resources), student handouts, and a pre/posttest. An average of six hours (one to three class sessions) is required to complete a module.

Modules can also be used to provide remediation for the APL and SHARP tests.

**evidence of effectiveness** Field testing using a locally developed instrument in a pre/post design to measure mastery of module objectives was conducted in fall 1979 at Adult Basic Education and English as a Second Language programs at four California sites ranging from rural (Clovis) to highly urban (San Diego). Pretest data were used to remove bias in favor of treatment classes. Differences between treatment and control groups in gain in percent of students mastering objectives were highly significant, as reflected in differences in median gains at individual sites (e.g., Clovis: 80 vs 0; San Diego: 20 vs 0).

**implementation requirements** Adopters must purchase a set of CLASS and LifeSchool modules and provide inservice training and staff development time for teachers involved. Program can be implemented by a single teacher, an entire school, or a district. Facilities for reproducing tests and handouts are needed. No other special facilities or equipment are required.

**financial requirements** CLASS modules: \$225 per set (Level I Independent Study, \$75; Level II Classroom, \$75; Level II Independent Study, \$75). LifeSchool Level I Classroom replaces CLASS Level I Classroom modules. LifeSchool Level I Classroom: four binders \$225 (or \$59.50 each) including a classroom management manual; available from Pitman Learning, Inc. Several classes can use same materials. Two-day implementation workshop at adopter site: \$300 plus travel expenses. Continuation costs are limited to reproduction of tests and handouts.

**services available** Awareness materials are available at no cost. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted only at adopter site (all expenses must be paid, including trainer's fee, travel, and per diem). Implementation and follow-up services are available to adopter.

**contact** Mary Rich, Project Director, or Lorraine Ruston, Assistant Director; Clovis Adult School; Clovis Unified School District; 914 Fourth St.; Clovis, CA 93612. (209) 299-4367 or -2961.

SECTION A-2: ALTERNATIVE SCHOOLS/PROGRAMS\*

ENCE-BASED CAREER EDUCATION (EBCE) [Far West Laboratory (FWL)] -- California . A-2.3  
t FAR (Freshman Attrition Reduction) -- Delaware . . . . . A-2.4

**PROJECT** EXPERIENCE-BASED CAREER EDUCATION (EBCE) [Far West Laboratory]

A competency-based alternative program that asks students to step outside the classroom walls for approximately half of their school time.

**target audience** Approved by JDRP for students of all abilities grades 9-12. This program has also been used with grades 7-8, with adults, and with disadvantaged, migrant/bilingual, gifted, talented, and handicapped populations, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** EBCE is a secondary education program that uses the entire community as a school. Learning is accomplished through carefully planned activities that capitalize on the knowledge and expertise of business people and other community resources. These activities effectively combine academic learning, basic skills, and career awareness.

EBCE can be a full-time alternative program distinct from the traditional school (even located off-campus), or it can be operated as an in-school option to supplement traditional instruction. Teachers become coordinators of student learning and help students select and use community sites (business, industrial, labor, cultural, professional, governmental, and environmental) as primary resources to meet curriculum objectives. These community resources are developed and analyzed by staff so information about the nature of the resources and possible learning activities is available to students. Preliminary exploration is followed by intensive visits to resources. Using the experience of these visits, as well as a variety of traditional and nontraditional resources, students complete individualized projects they design under staff supervision, that incorporate specific academic, life skill, and career development objectives. Program emphasis is on skills needed for lifelong learning. Students are held accountable for their own time, learning, and behavior, with expectations of increasing maturity and responsibility. Program handbooks and materials offer guidelines within which students and staff make decisions as well as tools for documenting students' plans and progress. The program usually relies on an advisory committee composed of parents, students, and representatives of education, business, and labor. Students can earn both required and elective credit.

**evidence of effectiveness** Comprehensive formative and summative evaluation using pre- and posttest measures on program and comparison groups revealed student growth in basic skills, self-awareness, career awareness, and career development skills, in life skills, and in motivation to learn. Parents of EBCE students and community resource persons assessed the program positively. Summaries of evaluation findings available on request.

**implementation requirements** Communities adopting EBCE report greater success when staff has participated in several days of program design and planning plus five days of training in the new procedures this innovation requires. It is desirable for the new staff to visit an operating EBCE program. Inservice consultation after the program has been operating for a while has been found useful. Some programs use separate facilities as the EBCE learning center; others remodel or use existing building space. Student transportation options must be examined, as well as time and resources for community site recruitment and utilization to adopt the program.

**financial requirements** EBCE programs operate at approximately the average secondary per-pupil costs in most districts.

**services available** Descriptive materials are available at no cost. Operational handbooks and other program materials available at cost. Awareness conferences can be arranged (cost to be negotiated). Visits to a demonstration program in most regions can be arranged. Planning assistance, training, and on-site follow-up technical assistance are available through a network of trainer-consultants; these services are usually available at no cost when several adoptions are involved (otherwise costs are negotiable and will depend on travel schedules, geographical region, and other factors).

**contact** Ted Kildegaard, EBCE Dissemination Project; National Experience-Based Career Education Association; 1926 Divisadero St.; San Francisco, CA 94115. (415) 567-2330. Frances L. Ruhlín, Project Director, EBCE, 701 East Main Street, Lexington, KY 40502. (606) 259-1411.

**PROJECT** Project FAR (Freshman Attrition Reduction)

An intervention strategy of curriculum and counseling to reduce dropout rate and improve academic standing of college freshmen.

**target audience** Approved by JDRP for postsecondary educational institutions that have significant student attrition problems, especially in the first year.

**description** In response to a freshman dropout rate of 41%, the Delaware State College developed the Attrition Reduction Program to create student awareness of the academic and non-academic factors contributing to attrition, and to offer services to facilitate adjustment to academic life. The three components of the program are:

**Prevention:** A one-credit, weekly orientation class is required of all new freshmen. Based on a proven affective approach, activities are designed to improve self concept, study attitudes, and educational values. Methods include small-group discussion, role playing, skill training, and other experiential activities. Behavioral objectives are evaluated by weekly quizzes.

**Early Warning:** Likely dropouts are identified using Astin's Instrument (Worksheet for Predicting Chances of Dropping Out) and are recruited for rehabilitation by counselors, instructors, and support staff.

**Rehabilitation:** This component provides professional counseling and peer tutoring. While not compulsory, an aggressive outreach program quite often is necessary to motivate freshmen to participate. The Counseling Center sponsors workshops and seminars to explore psychological factors such as test-taking anxiety and the relation of self-concept to achievement.

The college's effort was cited by the American Council on Education as one of eight model programs for dealing with student dropout behavior.

**evidence of effectiveness** Statistically, Project FAR has shown that freshman attrition can be reduced by as much as 20% by focusing on non-academic factors.

**implementation requirements** The adopting college needs to implement, or have in existence, a freshman orientation course for credit with appropriate course instructors and should be able to provide a maximum class size of 30. Supportive services such as tutoring, counseling, and dormitory outreach should also be available. College staff will also be responsible for administering the dropout prediction survey.

**financial requirements** One copy each of the training and instructional manuals should be purchased by adopting colleges. Copies of freshman orientation class and workshop activities should be distributed to all participating college staff. Total cost approximately \$50.

**services available** Awareness materials are available at no cost. Visitors are welcome at the project site anytime by appointment. Project staff are available to attend out-of-state awareness sessions (costs to be negotiated). Training is available at the adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** Dr. Randall Trawick, Counseling Department; Delaware State College; Dover, DE 19901. (302) 736-5106, -5107. Or, Mr. David Reynard; Office of Institutional Research; Delaware State College; Dover, DE 19901. (302) 736-5201, -5202.

SECTION A-3: BILINGUAL/MIGRANT EDUCATION\*

INDIVIDUALIZED BILINGUAL INSTRUCTION (IBI) -- Washington . . . . . A-3.3  
MIGRANT STUDENT RECORD TRANSFER SYSTEM (MSRTS)/A COMPUTER LINK OFFERING VARIABLE  
EDUCATIONAL RECORDS (CLOVER) -- Arkansas . . . . . A-3.4

\*See Sectional Cross-Reference Index, p. D-9, for related programs.

**PROJECT** INDIVIDUALIZED BILINGUAL INSTRUCTION (IBI)

A comprehensive instructional program for preschool through third-grade children; systematic training for instructional staff in skills necessary for implementation of the instructional program, including classroom management.

**target audience** Approved by JDRP for bilingual children, preschool through grade 3, teachers, and aides.

**description** Originally used with children whose primary language was Spanish, the program has been successfully extended to other languages. Trained paraprofessionals, supervised by professional staff, provide instruction to children in oral language, reading, math, handwriting, and cultural heritage. Paraprofessionals work with groups of six to eight youngsters. The program is individualized, although some instruction is conducted with homogeneous small groups.

Training for instructional staff teaches classroom management and provides skills necessary for implementing each curriculum area. Training covers the use of observation instruments for comparing actual teaching skills with criterion performance levels. The monitoring system measures maintenance of teaching skills and adequacy of children's progress through curriculum mastery tests.

In English, the Language Component uses SRA DISTAR Language I and II (Science Research Associates, Inc.). Level I was translated into Spanish for the project by Bilingual Mini-Schools, which is now making the Spanish edition available at cost for dissemination to other sites. In English, the Reading Component uses Phonics Primer (Student Behavior Lab), followed by the Sullivan Programmed Reading Series (McGraw-Hill). In Spanish, the Reading Component uses the project-developed primer Comenzando a Leer to prepare children to work in Aprendiendo a Leer (Behavioral Research Laboratories). The Math Component uses Singer Sets and Numbers (Random House) with project adaptation. The Academic Preschool Component uses project-developed pre-DISTAR language (Spanish and English), pre-math (Spanish and English), and cultural activities; the University of Kansas Follow Through handwriting levels; and reading primers and English and Spanish DISTAR, identified above.

**evidence of effectiveness** In 1973, children's concepts were measured using the Cooperative Preschool Inventory before and after 200 days in the program. Pre and post percentile scores were as follows: age 3, 38/55; age 4, 56/72; age 5, 52/74. Corresponding data cumulative through 1977: age 3, 34/69; age 4, 35/70; age 5, 48/75.

**implementation requirements** Personnel: one teacher or aide for every six to eight children for several groups during the day); a trainer for on-site inservice training; a part-time tester (can be paraprofessional). Training: two days for every curriculum component adopted. Five days for trainer providing inservice to adopting staff. Also, adopters must furnish certain monitoring and test data to developer.

**financial requirements** Training, curriculum, and testing materials are required for every component adopted. Free brochures and Sample Material Packets are available from the Dissemination Office. Adopters pay travel and per diem expenses of project staff providing adopter site services. Developer can send staff either from Texas or from Washington state.

**services available** Awareness materials are available at no cost. Visitors are welcome anytime by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (costs to be negotiated). Training is also available at adopter site (trainer travel and per diem must be paid). Implementation and follow-up services are available to adopters (travel and per diem must be paid).

**contact** Dianne Barr-Cole, Dissemination Coordinator; IBI; P.O. Box 2367; Pasco, WA 99302. (509) 547-8441.

**PROJECT**

MIGRANT STUDENT RECORD TRANSFER SYSTEM (MSRTS)/  
A COMPUTER LINK OFFERING VARIABLE EDUCATIONAL RECORDS (CLOVER)

An education and health system for migrant children, preschool-12.

**target audience**

Approved by JDRP as a program for migrant children, preschool through secondary, and teachers, teacher's aides, nurses, counselors, and administrators.

**description**

The Migrant Student Record Transfer System (MSRTS)/A Computer Link Offering Variable Educational Records (CLOVER) is a computerized system with 162 terminals located in 44 states. The system serves 49 states, Puerto Rico, and the District of Columbia. Through the MSRTS/CLOVER the process of receiving, storing and transmitting health and educational information is available to all schools, education and/or health organizations that serve migrant children. Teachers, nurses, aides, administrators, and others have at their disposal educational and critical health data delivered to their state within 24 hours of a child's enrollment. In four days or less, an in-depth record of educational and health data will be received at the state's designated location. This information may direct the adopter in formulating strategies to assist the migrant child in achieving academically. Curricula being taught to migrant children varies according to the established needs of migrant children at their various levels. The system's computer is programmed to provide skills-based information in the areas of reading, math, early childhood, and oral language. The health system provides the most updated reporting of health problems to insure continuity of health services by using the International Classification of Diseases (ICD.9.CM) and the Physicians's Current Procedural Terminology (CPT), 4th Edition.

**evidence of effectiveness**

Effectiveness and utilization of the information received by the user is controlled and evaluated by each state. A statistical survey in 1981 showed 21,954 schools participating in the system; 1,178,002 critical health data messages were sent; 1,814,201 academic records were sent; 1,447,322 medical records were sent; and 1,268,813 skills records were sent. These figures have increased each year since 1976. A 1980 study of turnaround-time showed: 30.5% of the records sent were received by the user in two days, 36.1% in three days, 19% in four days, and 14% did not respond. 1.4% of the records were received in more than four days.

**implementation requirements**

Interested adopters who have migrant children in their school or other education or health agency may contact the state director of migrant education in their state. If this information is not available, write or call the contact person listed below. Implementation requirements will be based on the level of participation.

**financial requirements**

Training packets are available at no cost. Training and follow-up are available at no cost. Other agencies outside the U.S. Department of Education that serve migrants may use computer time at a negotiated cost.

**services available**

Awareness materials are available. Visitors are welcome at project sites by appointment, Monday through Friday, 8:00 a.m. through 4:30 p.m. Training is conducted at the project site (adopter paying its own costs). If training is conducted out of the state of Arkansas, costs are to be negotiated. Quarterly workshops are held in February, May, August, and November.

**contact**

Nolan McMurray, Administrator for Special Services and Technical Advisor; Migrant Student Record Transfer System; Arch Ford Education Building; Capitol Mall, Little Rock, AR 72201.  
(501) 371-1857.

SECTION A-4: CAREER/VOCATIONAL EDUCATION\*

project CAP: Boston Mountains Educational Cooperative's Career Awareness Program  
-- Arkansas. . . . . A-4.3  
CAREER DEVELOPMENT PROGRAMS -- Ohio. . . . . A-4.4  
CAREER PLANNING SUPPORT SYSTEM -- Ohio . . . . . A-4.5  
project DISCOVERY -- Iowa. . . . . A-4.6  
project EQUALITY -- Washington . . . . . A-4.7

\*See Sectional Cross-Reference Index, p. D-9, for related programs.



**PROJECT**

PROJECT CAP: Boston Mountains Educational Cooperative's Career Awareness Program

A program for infusing career awareness into the regular elementary curriculum, emphasizing the relationship between careers and basic academic skills.

**target audience**

Approved by JDRP for students of all abilities, grades 1-6; supplementary Learning Activity Packets approved by JDRP for grades 7 and 8. A kindergarten program is available, but no evidence of effectiveness has been submitted to or approved by the Panel. The program now operates primarily in grades 1-6.

**description**

Career awareness becomes an integral part of the total curriculum of pupils grades K-8 through the use of Learning Activity Packets (LAPs). For each grade level, there are 32 different packets representing 30 occupations. Each packet includes a career story incorporating the concepts of work as a way of life, tools, tasks, training and education, traits, and economics. Pupils are provided the opportunity to exercise individual preferences, to use problem-solving skills, to be creative, and to do some decision making. Each packet also includes an academic skill. The worker's need for this skill, teaching facts or information, and practice activities for developing or improving pupil skill are provided in each packet. A posttest (review) covering the career concepts completes the packet. Care has been taken to show students that school subjects are important and related to the world of work.

The packets are designed to be completed in 15-30 minutes. They may be used to introduce, review, or reinforce their companion academic skills at the appropriate times.

Key Elements: teachers and administrators have received inservice training in infusing Project CAP into the classroom; sufficient materials have been provided for all participating teachers and pupils; pretest is administered (posttest planned for); teachers are using materials in accordance with plans made at training workshops.

**evidence of effectiveness**

Project pupils show a significantly greater (.01 level) awareness of careers than students in comparable schools not infusing a career awareness program into their curricula (Evaluative Research Associates' Occupational Career Concepts and Worker Activities Tests, administered in 1976). This shows that at minimal cost and without adding time to the daily schedule, infusion of career concepts into a regular academic skill area results in greater career awareness.

**implementation requirements**

Project staff provide a workshop (of one or more days) for adopting district teachers and administrators and return for monitoring or further inservice visits if requested. Experience has shown that administrator and teacher support results in a strong program.

**financial requirements**

A set of 32 CAPS-LAPs (25 copies of each) for a single grade level, \$105. Teacher's manual, \$5. Principal's or coordinator's manual, \$3. Student materials may be purchased by the adopter.

**services available**

Awareness materials are available at no cost. Visitors are welcome any time by appointment at project site and additional demonstration sites in home state. Project staff are available for out-of-state awareness meetings (costs to be negotiated). Training is conducted only at adopter site (trainer travel and per diem must be paid). Follow-up services are available to adopters (costs to be negotiated).

**contact**

Jeanne Leffler, Director, or Martha Rothrock, Assistant Director; Box 13; Greenland, AR 72737. (501) 443-3336.

**PROJECT** CAREER DEVELOPMENT PROGRAMS

A career education effort that exemplifies the integrated approach to career development by utilizing career education activities as part of the ongoing curriculum.

**target audience** Approved by JDRP for students of all ability levels in grades K-10. This program has been used in other settings with grades 11 and 12, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** This program continually demonstrates the relationships between basic curriculum skills and eventual worker roles. The program conforms to the State of Ohio model; thus, it provides for three career development stages: Career Motivation (K-6), Career Orientation (7-8), and Career Exploration (9-12). The motivation program develops positive attitudes toward task completion, pride in accomplishment, awareness of the variety of workers, the dignity of work, and self-worth. During the orientation stage, students study the relationship between basic curriculum skills and occupational areas, worker characteristics, and identify personal work values, interests, and abilities. The exploration phase introduces in-depth studies in occupational areas of student choice, and builds on realistic career exploring experiences with a heavy emphasis on decision making.

During all three stages of the program, seven developmental areas are integrated into all school subjects by teachers. These are: education and training, the individual and environment, world of work, economics, self, employability and work adjustment, and decision making. A major element of the program is the involvement of community members and workers of all types as collaborators with educators in preparing youth for entry into a changing work force and the skills needed to prepare for productive participation in a highly technical society.

**evidence of effectiveness** Process and product evaluation was developed and conducted by Policy Studies Education. Testing included 2,000 students in program and nonprogram schools. Results indicated that involvement in career development activities was responsible for knowledge gains being consistently higher for students in cognitive as well as affective areas.

**implementation requirements** A small group of teachers, a single school, or an entire district can adopt the program. Local project coordination can be provided by a teacher, counselor, principal, or an assigned coordinator, depending on the size of the program. Successful implementation depends on intensive staff inservice where concepts, materials, and sample activities are introduced. The project makes extensive use of community resources by means of special ongoing community-based programs involving local business, industry, and labor.

**financial requirements** Start-up costs will vary depending on the intensity of activity expected in the beginning year and the number of teachers involved in the adoption. A minimum suggestion for initial training and purchase of materials for a building would be \$3,000. The Akron Schools serve 26,000 students with a budget of \$10 per student.

**services available** Awareness materials are available free. Visitors are welcome at project site any time by appointment. A trainer is available to conduct awareness training (travel expense to be paid by requesting agency). Awareness training available on-site at no cost. Implementation training is conducted during the normal school year at no cost (adopted district to pay travel expenses only). Follow-up services are available.

**contact** Nick Topogis, Director of Career Education Programs, or Jerry Ryan, Project Coordinator;  
65 Steiner Ave.; Akron, OH 44301. (216) 434-3404.

**PROJECT** CAREER PLANNING SUPPORT SYSTEM

A set of materials for implementing a comprehensive high school career development program.

**target audience** Approved by JDRP for high school staff.

**description** The Career Planning Support System was developed between 1971 and 1973 by the National Center for Research in Vocational Education in response to an apparent need for the application of systems methodology to career education. The result is an extensive set of printed materials and filmstrip-tapes describing a comprehensive educational framework and procedures that school staff can use to set up an accountable, school-wide high school career development program. (Career development has been defined as the acquisition of nontechnical skills needed for a person to be able to work.)

Five elements are considered essential for a systematic planning process: a structure that makes provision for leadership and active committee work, assessment of local career education needs and use of the results in establishing the program, a set of career development goals listed in order of importance, behavioral objectives related to these goals, and activities for students related to these objectives. The printed materials and filmstrip-tapes provide the necessary training to plan, implement, and evaluate a comprehensive career development program.

**evidence of effectiveness** Pre/posttesting of experimental and control groups of high school staff and students in 19 schools with project-developed tests showed significant gains for experimental schools in setting up a systematic planning procedure for career development programs. The experimental school career development programs evidenced higher quality and higher probability of improving students' career development skills.

**implementation requirements** Use of the complete set of printed materials and filmstrip-tapes by school staff and students for one academic year is required. A designated CPSS Coordinator directs the CPSS implementation with the help of a four- to eight-member steering committee, two temporary task forces, and the cooperation of the principal and other administrative personnel.

**financial requirements** Personnel costs for one staff member (one-third to one-half time); cost of a complete set of materials, approximately \$80; cost of consumables, approximately \$50.

**services available** Awareness materials are available at no cost. Inquiries are welcomed by contact persons and at demonstration sites. Training can be provided at adopter site (costs to be negotiated).

**contact** Ann Nunez or Harry Drier; National Center for Research in Vocational Education; 1960 Kenny Rd.; Columbus, OH 43210. (614) 486-3655.

**PROJECT** PROJECT DISCOVERY

A systematic approach to career/vocational exploration that allows the participant to search for a "career theme," not just "a job."

**target audience** Approved by JDRP for individuals of all abilities, age 12 and up, including minority groups, the deprived, and the handicapped, as well as "typical" populations.

**description** Project Discovery kit activities can be used alone for prevocational exploration or combined with other activities (career-information materials, shadowing, Experience-Based Career Education, work evaluation, and employability skills training) to form a more comprehensive system. Forty-three exploration kits and a Guidance and Counseling Component comprise the "Regular Edition." Kits contain hardware and software necessary to perform work activities. These activities include individualized, written instructions (fourth- through sixth-grade reading level) in cartoon-style format. Participants gain experience and a feeling for work by performing these activities. Guidance and counseling activities assist in processing information.

Fifteen exploration kits ("Special Edition") are designed for special-needs populations including disabled readers. Modifications of the Regular Edition were based on field-testing in schools. The resulting changes include a lower reading level (second through fourth grade), addition of an introductory book for each kit, cassette tapes, and a revised set of guidance and counseling materials. The Guidance and Counseling Component allows staff to help participants more effectively "process" these work experiences. Guidance materials include a manual, instructor's notes for each kit, and a 16mm film. These materials support five functions: staff orientation, participant orientation, package details, experience processing, and integration.

**evidence of effectiveness** Project Discovery increases participants' experience base and heightens awareness of the kinds of work for which their abilities and interests suit them. Experimental and control groups (368 students at four schools) were pre- and posttested over a two-year period with the Majure Assessment of Discovery Exploration. Evaluation of test results shows that the greater the group mean for Project Discovery kits explored, the greater the mean change on all scales. Data are available.

**implementation requirements** The Discovery approach to pre-vocational exploration offers various adoption possibilities. There are numerous models, but most follow one of three basic formats: the Career Exploration Center Approach, where all kits are located in one large open or subdivided area with students scheduled for explorations; the Multiple Classroom Approach, with kits located in two or more rooms with separate staffings; and Mobile Approaches, where kits are circulated among different buildings or transported in a mobile lab. Staffing requirements vary accordingly. Lab course teachers are often selected, but any teacher dedicated to individualized instruction is suitable.

**financial requirements** Forty-three Project Discovery exploration kits plus Guidance and Counseling Component are available. Prices range from \$80 to \$1,300. Special Edition system of 15 Project Discovery exploration kits plus Guidance and Counseling Component range from \$200 to \$1,400 per kit. Individual packages, from \$60 to \$2,185. Guidance and Counseling Component included at no cost on all orders over \$4,000 for both the Regular Edition and the Special Edition.

**services available** Awareness materials are available at no cost. Visitors are welcome at project site anytime by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (all expenses must be paid). Training is also available at adopter site (all expenses must be paid). Implementation and follow-up services are available to adopters (all expenses must be paid).

**contact** Philip A. Olive; Experience Education; 401 Reed St.; Red Oak, IA 51566. (800) 831-5886.

**PROJECT** PROJECT EQUALITY

A project aimed at reducing sex-role stereotyping and expanding students' perceptions of job options open to females and males alike.

**target audience** Approved by JDRP for grades K-6.

**description** Project Equality proposes to reduce sex-role stereotyping in students, grades K-6, with materials designed to counter such stereotypes in occupational and home sex roles. Project-developed materials which may be used independently or in combination provide students with nontraditional sex-role models. All materials are self-contained, easily adapted to a variety of classroom settings, require no additional staffing, and fit within the context of subjects the teacher is already expected to cover. Most require 15-45 minutes' use per day over a two- to three-week period. Activities are simple, interesting, and experiential, making them usable with students of different ability levels. Six Occupation Simulation Packets (\$6.25 each) feature a hands-on career education activity based on the isolated job skill concept. This concept singles out a saleable skill required for a wide variety of jobs and already possessed in some measure by students. As students identify and use the skill in a hands-on simulated work experience, it becomes clear that a skill required for one type of work can often be transferred to another. Discussion questions emphasize these points. The six packets ("Color Discrimination" and "Crawling and Squatting" for grades K-2, "Assembling" and "Creativity" for grades 3-4, and "Measuring" and "Oral Persuasion" for grades 5-6) are sensitive to many kinds of discrimination; illustrations show a mix of races and sexes, and K-2 packets include a discussion of how to use the activities with handicapped children. Packets include lesson plans and a list of required support materials. Kits containing all required support materials are available, ranging in price from \$155-\$375. The Yellow, Blue and Red Book, for grades K-6 (\$26), is a large loose-leaf notebook containing many ideas for short-term activities that help teacher and students expand their awareness of sex-role stereotyping and broaden their views of sex roles in the home and appropriate job opportunities for qualified people. Activities in the yellow area take 10-20 minutes to carry out, those in the blue area require 20-40 minutes, and those in the red, more than 40 minutes. Many Thousand Words -- Work Pictures, for grades K-6 (\$26), is a loose-leaf book containing pictures of women and men, girls and boys in a variety of nonstereotyped work settings at home, at school, and in the community; a variety of skills and abilities is depicted. Discussion questions focus on the job skills needed and on whether possession of those skills is limited by sex.

**evidence of effectiveness** Pre- and posttesting of 5,259 students in six school districts with the Who Should test (an objective instrument designed to assess degree of sex-role stereotyping) was conducted in 1977-78. Primary students showed a 17.3% reduction and intermediate students a 16.1% reduction in sex-role stereotyping after exposure to just one set of Equality materials. Control groups showed little change. Results were statistically significant at less than the .005 level. The materials are even more effective when used in combination.

**implementation requirements** Staff: district career education director and/or curriculum director, principal, school librarian, and six teachers. Training: one one and one-half day training session; optional one-day follow-up meeting. Total cost for staff development of implementation team and all interested teachers (to a maximum of 60): \$800 plus travel costs for two trainers.

**financial requirements** If all materials are used, total cost is \$1,789. Estimated continuation cost is \$75 a year. Materials can be used by all district elementary schools in turn. Assuming 3,000 K-6 students in a district, first year cost of implementing the program is 85¢ per pupil.

**services available** Awareness materials are available at no cost. Visitors are welcome at project site any time by appointment. Project staff are available to attend out-of-state awareness meetings (travel and per diem must be paid). Training is conducted at project (adopter pays only its own costs). Training is also available at adopter site and at turnkey sites in Bellevue, Washington and Farmington, Utah (all expenses must be paid, including trainers' stipends). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** John Ross, Director of Federal Programs; Highline School District; 15675 Ambaum Blvd. SW; Seattle, WA 98166. (206) 433-2454.

SECTION A-5: **EARLY CHILDHOOD/PARENT EDUCATION\***

COPE: COGNITIVELY ORIENTED PRE-PRIMARY EXPERIENCE -- Pennsylvania. . . . . A-5.3  
EARLY PREVENTION OF SCHOOL FAILURE -- Illinois . . . . . A-5.4  
PARENT READINESS EDUCATION PROJECT (PREP) -- Michigan. . . . . A-5.5  
PERCEPTION+ -- New Jersey. . . . . A-5.6  
the PORTAGE PROJECT: A HOME APPROACH TO THE EARLY EDUCATION OF HANDICAPPED  
CHILDREN -- Wisconsin. . . . . A-5.7

\*See Sectional Cross-Reference Index, p. D-9, for related programs.

**PROJECT** COPE: Cognitively Oriented Pre-Primary Experience

A comprehensive sequentially programmed pre-primary curriculum and management system that provides for individual developmental growth and learning of basic readiness skills.

**target audience** Approved by JDRP for pre-primary students in pre-kindergarten, kindergarten, and transitional first grade from low- and middle-income families including those with developmental lags and learning disabilities.

**description** COPE's wide range of activities and objectives (2-6 years developmentally) makes it effective for use with pre-primary children from varied socioeconomic backgrounds and with varied learning needs.

The program is diagnostic/prescriptive. Based on the child's skills and development at entry, he/she works through a series of activities to reach advanced objectives. With its well-defined, step-by-step, closely sequenced levels, the 850-page curriculum is extremely helpful both in determining a child's needs and in stimulating outstanding intellectual, language, and socioemotional growth. Each level is essentially a mini-lesson plan complete with objective, materials, method, and evaluation. Children pursue the objectives through individualized small-group and large-group instruction as well as in free-inquiry situations.

The curriculum consists of two areas: the Developmental Area contains levels in perceptual-motor, conceptual-language, and socioemotional development; the Achievement Area contains units of instruction in reading, math, science, social studies, and health/safety.

Teachers and paraprofessionals who attend a COPE workshop not only learn to use the curriculum materials, but also come to understand a complete classroom management system that helps them put the program to use in their own particular teaching situations.

**evidence of effectiveness** In data collected from 1972-75, participating children demonstrated an average gain of 2.98 months per month of attendance as measured on the Slosson Intelligence Test, equivalent to about three times the normal rate of growth. Comparable gains were shown in testing for language development and socioemotional development.

**implementation requirements** Program may be implemented in an individual classroom, a single school, or a district. Any teacher wishing to implement the program and management system must attend a two-day workshop. Workshops are most often conducted at district or regional sites, with administrators and paraprofessionals frequently attending with teachers. Workshops are also conducted at the demonstration site. Facilities, space, and instructional equipment required are those typically found in elementary schools.

**financial requirements** One set of COPE curriculum is required per classroom at cost of \$60 per set. Workshop handouts necessary for all participants at cost of \$12 per person. A wide variety of inexpensive teacher-made and commercially available materials may be used with curriculum.

**services available** Awareness materials are available at no cost. Visitors are welcome anytime by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings. Training is conducted at project site (costs to be negotiated). Training is also available at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** May Alice Felleisen, Director; Project COPE; 38 N. Waterloo Rd.; Devon, PA 19333. (215) 688-7993 or 687-6252.

**PROJECT** EARLY PREVENTION OF SCHOOL FAILURE

A program designed to prevent school failure by identifying the developmental levels and learning styles of four-, five- and six-year-old children. The program uses a professional team to screen and plan developmental activities for each child to assure a successful school experience.

**target audience** Approved by JDRP as a screening and curriculum program appropriate for children ages 4-6.

**description** The Early Prevention of School Failure program is implemented by: screening all kindergarten and/or first grade children to identify their skill development in the modalities of language development, fine and gross motor, and auditory and visual perception necessary for success in formal reading and writing curricula; providing professional training for teachers so that they may acquire skills and competencies in providing successful learning experiences for all children (talented, learning disabled, etc.); providing special education services for children identified as having moderate or severe learning problems; providing management guidelines that include parent volunteers and learning center concepts for greater individualization in the learning environment.

In addition to using educational strategies already found successful, a teacher should provide 20-30 minutes of small-group and/or individualized activities daily (based upon screening results and utilization of the EPSF management system) for identified students. Early Prevention of School Failure program materials include screening instruments, classroom management guides, classroom activity guides, and parent materials.

Early Prevention of School Failure is being used with children whose first language is English, Spanish, Cambodian, Laotian and Vietnamese. Screening tests and parent materials have been translated into all these languages.

**evidence of effectiveness** Evaluation data demonstrates that achievement gains for students ages 4-6 years were statistically significant at or beyond the .05 level as measured by three standardized instruments using a one-tailed test of significance. Teacher and parent attitudes concerning the program were extremely positive.

**implementation requirements** A team of at least four (including kindergarten and/or first grade teachers, special education teacher and psychologist, speech teacher, and an administrator) is involved in a two-day leadership training workshop that covers screening instruments, staffing, educational planning, and management systems. Involvement of parents is encouraged. Follow up by project site determines effectiveness along with growth as shown on the pre/posttesting data.

**financial requirements** Cost of a two-day leadership training session at project site and/or local school site for school district team (minimum of four persons). Training guides for teams, one set of curriculum guides and screening materials: total cost \$160 for a team of four involved in leadership training. Cost of substitutes for a one-day follow-up inservice training for adopter team.

**services available** Awareness materials are available at no cost. Visitors are welcome throughout the United States. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (adopter pays only its own costs). Training is also available to adopter site (costs to be negotiated). Follow-up services are available to adopters (travel and per diem must be paid).

**contact** Luceille Werner, Project Director; Peotone School District 207-U; 114 N. Second St.; Peotone, IL 60468. (312) 258-3478.



**PROJECT** PARENT READINESS EDUCATION PROJECT (PREP)

An early-intervention project for academically high-risk preschool children in which parents attend classes to learn to become effective change agents for their own children and high school students learn parenting skills while working with children.

**target audience** Approved by JDRP for preschool children with developmental delays and for parents and high school seniors.

**description** PREP is appropriate for special education, Head Start, and Chapter I (formerly Title I) programs. The goals of PREP are to identify preschool children with potential learning problems and develop a plan of remediation, to teach parents how to develop the skills necessary for academic achievement by these children, to teach child development and management techniques, and to train high school students for effective parenthood. This is a cost-effective program that enables two part-time professionals to reach 52 families. The model has been successfully adopted in inner-city, suburban, rural areas, and diverse socioeconomic areas throughout the United States. The PREP model provides for intensive parent involvement in an atmosphere of openness and trust. Continuing contacts provide opportunities for modeling, trying new parenting behaviors, and changing parent-child interaction patterns. Increasing parents' awareness of how their everyday activities can be learning experiences is a major goal.

All children are tested in the fall of the year before they enter kindergarten. Based on indications of potential learning problems and parental willingness to participate, 52 children are selected. The children attend PREP one morning a week in groups of 14. Activities that the parent and child do together at home are the key to skill development. Language and conceptual development, visual skills, auditory skills, small- and large-muscle coordination, enhancing the self-concept, and the world around us are emphasized in the classroom and home curriculum. One parent agrees to attend PREP class one morning a week with the child. The parent observes the children in the classroom and receives activities to do at home daily with the child. Parents also meet in a group to discuss topics related to raising and nurturing children. Twelve high school seniors work individually with the preschoolers to stimulate language and conceptual development and to enhance self-concepts during the second semester. The high school students also attend weekly seminars and receive course credit in child development. Topics such as the origins of behavior and responsibilities of parenthood are discussed.

PREP can be adopted/adapted to existing preschool programs by adding a parent and home curriculum component and an organized preschool curriculum.

**evidence of effectiveness** Participants made great gains in school-readiness areas. Mean scores from the Caldwell Cooperative Preschool Inventory, administered 1972-74: pretest, 24.35; posttest, 49.92. Control mean: pretest, 24.95; posttest, 40.20. Results are significant at .01 level. Parents had excellent attendance, reporting that their parenting styles evolved toward promoting cognitive growth and positive self-concepts in their children.

**implementation requirements** Staffing to reach 52 families requires two teachers (can be .6 time), one part-time secretary, and one part-time aide. Training sessions last three days. A large classroom equipped for young children, an observation room, and a meeting room for parents are required. Program can be adopted by an individual school, an entire district, or a region.

**financial requirements** Staff (all can be part-time): two teachers, one secretary, one aide. Cost of equipping preschool classroom, \$1,200; observation room, \$1,000; PREP manuals, \$25; parent library, \$500; curriculum materials, \$800.

**services available** Awareness materials are available at shared cost. Visitors are welcome by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (costs to be negotiated). Training is also available at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (all expenses must be paid).

**contact** Diane K. Bert, Ph.D., Project Director; Redford Union School District No. 1; 18499 Beech Daly Rd.; Detroit, MI 48240. (313) 535-2000, ext. 201 or 202.

## **PROJECT** PERCEPTION+

A prerequisite to any formal learning discipline.

**target audience** Approved by JDRP for kindergarten (Level I) and first grade (Level II). This program has been used with other grade levels, but no evidence of effectiveness has been submitted to or approved by the panel.

**description** PERCEPTION+ addresses the student's ability to learn; it is based on the premise that learning can be learned as a skill. PERCEPTION+ is not a reading, writing, or arithmetic program; it prepares students to learn to read, write, and do arithmetic. It is not a remedial program, but it is being used for remediation. It is designed to be introduced at the kindergarten level, but it is being used effectively from preschool to junior high.

PERCEPTION+ is perceiving: seeing what is looked at, hearing what is listened to, feeling what is touched. These are fundamental requisites for learning, the foundation for the "basics," and they are attainable through the 15-minute PERCEPTION+ lessons, given three times a week throughout the school year. An entire class, not just those identified as having perceptual deficiency, participates as a group. The teacher offers experiences, and the students describe them in their own words. PERCEPTION+ is also processing. Unprocessed information is meaningless and irrelevant. In each lesson of the Level I and II instructional units, PERCEPTION+ students continually process data. They analyze, relate, compare, judge, sequence, decode. They critique and self-correct. They internalize information through their individual and group interaction with experiences. The teacher functions as the provider of experience and director of the process of internalization, not as an expositor of information. The PERCEPTION+ program provides children with the means for making information meaningful. Finally, PERCEPTION+ is applying: information that has been internalized can be easily and readily applied. Understanding generated in one context can be transferred to new and different contexts without reteaching. The PERCEPTION+ program addresses its activity to the transfer of understanding. Students become sensitive to the interrelatedness of experience. They also come to perceive the subtle differences, the uniqueness of experience. Students who know what they know are willing to investigate that which they don't know. Teachers who know what their students know can determine logically what they have to know. As students apply internalized understanding to new experience, teachers will know what students know.

**evidence of effectiveness** Evaluation through pre/posttesting with Knobler Perceptual Development Series and teacher's subjective-response questionnaire showed 100% greater growth for experimental classes in skills tested than for control classes. Teachers consistently report above-average impact on perceptual awareness, communication skills, eye-hand coordination, thinking, and decision making.

**implementation requirements** In recognition of the unique character of each classroom situation, PERCEPTION+ is a program more to be adapted than adopted. It may be initiated in a single class or district-wide. It requires no special staff or physical arrangements. Teachers can be trained by project staff in two and one-half hours, or they can replicate the program from the teacher's guide and available filmstrip-tape or from the TV presentation on project philosophy, rationale, and methodology.

**financial requirements** The program can be implemented for as little as \$30 (the cost of one instructional kit) by the regular classroom teacher in the regular classroom. There are four instructional kits: Level I (first year), Level II (second year), and Tactual Level I and Tactual Level II as supplements for children with deficiencies. Each kit is \$30. These are totally self-contained and nonexpendable and are for use with an entire class regardless of size.

**services available** Awareness materials are available at no cost. Visitors are welcome at project site by appointment. Project staff are available to attend out-of-state awareness meetings. Training is conducted at project site (adopter pays only its own costs). Training is also available at adopter site (trainer travel and per diem must be paid). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** Arlene Schor, Director, or Karen Fuko, Project Disseminator; PERCEPTION+; Union Township Board of Education; 2369 Morris Ave.; Union, NJ 07083. (201) 688-1200, ext. 257 or 288.

**PROJECT**

THE PORTAGE PROJECT: A Home Approach to the Early Education of Handicapped Children

A home teaching program serving multicategorical handicapped children from birth to six years of age.

**target audience**

Approved by JDRP for handicapped children, mental age 0-6, preschool programs, and nonhandicapped Head Start home-based programs.

**description**

The Portage Project is financially supported by 23 local school districts in south-central Wisconsin in cooperation with the Wisconsin Department of Public Instruction. The program provides a home teacher to each family each week to aid parents in assessing the child's present skill level in five developmental areas, targeting emerging skills, developing skills necessary to teach the child, defining appropriate teaching techniques, and evaluating the child's performance.

The program follows a precision teaching model and is based on the premise that parent involvement is the main ingredient in effective, long-term early childhood intervention. During the home visit, the home teacher demonstrates how the parent is to teach the child during the week, and baseline data are recorded. The parents then model the teaching process for the home teacher, and a system for recording child performance is determined. Three or four prescriptions are left weekly, and parents teach the child daily and record progress. On the following home visit, the home teacher records post-baseline data on each task that serve as the basis for weekly curriculum modification.

A new aspect of the project is the Portage Parent Program, a systematic parent-training component to improve parental skills in the teaching and child-management domains. During the regular home visit session, instruction is provided for the parent as well as for the child using written and audiovisual materials.

**evidence of effectiveness**

As measured by the Cattell Infant Test and Stanford-Binet, children in the project (mean I.Q. 75) gained 15 months in an eight-month period. Another evaluation measure showed that greater gains were made by Portage Project children in mental age and in language, academic, and socialization skills than by children receiving only classroom instruction. The Portage Project has been replicated in approximately 90 sites. All have demonstrated similar gains.

**implementation requirements**

At least two teachers, including one master teacher (professional), should be employed on the project. Resource personnel should be available to the staff for assessment and curriculum planning. All instruction takes place in the child's home. The only facility necessary is a small office for storing materials and for staff meetings. Initial training consists of four or five days of intensive instruction at the replication site. One or two follow-up visits must be scheduled during the year to assess program effectiveness and evaluate curriculum planning, data collection, and the home teaching process.

**financial requirements**

Based on a nine and one-half month school year, per-pupil cost averages \$650. Start-up cost ranges from \$775-\$1,600 per child per year (data secured from replication sites).

**services available**

Awareness materials are available at no cost. Visitors are welcome at project site by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (adopter pays only its own costs). Training is also available at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact**

George Jesien, Director; Cooperative Educational Service Agency 12; 626 E. Slifer St.; P.O. Box 564; Portage, WI 53901. (608) 742-8811.

SECTION A-6: ENVIRONMENTAL EDUCATION/SCIENCE/SOCIAL SCIENCE\*

project ADVENTURE -- Massachusetts . . . . . A-6.3  
project I-C-E (Instruction-Curriculum-Environment) -- Wisconsin. . . . . A-6.4  
INSTITUTE FOR POLITICAL AND LEGAL EDUCATION (IPLE) -- New Jersey . . . . . A-6.5  
ISIS: Individualized Science Instructional System Dissemination Project -- Florida . A-6.6  
project KARE (Knowledgeable Action to Restore our Environment) -- Pennsylvania . . . A-6.7  
LAW IN A CHANGING SOCIETY (LCS) -- Texas . . . . . A-6.8  
MARINE SCIENCE PROJECT: FOR SEA -- Washington. . . . . A-6.9  
SCI-MATH -- Connecticut. . . . . .A-6.10

\*See Sectional Cross-Reference Index, p. D-9, for related programs.

**PROJECT** PROJECT ADVENTURE

An interdisciplinary program involving experience-based learning in academics along with group problem solving and an alternative physical education program in the out-of-doors.

**target audience** Approved by JDRP for students of all abilities, grades 6-12. Parts of the program have also been applied in therapeutic and camp settings, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** Project Adventure is designed to add an experience component to standard high school and middle school courses. For many students, learning is essentially a passive process offering little opportunity to take responsible action or to test abstract ideas in the real world. Project Adventure represents a combination of Outward Bound techniques and philosophy with a group problem solving approach to learning and teaching. Small groups of students learn by actually working on specific reality-based tasks or problems in the community and the natural environment. The teacher's role is to state the problems and limits, giving students the responsibility for finding solutions. This approach has produced measurable improvements in self-concept, physical agility, and competence. It encompasses and supports a wide variety of teaching and learning styles.

The project is made up of two separate components, which may be used singly or together: a physical education program involving initiative games, outdoor activities, and a Ropes Course apparatus that can be constructed by teachers and students; and an academic curriculum component designed to give hands-on experiences and a practical application of the basics. The program's aim is to educate the whole student through sound academics, physical activity, and learning activities that enhance self-concept.

The project's strengths are its flexibility, the variety and quality of its curriculum models, and its ability to inspire and rekindle the enthusiasm of both teachers and students.

The project offers training programs in both academics and physical education to give teachers skills in program management, teaching strategies, and techniques necessary for implementation. Ideally, a core group of enthusiastic teachers from a single school attends a five-day workshop. Follow-up sessions and assistance with construction may also be part of the adoption process.

Many of this project's adoptions have been in the area of environmental education.

**evidence of effectiveness** Evaluation data (1971-72) show that participation in Project Adventure significantly improved students' self-concept and level of achievement motivation as measured by the Tennessee Self-Concept Scale, the Rotter Scale of Internal vs. External Control, and a School Climate Survey. There has been measurable improvement of physical functioning on five of six measures. Students and parents see growing self-confidence and more active participation in school programs as outcomes.

**implementation requirements** Attendance at the five-day workshop is essential. Ideally, one or more interested and enthusiastic teachers are trained in the physical education or curriculum workshop or in both. (Both programs can be taught by teachers who are willing to try.) A supportive (or at least neutral) administration willing to incorporate new teaching styles and programs that may involve some flexibility in scheduling is also required. No special facilities are needed, although the Ropes Course apparatus for the physical education program calls for some open space around playing fields or in a wooded area. No special staffing is required.

**financial requirements** The five-day residential teacher-training program costs approximately \$235 per teacher, including room, board, and materials; travel costs are not included. For the physical education component, schools should allow a minimum of \$2,800 for Ropes Course materials (actual costs vary). For the academic component, costs may include transportation, substitutes, and camping equipment, depending on the curriculum developed.

**services available** Awareness materials are available at no cost. Visitors are welcome any time by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (all expenses must be paid, including tuition, and room and board). Training is also available at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** Dick Prouty, Project Adventure; P.O. Box 100; Hamilton, MA 01936. (617) 468-1766.  
Alan Sentkowski, Project Adventure Southeast; P.O. Box 5573; Savannah, GA 31404. (912) 897-6758.

**PROJECT** PROJECT I-C-E (Instruction-Curriculum-Environment)

A concept-based, integrated, interdisciplinary, total K-12 environmental education program.

**target audience**

Approved by JDRP as a K-12 integrated environmental education program for all teachers in major discipline areas, excluding foreign languages, and for most student ability levels.

**description**

Project I-C-E offers a total K-12 curriculum and instruction program for environmental education. Its primary goal is to lead students directly or subtly to awareness, appreciation, recognition, and action regarding the vital issues, concerns, and factors necessary to maintaining a quality environment.

Twelve major environmental concept categories provide a framework for the program as well as for each grade level and subject area. The entire program is neither scientifically nor technically oriented; it is based on the assumptions that all teachers can and should teach environmentally, and that all disciplines (subject areas) should be used to reinforce environmental learning.

Through the use of a supplementary episode (mini-lesson) design, the learning activities may be integrated into traditional courses of study by substitution of content or activity; hence, the program does not make additional instructional demands on teachers. The lessons are referenced as to concept; they have subject-area and topic designations, suggest alternative student-centered activities based on objectives, and include suggested reference and instructional resources for teachers. The program emphasizes use of the urban and natural community as an extension of and reinforcement for classroom activities. No special equipment, facilities, or staffing are necessary.

Project curriculum guides and model field-activity units can be adapted and used by individual teachers, groups of teachers, schools, or a K-12 system regardless of locale or circumstances.

Since 1975, I-C-E has accumulated over 120 adoptions/adaptations in 20 states and the Virgin Islands, involving more than 5,000 teachers. A number of the adoptions include total K-12 district staff.

**evidence of effectiveness**

An evaluation design using project-developed criterion-referenced instruments tested for validity and reliability showed statistically significant student cognitive gains in the 12 major environmental concept categories for sample grades. Gains from pre- to posttest were as follows: grade 2, 5.28; grade 5, 5.14; grade 8, 2.95; grade 11 results were inconclusive. A complete evaluation report is available.

**implementation requirements**

The adoption/adaptation agreement to implement the I-C-E program requires a minimum of 20 teachers in the district to be trained, or, if less than 20, a building staff; district/school acquisition of curriculum materials for staff training; a one-day (five-hour) period available for training; local staff commitment to teach a minimum of six of the 12 program concepts; local responsibility for monitoring implementation; evaluation feedback from teachers on lessons and activities via simple monitoring reports; and, when possible, the pre- and posttesting of students at sample grades 2, 5, 8, and 11. An alternate strategy is available that allows for one LEA staff to become a local trainer/director to achieve adoption implementation per the above requirements.

**financial requirements**

The 39 I-C-E curriculum guides range in price from 75¢ to \$3.75. The cost of these, together with other program implementation materials, averages approximately \$5 per teacher. The cost of travel and per diem for adoption training, follow-up monitoring, and evaluation to be negotiated.

**services available**

Awareness materials are available at no cost. Visitors are welcome at project site anytime by appointment. Project staff are available to attend out-of-state awareness meetings. Training is conducted at adopter site except in the alternate strategy. Implementation follow-up services are available to adopters including impact evaluation.

**contact**

Robert J. Warpinski, Director; Project I-C-E; Cooperative Educational Service Agency No. 9; 1927 Main St.; Green Bay, WI 54301. (414) 497-3755.

**PROJECT** INSTITUTE FOR POLITICAL AND LEGAL EDUCATION (IPLE)

A secondary social studies program designed "to turn students on to active citizenship."

**target audience**

Approved by JDRP for students of all abilities, grades 9-12. Present materials may be adapted to grades 5-8, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description**

National polls and IPLE tests show that most secondary students have insufficient knowledge or skills to assume their political and legal rights and responsibilities in a representative democracy. IPLE was funded to design and field-test units that give secondary students knowledge, understanding, and practical experiences in political, governmental, and legal processes. Staff have trained over 1000 teachers and work with educators in more than 40 states. With the increasing interest in citizenship programs and the commitment being made by numerous states to promote effective citizen education courses for students, the IPLE model is particularly timely.

The curriculum, developed initially by the IPLE staff together with teachers and students in eight New Jersey districts, comprises an integrated mixture of innovative printed and audiovisual materials, role playing, simulations, and practical experience through internships and contact with community leaders. Crucial to the curriculum are the voluntary services of local resource people who contribute their expertise. The three curriculum components (focusing on political structure, governmental organization and legal institutions) are based on teacher guides: Voter Education; Government: the Decision Making Process; and Individual Rights. While there is a logical sequence from one component to another, each is independent and can be offered as a separate elective course or incorporated into a required American government class. Juvenile Justice and Law and the Family are two optional guides for the legal component.

Instruction stresses a two-fold approach: acquisition of knowledge and skills and participation by students, first in classroom and school activities, then in the actual community, most often in local and state agencies. Field study and internships are vital aspects. No specific instructional approach is required; however, an inquiry-oriented peer-teaching approach is recommended. Approaches to Political/Legal Education: An Implementation Guide provides instructional assistance to teachers, stressing the program's key elements which are: use of various experimental classroom methods with teacher acting as facilitator of learning (e.g. simulations, role plays, mock trials/moot courts); use of community resources; community/school involvement projects; internships; peer teaching.

**evidence of effectiveness**

In comparison with a control group (1973-74), IPLE students showed substantial gains in both cognitive and affective areas based on pre/post responses to the Test of Political Knowledge ( $p < .001$ ) and the Inclination to Participate Test ( $p < .01$ ). Many students have built upon their IPLE course experiences as demonstrated by their choice of college majors, careers, and volunteer community involvement.

**implementation requirements**

An adopting/adapting district agrees to implement IPLE materials and model in a year-long course or in minicourses; to have at least one teacher participate in a training workshop (although experience has demonstrated that a stronger program results when administrator, teacher, and student attend together); to purchase the IPLE teacher curriculum guides; and to assume adaptation.

**financial requirements**

The major implementation cost is training of teachers. Depending on where workshops are conducted, how trainer expenses are paid, and under what funding auspices workshops are held, costs can be as low as cost of workshop materials, which include one set of all teaching manuals required for a quality adoption (approximately \$65). After initial start-up investment for staff training and materials, program maintenance should not require an increase in operating expenses.

**services available**

Awareness materials are available at no cost. Visitors are welcome any time by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training at project site is conducted each summer with participants assuming all expenses plus materials. Training and follow-up is also available at adopter site with all expenses reimbursed, including travel, and per diem and consultant fee.

**contact**

Katherine Wallin, Program Administrator; Institute for Political and Legal Education; Educational Improvement Center South; 207 Delsea Dr. (Rte. 47); RD #4; Box 209; Sewell, NJ 08080. (609) 228-6000.

**PROJECT** ISIS: Individualized Science Instructional System Dissemination Project

An interdisciplinary, modular science program preparing students who do not plan to major in postsecondary science to understand practical, real-world, science-related problems.

**target audience** Approved by JDRP for science students of all abilities, grades 9-12. The program has been used in grades 7-8 and in health, social science, and physical education courses, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** The program consists of 52 short, independent minicourses (34 of which currently have JDRP approval). The courses cover a broad range of topics of practical significance; they are intended to help students meet the diverse needs of today's world. Since the minicourses are independent, they can be used separately or grouped to form year-long courses in life science, general science, physical science, health, and environment science. Individual minicourses cover topics related to health, physical education, ecology, and social science as well as the traditional science areas. An accompanying teacher's manual can assist teachers in using individualized, small-group, or whole-class teaching methods.

Each minicourse is based on 15-20 learner objectives that were drafted at the beginning of the six-year development period by a panel of science educators, scientists, classroom teachers, parents, and students. A minicourse is normally completed by a student in three to four weeks (15-20 class periods). For every minicourse there is a test in two forms, and several minicourses have ancillary items such as cassette tapes, instructional games, atlases, maps, and wall charts. The reading level of the minicourses averages grade 8 as verified by the Fry Readability Graph. Remedial material on basic skills is also available.

Each minicourse, its accompanying test items, and all ancillary materials were reviewed for their science content at every stage of development and testing by at least two scholars considered to be experts in the content discipline. The materials were also reviewed by a panel from the National Congress of Parents and Teachers, who judged them for bias and appropriate treatment of sensitive issues.

Trial editions and revisions of the minicourses were used by more than 250 teachers with over 25,000 students in 750+ classrooms in 10 states. The schools were in urban, suburban, and rural areas and included a spectrum of racial and socioeconomic populations.

**evidence of effectiveness** Thirty-three teachers and 1,468 high school students in seven states participated in the 1977-78 study of effectiveness using tests developed by ISIS. Compared to control groups, project students demonstrated statistically and educationally significant gains.

**implementation requirements** ISIS can be implemented in a variety of ways. A single minicourse can be used by a single student or an entire class to supplement an existing program, or minicourses can be grouped to form a one- to four-year complete science program. The equipment called for in the minicourses is usually available in school science laboratories. A few minicourses can be used outside a laboratory setting. Teachers who use the management manual generally need no more than two days of training to initiate the program.

**financial requirements** Costs vary depending on the minicourses chosen and the quantities requested. Since minicourse activities are usually completed in class, multiple classes can use one set of minicourses. The per-pupil cost for full-year installation compares favorably with single-textbook-based programs. Most ISIS materials are nonconsumable, so recurring costs are minimal.

**services available** Awareness materials are available at no cost. Visitors are welcome anytime by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (costs to negotiated). Training is conducted only at adopter site (all expenses must be paid). Implementation and follow-up services are available to adopters (all expenses must be paid).

**contact** Ernest Burkman, Director; ISIS Dissemination Project; ESC, Inc.; P.O. Box 3792; Tallahassee, FL 32303. (904) 386-3176.



**PROJECT** PROJECT KARE (Knowledgeable Action to Restore our Environment)

An environmental studies approach based on investigating real environmental concerns in local communities using "down-and-dirty" interdisciplinary learning activities.

**target audience** Approved by JDRP for students of all abilities, grades K-12.

**description** Project KARE was established to develop an effective approach for strengthening environmental studies in local schools. The KARE approach uses process-education techniques that encourage students to confront real environmental problems in action-oriented interdisciplinary activities. This approach has been adopted in over 700 Local Action Programs conducted in local schools throughout the country. These schools differ significantly in size, demography, and wealth. Programs focus on a variety of environmental problems, including water pollution, community deterioration, and air contamination. Dealing with reality-based problems leads to cognitive development at awareness, transitional, and operational levels. Attitudes toward environmental issues are questioned, clarified, and frequently reformed. Multischool cooperation develops, since environmental problems ignore socio-political demarcations. The KARE approach is implemented by classroom teachers working as an interdisciplinary team. In elementary schools, teachers from two to eight classes at various grade levels cooperatively install the approach. In secondary schools, teachers of two or more disciplines are involved. The local school staff should consist of enthusiastic teachers and creative, resourceful administration willing to work with students in planning and conducting environmental studies activities. In addition, staff should be willing to leave the school building with their students, coordinate community involvement, and carry out curricular change on an incremental basis.

Project KARE has produced a series of 13 curriculum activities guides in environmental studies. KARE has also produced two 16mm color/sound films: "Environmental Studies -- The KARE Approach," and "Urban Studies: Two Ways."

The KARE approach was developed and refined in 75 schools in southeastern Pennsylvania during 1971-75. Selected sites may be visited, and a "Guide for Visitors" is available upon request.

**evidence of effectiveness** The KARE approach was evaluated during development by ERANDA, Inc. A comprehensive evaluation design measured general and localized cognitive growth, mastered competencies, attitudinal growth, effective learning atmosphere, and behavioral changes. Pre/posttesting data showed student growth both in knowledge and attitude. Control groups were used. Test data are available on request.

**implementation requirements** Adopters must be willing to attempt curricular change in small, discrete steps. In this process, schools initiate Local Action Programs utilizing activities from KARE Curriculum Guides. School personnel usually participate in a three-day training workshop conducted by KARE staff, in which they acquire process skills, prepare plans for Local Action Programs, design evaluation procedures, and receive a set of KARE curriculum materials. However, optional training modes are available.

**financial requirements** Since each adopter school initiates and generates a unique Local Action Program, cost varies considerably. Set of 13 KARE Curriculum Guides costs \$65. Schools need not purchase guides to install a Local Action Program. Costs of the required training workshop (\$100-\$1,800), held at adopter sites, are shared by KARE, NDN Facilitators, and adopters. Trainees may expend an average of \$100-\$500 local money per school for equipment as they establish their Local Action Programs. The optional training modes can reduce costs for smaller numbers of teachers.

**services available** Awareness materials are available at no cost. Visitors are welcome anytime by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (adopter pays only its own costs). Project prefers to conduct training at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** Matthew M. Hickey, Director; Project KARE; Montgomery County Intermediate Unit #23; Montgomery Ave. and Paper Mill Rd.; Erdenheim, PA 19118. (215) 233-6900 or -6965.

**PROJECT** LAW IN A CHANGING SOCIETY (LCS)

A social studies program designed to improve the citizenship skills and attitudes of students by providing them with an operational understanding of the law, the legal process, and its institutions.

**target audience** Approved by JDRP for teachers and their students in grades 5-12. This program has also been used with students in grades K-4, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** Curriculum materials complement subjects traditionally taught in social studies classes. A broad range of topics and concepts is addressed in the units, in which constitutional issues and the functioning of our legal system predominate. Curriculum materials are activity-oriented, and legal content provides a natural vehicle for developing skills related to critical thinking and reasoning. The strategies used encourage students to respond at higher thinking levels, consider alternatives and consequences, and evaluate both their own and society's solutions to the social, political, and economic issues that have been resolved through judicial questions. Students are exposed to the legal system's strengths and ways to participate in the system, and encounter positive experiences with functionaries in the legal system. The format of the classroom materials makes them easy to use. Each unit contains a detailed teacher's lesson plan, materials for students, and a handbook describing 27 strategies to be used. These materials are supplemented by optional audiovisual materials usually found in school district libraries. An important part of the curriculum is the use of community resources. The local bar association, police department, judiciary, and other legal agencies and groups provide resource speakers and field trip opportunities essential to the program.

**evidence of effectiveness** Extensive evaluations were conducted with students of teachers using the LCS methods and materials in 1972-73 and 1975-76. Tests developed by teams of independent evaluators assessed knowledge, attitudes toward law, and attitudes toward legal careers questions. Results showed that experimental students outperformed control students in both evaluations.

**implementation requirements** Numerous options are available to adopting districts. A district may adopt the program at any or all levels. Teachers implementing the materials should be introduced to the program through inservice training. This training is meant for teachers who will implement the program, trainers who will conduct staff training in the adopting district, or a combination of the two. Each teacher will need a set of classroom units designed for his/her grade level or subject area. A social studies staff person to coordinate the implementation efforts should also be designated.

**financial requirements** Cost of classroom materials, \$6-\$12 per set. Major costs are for teacher training. Costs will vary depending on ability of adopting district to provide time for training and number of persons trained. Cost is approximately \$50 per teacher (if entire program is purchased) plus travel costs and consultant fees for workshop consultant. Additional duplicating paper and transparencies and some supplementary audiovisuals may be required.

**services available** Awareness materials are available at no cost. Visitors are welcome anytime by appointment at project site and additional demonstration sites in home state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training may be conducted at project site or at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** Gay Luckie Bearden, Director; Law in a Changing Society; 3700 Ross Ave.; Box 175; Dallas, TX 75204. (214) 748-2284.

**PROJECT** MARINE SCIENCE PROJECT: FOR SEA

A curriculum program about the marine environment.

**target audience** Approved by JDRP for all students, grades 2, 4, and 6.

**description** Over 70% of Planet Earth is covered by water. By the year 2000, three out of four Americans will live within an hour's drive of the sea or Great Lakes coasts. The impact on these coastal waters will be severe. The curriculum materials of FOR SEA are designed to equip students with information necessary to protect and maintain the world of water.

FOR SEA provides activity-oriented, multi-disciplinary marine education materials to be used in lieu of a regular science program. Curriculum guides for each of the grade levels contain a conceptual framework; guide to marine aquaria in the classroom; selected bibliography of children's literature of the sea; bibliography of juvenile information books of the sea; teacher background for each activity of text; answer keys and a listing of vocabulary words for each unit; and masters for all student activity and text pages. An Activity Kit contains sufficient materials and equipment for one classroom to perform the activities found in the curriculum guide.

**evidence of effectiveness** Test data indicate that students using Marine Science Project: FOR SEA materials show significant gains in their knowledge of marine science when compared to control groups on both project-developed tests and on the nationally recognized McGraw-Hill Comprehensive Test of Basic Skills: Science Tests. These significant gains were obtained in widely differing geographic regions and a variety of classrooms with several teaching situations.

**implementation requirements** The Marine Science Project: FOR SEA is designed to be implemented in second-, fourth- or sixth-grade classrooms at a room, grade, school, or district-wide level. Eight hours of inservice training provide implementing classroom teachers with an overview of the project, text implementation procedures, and activities designed to familiarize them with the materials. Project staff provide support during the entire adoption process.

**financial requirements** A copy of the appropriate grade-level curriculum guide must be purchased for each implementing classroom teacher at \$25 per guide. Student text and activity pages may be purchased from the project. While hands-on materials are generally found in the elementary school setting or are readily available at local grocery or variety stores, activity kits including most of these items are also available for purchase from the project.

**services available** Awareness brochures are available at no cost. Project staff is available to attend out-of-state awareness sessions, with negotiable cost-sharing. Inservice training is provided at adopter site, again with cost-sharing negotiable. Follow-up services are provided by the project in appropriate cost-effective ways, including telephone, mail, cassette tape, and visits.

**contact** Margaret Philbrick, Developer/Demonstrator; Marine Science Center; 17771 Fjord Drive N.E.; Poulsbo, WA 98370. (206) 779-5549.

**PROJECT** SCI-MATH

A curriculum module that bridges the abstract operations taught in mathematics and their application in the introductory sciences and in everyday activities.

**target audience**

Approved by JDRP for students who are average to above-average achievers in grades 7-10, or low achievers including educationally disadvantaged at a slower rate in grades 7-12.

**description**

Sci-Math is a one-semester curriculum that teaches the skills and concepts needed for proportional problem-solving in the introductory sciences and in the outside world. Many students have a great deal of difficulty with the mathematical aspects of the sciences, and fail to understand, appreciate, and like the sciences. Sci-Math fills the gap between the operations taught in mathematics and their application to problems encountered in everyday life and in science. Because of the nature of the course, it may be taught by either mathematics or science teachers. The approach is based on equality of rates -- the quantity of one variable per quantity of another variable -- that is used in college chemistry textbooks and most secondary textbooks. Mathematics in everyday living involves this same concept, from miles per hour to calories per candy bar.

There are 25 hands-on activities in the course textbook available for classroom work. All problems and activities deal with familiar variables such as those found in the home, consumer purchasing, crafts, business, and shop work. The purpose of these activities is to give three-dimensional reality to problems, to provide another perspective to help in learning, and to introduce the distractors that are so often present in real situations. "Dry" activities can be carried out in the ordinary classroom, and optional "wet" activities, involving water and/or heat, may be carried out in a science or home economics classroom. The materials used in the dry activities are readily available to mathematics teachers -- rulers, string, pennies, spoons, jars; science teachers ordinarily have the materials needed for wet activities. The curriculum is written at a simple level, and may be used for self-teaching with guidance if desired. A teacher's manual provides suggestions and answers to problems as well as instructions for the activities.

**evidence of effectiveness**

Pre- and posttesting was done by classroom teachers using one of two forms of a project-developed criterion-referenced achievement test that included no terminology pertaining only to the Sci-Math curriculum. Sci-Math students scored higher on posttests than did all four groups of control students. In a separate small-scale study in which Sci-Math was incorporated into a required physical science course for low achievers, posttests showed that the treatment group scored higher than comparison groups, and also scored at a level at least equal to that of students who typically go on to study chemistry.

**implementation requirements**

Sci-Math can be used in any regular classroom. Personnel training requires only a workshop leader.

**financial requirements**

Purchase of books is a necessary one-time cost -- \$4.50 for pre-algebra module and \$7.50 for the module that uses some algebra. Cost of materials for hands-on activities varies from \$0 to a one-time cost of \$3 per student, depending upon the activities selected. Personnel training is a one-time cost of \$300-\$450 plus travel and lodging costs where applicable.

**services available**

Awareness materials are available at no cost. Project personnel are available for both in-state and out-of-state awareness workshops (costs dependent on travel distance). Training and inservice workshops are conducted at adopter sites (per diem and travel costs paid by adopter).

**contact**

Dr. Madeline P. Goodstein; Central Connecticut State College; Room 434 Copernicus Hall; New Britain, CT 06050. (203) 827-7439 or 7483.

Section A-7: **ORGANIZATIONAL ARRANGEMENTS/ADMINISTRATION\***

DEMONSTRATION EVALUATION CENTER (CAM) -- Minnesota . . . . . A-7.3

TIPS: Teaching Individuals Positive Solutions/Teaching Individuals Protective  
Strategies -- Virginia . . . . . A-7.4

U-SAIL: Utah System Approach to Individualized Learning --Utah . . . . . A-7.5

\*See Sectional Cross-Reference Index, p. D-9, for related programs.

**PROJECT** DEMONSTRATION EVALUATION CENTER (CAM)

Dissemination/implementation of computer-assisted instructional management systems.

**target audience** Approved by JDRP as a program for evaluating and monitoring instructional objectives grades K-12.

**description** CAM is a microcomputer-based instructional management system using teacher-defined course objectives designed to support objective-based instruction, competency-based instruction on mastery learning approaches.

The Evaluation Center has developed and operates a computer-based instructional management system that provides relevant data to teachers and students after each test taken on course objectives. Also available for inclusion in the printout are data on class performance on each objective and a test form evaluation. The time needed to get this information back to a classroom that has just been CAM-tested is generally 24 to 48 hours from the date of testing.

Teachers using the CAM system of monitoring student achievement first commit themselves to basing their instruction on course objectives developed by curriculum groups and teaching teams in the district. They also test the course objectives on a regular basis, every two to three weeks. The objectives are tested by teacher-developed test items, generally five to ten for each objective. Most teachers request tests that are pretest, posttest, and retention test in one.

The system is used in classrooms that are group-paced, individualized, multigraded, etc. Approximately 1,000 classrooms (grades 1-12) are using the system in subject areas including math, science, social studies, English, and reading. The Evaluation Center has developed techniques to assist teaching teams in identifying instructional strengths and weaknesses.

This project has been identified as an NDN Technology Lighthouse Center. In addition to the JDRP approved program, visitors to the project site can see other applications of the uses of computers in education.

**evidence of effectiveness** Sample evaluation results, using sequential Test of Educational Progress, Language Arts, administered in 1974: grade 10, experimental mean of 52.90, control mean 46.66; grade 11, 58.83, control 46.44; grade 12, 60.93, control 53.75 (all significant at alpha  $< .01$ ). Attitudes of both teachers and students toward CAM-style instruction were significantly positive after use of program.

**implementation requirements** CAM is available for adoption in a single classroom or building. Adoption site personnel must have a willingness to develop instructional objectives/test items, have access to computer facilities (micro, mainframe, etc.), and must participate in staff development training.

**financial requirements** Microcomputer/printer/optional card reader: \$2,000-\$2,500; CAM software: \$150-\$300; local staff workshop time (one or two days), adopter implementation support, teacher and aide time: \$2,000.

**services available** Awareness material packet available at no cost. Visitors are welcome at project site by appointment. Project staff available for awareness meetings, training, implementation, project evaluation consultation, and follow-up services (costs to be negotiated).

**contact** Marie Weld, Don Sension, Lee Rodel, John Erickson, or Pam Askeland; Evaluation Center; Hopkins Public Schools; 1001 State Highway 7; Hopkins, MN 55343. (612) 933-9230.

**PROJECT****TIPS: Teaching Individuals Positive Solutions/Teaching Individuals Protective Strategies**

A structured approach to teaching young people how to positively resolve conflicts, to resist crime, and to protect themselves and their property.

**target audience**

Approved by JDRP for fourth- and fifth-graders. Curriculum has been developed for K-8, but no evidence has been submitted to or approved by the Panel.

**description**

This program was initiated by a request from the Director of the Federal Bureau of Investigation to translate the concept of crime resistance into an educational program. TIPS is a ten-week intervention program aimed at both the perpetrators and victims of crimes. The basic assumption of the program is that increased knowledge about crime resistance concepts will lead to more positive attitudes toward them and subsequently to improved behavior in dealing with them. The goals of the program are to promote and maintain positive student attitudes and behavior, while teaching students to responsibly insure the safety and welfare of themselves and others.

Each grade-level curriculum is contained in a single manual that includes instructions for use, teacher information, reproducible student worksheets, and suggested supplementary information. Concepts presented are appropriate to the skill and reading level of each grade with more sophisticated materials added each year. Topical areas include positive conflict resolution; respect for rules, laws and authority; responsibility; and strategies in crime resistance. TIPS can be taught as a mini-course, a supplement to existing courses, an interdisciplinary unit, and as a focus for small-group discussion. Specific math, reading, and language arts skills are delineated for each lesson. Teacher-guided discussion is supplemented by student activities such as decision making, role playing, moral dilemmas, creative writing, vocabulary development, graphing, mapping, and decoding.

**evidence of effectiveness**

Evidence of program impact came from four sources: student knowledge tests, student attitudinal scales, teachers, and parents. Upon completion of post-testing, results showed that students participating in the program had increased their knowledge and improved their attitudes in the areas of positive conflict resolution, rules, laws, responsibility, authority, and strategies in crime resistance, when compared to their pretest scores and compared to classes not exposed to the TIPS curriculum.

**implementation requirements**

Project TIPS can be replicated by an individual teacher, a school, or an entire district. One day of staff training, monitoring of implementation, and evaluation of impact are required for adoption. There are no additional facility, equipment, or personnel requirements.

**financial requirements**

Teacher booklets with student worksheets cost \$4; training costs are negotiable; reproduction of student worksheets as desired.

**services available**

Awareness materials are available at no cost. Visitors are welcome by appointment at project site. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training may be at project or adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact**

Loreli Damron; Project TIPS; Jefferson Annex; Fourth Street NW; Charlottesville, VA 22901.  
(804) 293-5179.

**PROJECT** U-SAIL: Utah System Approach to Individualized Learning

An effective, economical, and exportable system for individualization and improvement of instruction.

**target audience** Approved by JDRP for administrators, teachers, and students of all abilities in grades 1-9.

**description** When the U-SAIL System is installed, both achievement and attitude gains are made. The program builds skill in program planning, organization, classroom management, effective teaching, and student responsibility.

The system provides for the most appropriate task being prescribed for each learner, given the resources available. Prescription is based on the unique needs of learners in a humane environment for learning. Teaching, monitoring, providing appropriate practice and application of skills learned, giving students feedback, and retrieval or record keeping are basic to program installation. Each part of the system is always operational and influences the behavior of teachers and learners as they manage, teach, and learn.

The system is supported by inservice training in program implementation for administrators and teachers and by curriculum materials designed to assist the teaching of concepts in reading and mathematics (K-9). Training is practical and personalized with emphasis on classroom management and effective teaching of basic skills.

Implementation is possible in a variety of settings with local educators. The U-SAIL program gives teachers and administrators in any physical environment or organizational framework the tools necessary for systematic improvement.

Support materials are available in mathematics, language arts, and reading.

**evidence of effectiveness** Student achievement comparisons show experimental U-SAIL students' gain scores are significantly greater than controls in reading, language arts, and math for grades 1-9. Longitudinal data (10-year study) show original schools maintaining significant differences over controls ( $p < .01$ ). Data from adoptions consistently show positive impact on student achievement where U-SAIL is implemented in reading, language arts, and mathematics. Arkansas, for example, reports 22 U-SAIL schools average five months' gain greater than baseline comparisons.

**implementation requirements** Program may be implemented in a single primary, intermediate, or middle-school unit, or in total school or district configurations. Two to five days are required for staff training with follow-up inservice as needed. Administrator or implementer instruction usually precedes teacher inservice. It is recommended that only one content area be installed per year. Second- and third-year involvement provide stabilized change in practice and allow for integration of additional content areas into the system. No special facilities are required. Adopter costs include stipends paid to teachers for involvement and costs of materials.

**financial requirements** Cost of materials varies with extent of implementation. Start-up costs average \$4 per pupil. Maintenance costs can be absorbed within a regular district budget. Costs of staff training vary and are negotiable. Teachers of teachers are trained, and follow-up assistance is given. Development of local leadership is emphasized.

**services available** Awareness materials are available at no cost. Visitors are welcome at project site anytime by appointment. Project staff are available to attend out-of-state awareness meetings (all expenses must be paid). Training is conducted at the project site (all expenses must be paid). Training is also available at adopter site (all expenses must be paid). Implementation and follow-up services are available to adopters (all expenses must be paid).

**contact** Carma M. Hales, Director; U-SAIL Project; 2971 Evergreen Ave.; P.O. Box 9327; Salt Lake City, UT 84109. (801) 486-5491.



Section A-8: **PRESERVICE/INSERVICE TRAINING\***

CALIFORNIA MIGRANT TEACHER ASSISTANT CORPS: California Mini-Corps -- California. . . A-8.3  
EFFECTIVE USE OF TIME IN SECONDARY READING CLASSES -- California . . . . . A-8.4  
EXEMPLARY CENTER FOR READING INSTRUCTION (ECRI) -- Utah. . . . . A-8.5  
LEARNCYCLE: Responsive Teaching -- New Jersey. . . . . A-8.6  
POSITIVE ATTITUDE TOWARD LEARNING (PATL) -- Illinois . . . . . A-8.7  
SAN JOSE NUTRITION EDUCATION PROJECT (SJNEP) - Nutrition Through Science  
-- California. . . . . A-8.8  
project SITE: SUCCESSFUL INSERVICE THROUGH TURNKEY EDUCATION -- New York . . . . . A-8.9  
TEACHING RESEARCH DATA BASED INSERVICE TRAINING -- Oregon. . . . . A-8.10

\*See Sectional Cross-Reference Index, p. D-9, for related programs.

## **PROJECT**

CALIFORNIA MIGRANT TEACHER ASSISTANT CORPS: California Mini-Corps

A program designed to supply cross-cultural tutorial services to school districts and to train a pool of bilingual, cross-cultural teachers.

### **target audience**

Approved by JDRP for consortia of universities, state or county offices of education, and school districts wanting to implement bilingual, cross-cultural teacher-training practicums.

### **description**

The California Mini-Corps is an education management system that recruits the offspring of migratory farmworkers, helps them to enroll in college, trains them to provide direct instruction services to active migrant pupils, and ultimately increases the pool of professional educators who are specially trained, experienced, and committed to working with migrant children. From a modest beginning in 1967, when 14 Mini-Corps students worked as teacher assistants in two school districts, the program now fields about 330 Mini-Corps students per year in summer and school-year placements in 84 school districts in California.

Candidates for the program are recruited from the ranks of graduating high school seniors and college students who are former migrants.

Training sessions for the Mini-Corps are held in summer immediately following the end of the spring semester or quarter. At these institutes, Mini-Corps teacher assistants are trained in tutorial skills for the areas of cultural awareness, math, English as a second language, reading, classroom management, physical education, swimming, and language arts.

The program maintains permanent records on all of its students, including personal profiles, past performance ratings, inventories of skills, language proficiency scores (English and Spanish), college courses and grades, and work experience. Thus, it is possible to match the background of the student with the needs of the school district to which he or she is assigned. All Mini-Corps students are placed under the direct supervision of a "master teacher" who is provided with a complete student profile and manual describing appropriate use of the student in the classroom.

Since 1967, Mini-Corps has developed a coordinated set of administrative handbooks, recruitment aids, curriculum guides, student-training materials, and evaluation instruments.

### **evidence of effectiveness**

It has been demonstrated that Mini-Corps teacher assistant programs result in direct instructional family and support services for active migrant children, effective recruitment of college students from poverty backgrounds into teacher-training programs, and high incidence of placement in teaching jobs for Mini-Corps graduates (73% versus 51% for graduates of California university teacher-training programs).

### **implementation requirements**

Adoption of Mini-Corps concept requires a consortium of universities or colleges offering teacher training in bilingual education with elementary and secondary emphasis; a state, county, or regional education agency willing to manage the program; and one or more local school districts willing to supervise Mini-Corps teacher assistants for tutorial and small-group activities with migrant or other bilingual children. Consortium must organize a program of technical assistance and preservice under auspices of Mini-Corps, recruit and train teacher assistants and supervisors, and assign teacher assistants to migrant and/or bilingual children.

### **financial requirements**

Program could be supported through Migrant Education, other Chapter I funding, or other public or private foundations. Estimates for 1978 were \$3,450 for technical assistance package and \$62,580 for a program of full-time supervision and 20 teacher assistants serving 400 full-time equivalent pupils. Cost per learner, \$83.44 for 10-month school year. Cost for summer school program approximately 60% less. Costs may be reduced substantially by negotiation with colleges for work-study funds.

### **services available**

Awareness materials are available at no cost. Visitors are welcome anytime by appointment at project site and additional demonstration sites in home state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (adopter pays only its own costs). Training is also available at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopter.

### **contact**

Herbert C. White, Director of California Mini-Corps; or Joseph P. Rice, Director of NDN Developer/Demonstrator Project; 1859 Bird St.; Oroville, CA 95965. (916) 534-4430.

## **PROJECT**

EFFECTIVE USE OF TIME IN SECONDARY READING CLASSES (Formerly The Process of Teaching Basic Reading Skills in Secondary Schools)

A program providing inservice workshops to help secondary teachers and students use time effectively in reading classes.

### **target audience**

Approved by JDRP for teachers in secondary schools, grades 7-12, and apprentices from teacher centers, regional educational labs, state departments of education, and school staff developers.

### **description**

Research findings gathered from secondary classrooms where basic reading was being taught were used to identify processes specifically related to reading gain. Positively related processes were found to include: discussion of homework, seatwork, or the reading content. Instruction that linked new information to prior knowledge was found to be effective. Effective teachers checked the total group for understanding and retaught small groups by having them read aloud to learn concepts as necessary. Some drill and practice was used to help students memorize specific information. Specific praise or acknowledgment was provided for students' correct responses, and guiding corrections provided for incorrect responses. Much less off-task student behavior was found in such classrooms. Less effective were teachers who spent more time getting organized, too much time working alone or with one student at a time, and had students spend most of the class period doing seatwork. Students in these classrooms were frequently off-task and were absent more often.

Based on these findings, the project developed seven 2-1/2-hour teacher workshops. The first presents an overview of the research findings, which are interpreted for their relevance to teaching basic reading skills, and teachers are given individual profiles, prepared from observations conducted in their classrooms, together with recommendations for changes in their teaching behavior. The second workshop focuses on ways of organizing or structuring classroom activities and on efficient management of time. The third workshop provides recommendations for student motivation and behavior management. The fourth workshop deals with question-asking techniques and with supportive and corrective feedback. The fifth workshop deals with structuring new information and appropriate curriculum. At semester's end, teacher observations are conducted to determine whether recommendations have been followed. New profiles are prepared so that changes in teacher behavior may be examined at the sixth and seventh workshops. Workshop sessions are conducted one week apart, generally between 3:30 and 6:00 p.m. Groups are limited to seven. Although materials are used in the workshops, the cornerstone of the process is the encouragement and support given to teachers to try new ideas. Teachers make commitments about what they will try tomorrow. Every teacher operates in a unique situation, and class size, room assignment, and school policies will determine how he or she can respond to recommendations.

### **evidence of effectiveness**

Remedial reading students of teachers receiving the training gained 50.4 standard score points on the Comprehensive Test of Basic Skills, equivalent to a gain of 1.8 years. Teachers in the treatment group changed their classroom instructional processes in the ways recommended. Teachers and apprentices training other teachers have been successful in helping teachers learn to use effective practices in reading classrooms.

### **implementation requirements**

Teachers attend seven 2-1/2-hour workshops usually held after school hours. Teachers are observed in the fall, winter, and spring. They are given recommendations for behavior change based on these observations. They are expected to try to make the recommended changes. During three weeks spent in La Honda, CA, apprentices observe and participate in workshop sessions; they also learn to conduct observations. Subsequently, apprentices conduct workshops and train observers and other apprentices at their own sites. The apprentices' work is monitored by the project director through audiotapes of each session.

### **financial requirements**

Costs vary with the number of teachers, observers, and apprentices trained. Costs of training at the project site include teacher release time, data processing, achievement tests, adopter staff time, and travel to La Honda, CA, for three weeks.

### **services available**

Awareness materials are available. Project staff are available to attend out-of-state awareness meetings (expenses must be paid). Training is provided at La Honda (adopter must assume per diem expenses for apprentices). Training may be conducted at adopter site (adopter must assume all expenses of STALI staff). Follow-up technical assistance and evaluation services are available to adopters (expenses shared with STALI).

### **contact**

Jane Stallings; Stallings Teaching and Learning Institute; Star Route 2, Box 344; La Honda, CA 94020. (415) 948-4186.

## **PROJECT** EXEMPLARY CENTER FOR READING INSTRUCTION (ECRI)

An inservice program for teachers of students of all ability levels in reading and language skills, with expectations of 95-100% mastery.

**target audience** Approved by JDRP for teachers of students of all abilities, grades K-12, and adults, mono- or multilingual, during reading and language arts instruction (including content reading) in suburban, urban, and rural areas, and at all socioeconomic levels. Also for paraprofessionals, parents, and peers who tutor students at school or at home under supervision of teachers.

**description** ECRI's original purposes still hold: to identify critical teacher behavior essential in preventing reading failure, to provide inservice education for teachers geared to the research findings, and to disseminate this information. Teacher behaviors identified to date include abilities to: elicit correct responses from nonresponding pupils, establish high mastery levels of responses with performance and rate as criteria, correlate language arts activities to increase responses and save time, utilize effective management and monitoring systems, and diagnose and prescribe instantly when errors or no responses occur. Techniques are incorporated into specific directives during reading, grammar, spelling, dictation, creative writing, and penmanship instruction. Student advancement depends upon rate of mastery. A student progresses in practicing new skills and in working with materials independently of other students. No student waits for another. In small groups based upon instructional reading levels, students are instructed in those language skills that they will need in future work. Individual conferences are held daily. Students are reminded of the skills they have been taught, the skills they have mastered, and the skills they will be expected to master through the review (part of every skills instruction period). The teacher teaches new skills at least one mastery test in advance of the student who is passing the tests most rapidly, and reviews instruction for students at the lowest mastery test. Performance is individually measured with the mastery test. Absenteeism is not the problem it can be in the traditional classroom. No procedural changes need occur for a teacher to provide for the returning student. Students' attention is sustained with the momentum of the teacher directives during instruction and reinforcement offered during practice time. Overt responses help students remain on-task. The structure of the scheduling, record keeping, and multisensory instruction also keeps students motivated. Criteria for passing a mastery test are identical for all students, regardless of their reading levels. No student is made to feel less capable than another student. The teacher selects only those teaching techniques that build the student's self-concept. Instruction is provided by ECRI so teachers can utilize the critical teacher behaviors, develop the management system for mastery and individualization, and teach reading and language skills effectively.

**evidence of effectiveness** Project was validated over three years (1971-74) with more than 700 pupils in four Utah districts. First-graders are reading at 3.8; second-graders average 95th to 99th percentile; clinic pupils average four months' gain per month; Title I pupils average 1.4 to 3.2 years' gain per year; secondary students average 2.5 years' gain per year. Data available upon request. Some tests used: SAT, Metropolitan, California Achievement, Gates-MacGinitie.

**implementation requirements** A five- to ten-day preparatory inservice education program with one ECRI staff person for 25-30 trainees is desirable. Program includes lecture and practice sessions, preparation of materials for classroom use, and teaching pupils in a simulated setting. Following this, periodic visits by ECRI staff to trainees' classrooms to demonstrate, model, and monitor are desirable. The length of time to replicate the ECRI model varies. Existing district reading materials may be used. Supplies for teachers and pupils are those usually found in schools. ECRI has 12 self-instructional teacher texts that are used by teachers during inservice.

**financial requirements** At initial awareness sessions, time is provided without cost (travel expenses must be paid). For inservice programs and classroom monitoring, time and some travel expenses can be provided to a limited number of adopters. Some inservice and monitoring time is available without charge, but adopters pay all travel costs. Self-instructional workbooks: \$6.95 and \$9.95, and mimeographed materials from ECRI. Mastery tests: 25¢ each; can be reproduced. ECRI staff time: \$225 a day plus expenses.

**services available** Awareness materials are available at no cost. Visitors are welcome anytime by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training at project site is conducted in October, December, March, June, and July (all expenses must be paid). Teacher of Teachers Conference is in September. Training is also available at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** Ethna R. Reid, Director; Exemplary Center for Reading Instruction; 3310 South 2700 East; Salt Lake City, UT 84109. (801) 486-5083 or 278-2334.

**PROJECT**

LEARNCYCLE: Responsive Teaching

An intensive teacher-training program developing flexible, effective skills for managing and teaching mainstreamed or high-risk students.

**target audience**

Approved by JDRP for teachers of special education or mainstreamed students grades K-9, and teacher trainers and consultants.

**description**

The program includes two levels of training.

Responsive Teaching for Mainstreaming and Accountability comprises a variety of reinforcement-based teaching techniques, including precision teaching, contingency management, and token economies. Through lecture, demonstration, role playing, data collection, and task groups, participants learn to generate their own unique behavioral programs. The course also shows teachers how to monitor, evaluate, and revise their programs to meet changing student needs and observe recent accountability mandates. Short pre- and posttests let participants assess their mastery of the teaching skills. Classroom applications may include any of the following: a change in schedule of activities (to motivate difficult tasks by following them with more enjoyable ones); a redirection of teacher attention; use of readily available reinforcers (recess, privileges, special activities) in simple token exchange systems; precise systems for monitoring and reinforcing students' behavioral change with tokens and concrete reinforcers; and simple curriculum adaptations. What implementation is chosen depends on students' needs and teacher preference. A unique feature is training of teachers in proven ways to enlist the support of a whole class for program success with one or two high-risk students. Further, teachers are trained in an overall problem-solving method that allows them to adapt the program instantly to new situations.

Training to Train allows districts that desire an ongoing training capacity to have graduates of the first course trained to train others. They learn how to tailor courses to the individual needs of their trainees, as well as how to deal with system-wide implications of program implementation. A Behavior Analysis Mainstreaming Model allows participants to relate student needs and training and support needs to available support services in developing a comprehensive mainstreaming plan.

**evidence of effectiveness**

Student "on task" behavior increased by class from 50-80% as measured in twice-weekly in-class observations using the sequential Becker system; disruptive and "off task" behavior decreased correspondingly. Teachers' ability to teach high-risk or mainstreamed youngsters doubled, as demonstrated by a 50% decrease in teacher referrals. Population: varied, from middle-income suburban to low-income urban. Evaluation dates: 1970-72.

**implementation requirements**

No special staffing or facilities are required. Adoption involves only a change in teacher, trainer, or consultant. For classroom implementation, an adopting unit is an individual teacher. Training for teachers: one three-day sequence. One to two months after training and at six-month intervals thereafter, teachers submit brief data on student behavior change. Training for turnkey trainer or consultant in a position to offer back-home training to colleagues: one two-day sequence in addition to three-day teacher's sequence. Certification is contingent on completion of follow-up activities tailored to adopter setting.

**financial requirements**

Learncycle Teachers Manual, \$10 (\$4 in large quantities). Adopter shares cost of project staff travel, per diem, and time. Per-learner cost of program implementation: \$0-\$5 per year, depending on individual adopter and population served. Cost of training for adopter staff by turnkey trainer or consultant: commensurate with local costs for inservice.

**services available**

Awareness materials are available at no cost. Visitors are welcome anytime by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is available at adopter site or for a group of adopters at a common site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact**

Hilde Weisert, Project Director; Learncycle; Box 274; Teaneck, NJ 07666. (201) 833-0588.

**PROJECT** POSITIVE ATTITUDE TOWARD LEARNING (PATL)

A performance-based inservice training program designed to improve student attitudes toward school and their rate of cognitive growth by strengthening the consistency of teacher behavior.

**target audience** Approved by JDRP for K-12 students with a less-than-positive view of self and/or learning.

**description** Improvement in a student's attitude toward school, self, and others leads to improvement in his/her rate of cognitive growth. Staff development is accomplished through the use of self-paced, individualized, performance-based learning packages called kits.

The teacher-training kits teach specific skills in four complementary areas: active involvement, learning processes, individualized instruction, and improved communication and management.

Each of the training kits is designed to provide teachers with performance-based objectives, numerous learning activities designed to assist them in reaching those objectives, and criterion-referenced assessment procedures. Whenever possible, the learning activities provide the teacher with a choice of various media, small-group or individual sessions, and tapes or live observation. Feedback to the teacher is an essential component of the program.

Kit Advisors, a minimum of two per building, are trained to assist teachers working through the kits. Kit completion requires 20 hours of teacher time over a three- or four-month period. Completion of all four kits requires one and one-half to two years.

**evidence of effectiveness** Pre/post Coopersmith Self-Concept Inventory: target students improved from the 15th to the 40th percentile. Pre/post Gates-MacGinitie Reading Comprehension Tests: target students improved from .71 year of growth per year to 1.4 years per year.

**implementation requirements** Four days of training for persons selected as inservice specialists or Kit Advisors. Each Kit Advisor can then work with 7-10 fellow teachers, if they can be released from approximately 10% of their duties.

**financial requirements** Start-up cost is \$500 plus \$10 for each teacher to be trained. Operational costs consist of stipends for inservice specialists.

**services available** Awareness materials are available at no cost. Visitors are welcome by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (travel and per diem must be paid). Training is conducted at the project site (adopter pays only its own costs). Training is also available at adopter site (all expenses must be paid). Follow-up services are available to adopters (travel and per diem must be paid).

**contact** Charles Pelan, Director, or John Zirges, Inservice Specialist/Evaluator; Bethalto Unit #8 Schools; 322 E. Central; Bethalto, IL 62010. (618) 377-7213.

**PROJECT**

SAN JOSE NUTRITION EDUCATION PROJECT (SJNEP) - NUTRITION THROUGH SCIENCE

A teacher training program designed to train young children in the science of nutrition and to improve their food consumption patterns.

**target audience** Approved by JDRP for all students, grades K-4.

**description** The major goal of the program is to improve and develop cognitive knowledge, and to foster positive food habits to improve the overall nutritional status of children in kindergarten through fourth grade. A team approach involves teachers, food staff members, parents, and students in promoting nutrition awareness through an articulated curriculum of lessons, activities, displays, games, and incentive awards.

Curriculum guides include support information and teaching aids to encourage teacher participation. Workshops for teachers and food service staff focus on innovative teaching techniques to promote cognitive nutrition knowledge and better food consumption habits by students. These techniques include strategies for integrating nutrition education instruction in primary classrooms with the school food service programs and with regular academic subjects, especially science.

Teachers prepare two nutrition education activities per week which are scheduled during regular classroom time. Food service staff members implement a monthly cafeteria display, assist with a nutrition taste-in, and administer student incentive awards to improve the food selection habits of young children. All project curriculum materials are offered in Spanish and English. The curriculum is sequential and correlated with appropriate grade levels to allow teachers to individualize student instruction. In addition, most games have been designed as self-instructional tools or for small group instruction.

**evidence of effectiveness** Project students have had as high a gain as 50-85% on the California State-developed cognitive test. This was a significant gain of at least 22% over comparison students and was statistically significant at each grade level and overall for students. Research results for all staff members have indicated positive gains in the cognitive area.

**implementation requirements** A site coordinator implements and directs the adoption program. The coordinator may be an interested administrator, teacher, or health or nutrition professional. Teachers complete six hours of inservice training in nutrition principles, instructional materials, and program methodology in order to achieve a minimum proficiency in nutrition education. After inservice teachers select, implement, and record at least two to three nutrition lessons per week and one food-related activity per month, using the appropriate grade level curriculum guide. Teachers also assist in evaluation of program. Food service staff participate in one hour of nutrition education inservice and implement monthly cafeteria displays, nutrition taste-ins, and incentive award programs.

**financial requirements** Substitute time is provided by adopter/adaptor for each project teacher to attend a one-day inservice program. Each project teacher requires curriculum materials at \$39 per grade level. The site coordinator requires one complete set of curriculum materials at \$99. The suggested budget for food-related activities is \$40 per teacher (local school food service department may be able to help with food costs). Instructional aides for food service and teachers are approximately \$100 per school.

**services available** Awareness materials are available at no cost. Visitors are welcome at project site by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at adopter or SJNEP site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact**

Alicia Dixon, R.D., Project Manager, or Rosetta Holland/Schoen McGinnity, Project Co-Directors; San Jose Unified School District - Food Division; 706 West Julian St.; San Jose, CA 95126. (408) 998-6032.

**PROJECT** PROJECT SITE: SUCCESSFUL INSERVICE THROUGH TURNKEY EDUCATION

An inservice program to upgrade mathematical literacy and skills.

**target audience** Approved by JDRP for elementary school teachers and supervisors (grades 2-6) and students of these participants.

**description** The SITE program is based on a problem-solving approach to learning new mathematical concepts and skills. Unlike other mathematics inservice programs, SITE integrates content and methodology, using hands-on activities with a variety of manipulative materials. Since teachers "teach as they were taught," the program uses processes and activities which are immediately applicable in the classroom in the instructional model. SITE activities are readily integrated into the existing school mathematics curriculum. Eight of the ten basic skills identified by the National Council of Supervisors of Mathematics are incorporated in the SITE program and specific instruction is provided in place value, volume, decimals, area, metric measurement, and ratio proportion. The project provides instructional software, as well as the equipment needed to implement the program. Evaluation of process and content is continuous, from initial training sessions through classroom implementation with students. Project SITE may be adopted at one of two levels. Level I, Training the Turnkey Trainer, offers a 20-hour, four-day inservice program. Trained teachers then act as turnkey trainers for other teachers in their schools or districts. Level II, Direct Training for Classroom Teachers, is a 15-hour, three-day program which does not include turnkey training. All trained teachers are expected to implement the SITE program with students.

**evidence of effectiveness** Cognitive: Pre- and posttesting, using valid and reliable project-developed tests, showed that turnkey teachers and their students achieved significant growth in knowledge and retained that knowledge over a long term. Similarly, teachers trained by turnkeys achieved significant growth in knowledge as did their students. An additional benefit has been noted as project methodology continues to be used by participants for teaching mathematics and other curricular areas.

**implementation requirements** Level I Adoption: A minimum of two teachers or supervisors from each adopting school must be released for four full days of turnkey training. Participants must achieve a minimum proficiency level on the posttest. Trained turnkeys are expected to conduct an inservice series for other school or district teachers totalling 10-15 hours. Level II Adoption: Classroom teachers must be released for three full days of training. Each trained teacher, turnkey or otherwise, is expected to implement project activities for 20-40 hours in the classroom. Evaluation of training workshops and teacher and student knowledge growth is expected. The program can be adopted by a district, a school, or an individual teacher.

**financial requirements** Stipends, travel, and per diem costs for Project SITE trainers. Substitute costs to cover released time for participants. Twenty dollars per workshop participant for instructional materials and \$300 per adoption unit for Starter Kit of basic equipment. Starter Kit costs can be reduced by the use of equipment already existing in the adopting site. Total adoption costs can be minimized by the formation of a consortium of neighboring districts or schools.

**services available** Awareness materials are available at no cost. Visitors are welcome by appointment at the demonstration site in Claremont, NH, and at other sites as they become available. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopter (costs to be negotiated).

**contact** Dr. Barbara Berman and Dr. Fredda J. Friederwitzer; Project SITE; Educational Support Systems, Inc.; 446 Travis Avenue; Staten Island NY 10314. (212) 698-3636.



**PROJECT** TEACHING RESEARCH DATA BASED INSERVICE TRAINING

An inservice training program for teachers and aides.

**target audience** Approved by JDRP for educators, inservice trainers, and supervisors responsible for training teachers.

**description** This program is an inservice training model designed to assist educators in providing inservice training to their staff. The Teaching Research Data Based Inservice Model will assist the adopter in identifying desired outcomes of training and then designing training strategies to achieve those outcomes. The model provides the trainer with objectives, activities, and evaluation strategies aimed at teaching the trainee new skills and/or procedures and helping the person to implement them in the classroom. Specific content of the training is to be determined by the adopter's needs.

Training objectives and procedures to assess the level of skills assimilation are clearly identified.

**evidence of effectiveness** Trainees in 1978-79 completed 98% of the training objectives at specified levels. Twenty-eight weeks after training, 92% of the model components had been incorporated in trainee's classrooms, with 87% meeting the established criteria.

**implementation requirements** Implementation of the Teaching Research Data Based Inservice Training Model requires training for the adopting district's training staff and on-site consultation by Teaching Research staff to assist in the design of training and evaluation procedures. Depending on the complexity of the adopter's training program, it may require demonstration training in the adopter's district.

**financial requirements** Costs incurred in adoption include: tuition for the adopting district's trainer for attendance at a one-week training session at Teaching Research in Monmouth, OR, \$310; travel to Monmouth, OR; and travel to the adopter's site for follow-up technical assistance (costs for travel are negotiable).

**services available** Awareness materials are available at no cost. Visitors are welcome at the project site by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at the project site (costs to be negotiated). Follow-up services are available to adoptors (costs to be negotiated).

**contact** Torry Piazza Templeman; Teaching Research; Western Oregon State College; Todd Hall; Monmouth, OR 97361. (503) 838-1220, ext. 401.

Section A-9: **READING/LANGUAGE ARTS/MATHEMATICS/WRITING\***

ALPHAPHONICS: Beginning Reading Program -- California. . . . .	A-9.3
CALCULATOR MATH -- California. . . . .	A-9.4
CAMEL (Calculator Assisted Mathematics for Everyday Living) -- Florida . . . . .	A-9.5
project CATCH-UP -- California . . . . .	A-9.6
project CLIMB: Coordinated Learning Integration - Middlesex Basics -- New Jersey . .	A-9.7
project COAST: Cognitively Oriented Approach to Skills Teaching -- Florida . . . . .	A-9.8
COMPREHENSIVE SCHOOL MATHEMATICS PROGRAM (CSMP) -- Missouri. . . . .	A-9.9
COMPUTER-ASSISTED-DIAGNOSTIC-PRESCRIPTIVE PROGRAM IN READING AND MATHEMATICS (CADPP) -- Virginia. . . . .	A-9.10
CONCEPTUALLY ORIENTED MATHEMATICS PROGRAM (COMP) -- Arizona. . . . .	A-9.11
CRANSTON'S COMPREHENSIVE READING PROGRAM K-12 -- Rhode Island. . . . .	A-9.12
DIAGNOSTIC PRESCRIPTIVE ARITHMETIC (DPA) -- New York . . . . .	A-9.13
FERGUSON-FLOISSANT WRITING PROJECT -- Missouri. . . . .	A-9.14
project FUTUREPRINT -- California. . . . .	A-9.15
GEMS: Goal-based Educational Management System -- Utah . . . . .	A-9.16
HOSTS MATH: Help One Student To Succeed -- Washington. . . . .	A-9.17
HOSTS READING: Help One Student To Succeed -- Washington . . . . .	A-9.18
INDIVIDUALIZED LANGUAGE ARTS: Diagnosis, Prescription, and Evaluation -- New Jersey. . . . .	A-9.19
project INSTRUCT -- Ohio . . . . .	A-9.20
KENOSHA MODEL: Academic Improvement Through Language Experience -- Wisconsin . . .	A-9.21
LEARNING TO READ THROUGH THE ARTS PROGRAM -- New York. . . . .	A-9.22
MODEL CLASSROOMS' Computerized Classroom Management System (CLASS) -- Washington .	A-9.23
NEW ADVENTURE IN LEARNING: Success Strategies for Reading and Language (NAIL) -- Florida . . . . .	A-9.24
the NEW JERSEY WRITING PROJECT -- New Jersey . . . . .	A-9.25
PEGASUS-PACE: Continuous Progress Reading Program: Personalized Educational Growth And Selective Utilization of Staff -- Personalized Approach to Continuous Education -- Alabama. . . . .	A-9.26
PRE-ALGEBRA DEVELOPMENT CENTERS -- Illinois. . . . .	A-9.27
PROVISO READING MODEL -- Illinois. . . . .	A-9.28
project R-3: Readiness, Relevancy and Reinforcement -- California. . . . .	A-9.29
READING/ENGLISH ROTATION PROJECT -- Georgia. . . . .	A-9.30
SCHOOL VOLUNTEER DEVELOPMENT PROJECT -- Florida. . . . .	A-9.31
STAMM: Systematic Teaching And Measuring Mathematics -- Colorado . . . . .	A-9.32
TALK: Teaching Activities for Language Knowledge -- Illinois. . . . .	A-9.33
TEAMS-GAMES-TOURNAMENT (TGT) -- Maryland . . . . .	A-9.34

\*See Sectional Cross-Reference Index, p. D-9, for related programs.

TRAINING FOR TURNABOUT VOLUNTEERS -- Florida . . . . .A-9.35  
VRP: Reading Power in the Content Areas (Vocational Reading Power) -- Minnesota. . .A-9.36

**PROJECT** ALPHAPHONICS: Beginning Reading Program

A 26-week success-oriented beginning reading program employing an organized phonics system to be used as a foundation for any reading system or program.

**target audience** Approved by JDRP for kindergarten students. This program has been used in other settings for preschool, special education, bilingual education, and Title I students in primary grades, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** Alphaphonics increases reading achievement by promoting the acquisition of basic reading readiness and language skills while helping children develop positive academic self-images. The program utilizes repetition, discovery, mystery, and memory aids. It stresses both positive reinforcement and a belief in the ability of each child to succeed. It combines frequent repetition of letter sounds, systematic review, and immediate correction or confirmation of children's responses with a game-like presentation of materials and a great deal of positive feedback from the teacher. The necessary repetition is made interesting by the presence of Astro, an imaginary friend from outer space. Astro's Bag, an essential program prop, contains lesson materials for the day and stimulates curiosity in the children. The children believe Astro is the source of food reinforcements and badges awarded to them each week. Astro also displays feelings of happiness, sadness, fear, excitement, and frustration, thus enabling the children to identify with him.

The daily Alphaphonics lesson lasts 20-30 minutes. It can be used for large-group instruction, small-group enrichment, or individualized programming. The children begin an individualized reading program while they continue with the Alphaphonics lessons. The first part of an Alphaphonics lesson consists of a lively class discussion during which the teacher presents the day's worksheets. The teacher then works individually with students who need enforcement or enrichment. Alphaphonics does not require a teacher's aide, although the use of aides allows increased individual attention to each student.

This program is also available in a Spanish version.

**evidence of effectiveness** The program was measured by the Metropolitan Readiness Test and the Cooperative Primary Reading Tests, administered annually. At the end of kindergarten and grades 1, 2, and 3, the Alphaphonics group scored significantly higher than control groups (of the order of one standard deviation). Details of study as well as results from adopter sites available from project.

**implementation requirements** The program can be implemented in a typical classroom using regular teachers. A one-day training session is highly recommended. The only materials that must be purchased are the Alphaphonics manual and Astro's Bag. A variety of educational and motivational materials to enhance the program are useful and highly recommended.

**financial requirements** Alphaphonics manual including Astro's Bag (one per classroom), \$45 (required start-up); Astro Doll, \$45; One to One, \$3; Game Book, \$5.50 (desirable); set of materials, \$102 per classroom; individualized reading, \$95 (optional); worksheet pads, \$3.50 each; rubber stamps, \$20; large alphabet cards (26 per set), \$10; Astro's iron-on transfers, \$4.

**services available** Awareness materials are available at no cost. Visitors are welcome anytime by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (adopters pay only their own costs). Training is conducted September through May. Training is also available at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** Judith Brown, or Jeanne Stout Burke, or Gretchen Ross, Co-Directors; Alphaphonics; Ponderosa School; 295 Ponderosa Rd.; South San Francisco, CA 94080. (415) 588-8082.

**PROJECT**

CALCULATOR MATH

A supplementary math curriculum.

**target audience** Approved by JDRP for students, grades 7-9.

**description** CALCULATOR MATH is a mathematics project which parallels and supplements the 7th-9th grade program. It brings the technology of the hand calculator into the classroom with a proven instructional curriculum. The program teaches students:

to use calculators with efficiency and with confidence;

to improve their skills in problem solving, rounding off, estimating and solving consumer word problems; and

to improve their ability to work with whole numbers, decimals, fractions, and percentages.

CALCULATOR MATH students attend regular math classes, except that one day a week, calculators and project curriculum are used. Students complete the 20-page Student's Guide (an introduction to the calculator and to problem solving) and, based on their pretested skill level, the teacher assigns them calculator worksheets from the skill/drill units. Checkup pages provide immediate feedback to the student and serve as progress reports of mastery of skills. As students complete designated tasks, further application of skills is possible through the use of supplemental task cards and super problems that are correlated to the skills program. These are consumer, real-life or fantasy problems written by students that extend the application of learned concepts. A posttest is administered upon completion of a skills unit.

**evidence of effectiveness** On the Consumer Mathematics criterion-referenced test, project students showed greater gains in computation on the calculator than their matched counterparts. Target students maintained or exceeded achievement level in computation even without the use of the calculator.

**implementation requirements** Staff training is required. Program can be adopted by one teacher or an entire district. Each teacher will need a CALCULATOR MATH binder and task cards, access to calculators, and access to duplicating equipment.

**financial requirements** First-year installation costs: no more than \$6.50 per student including purchase of calculators, materials, training, and duplication costs. Subsequent years: \$1.50 per student (duplication costs).

**services available** Awareness materials are available. Visitors are welcome at demonstration sites by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site or adopter site (costs to be negotiated). Implementation and follow up services (regular monthly mailings of additional calculator activities and phone calls) are available to the adopter.

**contact**

Carolyn Aho or Jo Ann Bulotti, Co-Directors; Calculator Math Office; 400 Mansell Street, San Francisco, CA 94134. (415) 469-5697 or 239-6200, ext. 240.

**PROJECT** CAMEL (Calculator Assisted Mathematics for Everyday Living)

A curriculum to increase the computation and application skills of general mathematics students.

**target audience** Approved by JDRP for 9th and 10th grade general math students.

**description** CAMEL is an individualized two-year program for those students who have had little or no success in mathematics. These students usually have computational deficiencies that preclude their mastering many of the "living skills" concepts that are part of everyday life for most people. CAMEL is based on the premise that these students can and will learn these concepts if the amount of computation is reduced. Students in a CAMEL classroom use calculators to perform the computations necessary to learn and apply these concepts. All examples show how the given information is analyzed and entered in the calculator. All example answers are explained and are identified with units or labels where appropriate.

Paper and pencil computations are not excluded by use of the calculator. The program includes eight computations modules that the students must work using paper and pencil if they cannot demonstrate mastery of the skill on a pretest. Paper and pencil computations should take less than 20% of the students' time.

While CAMEL was developed for use in a regular classroom and is primarily used there, the individualized nature of CAMEL makes it appropriate for any group that is highly transient and not well motivated. In the developing district CAMEL is also used in the Juvenile Detention Center, the Alternative School for Disruptive Students, The Center for Emotionally Handicapped or Learning Disabled Student, and The Half-Way House for Young Adults.

**evidence of effectiveness** The program was field-tested in 1980-81 in 14 junior high general math classes. Results of scores on the Test of Mathematical Skills indicated that the fall-to-spring changes are significantly higher than the changes experienced by 16 general math classes in the control group.

**implementation requirements** The CAMEL program can be implemented by any math teacher. Teacher-student ratio 1:30. A one-day training session is desirable but not necessary. No special facilities are needed. Each student in the program should have access to a calculator. A set of CAMEL materials is required and consists of eight computational modules, 31 applications modules, and two applications review modules; teacher and manager manuals; complete set of pre- and posttests with answer key. A management system to help the teacher is also part of the program.

**financial requirements** One set of calculators (\$9 each) and one set of CAMEL materials (\$450) which can be used by one to five classes per day. Costs of expendable materials vary depending on the number of students involved.

**services available** CAMEL Resource Staff Project consultants provide technical assistance and training in program implementation. Visitors are welcome to visit a demonstration school. Awareness materials are available.

**contact** Whiteford G. Colee, Project CAMEL; P.O. Box 1910; Daytona Beach, FL 32015-1910.  
(904) 255-6475; Suncom 391-1011.

**PROJECT** PROJECT CATCH-UP

A diagnostic/prescriptive laboratory program in reading and/or math.

**target audience** Approved by JDRP for students in the lowest quartile in reading or math, grades 1-6. This program has been used with students at other achievement levels and in grades K-9, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** Project Catch-Up is a laboratory program of continuous diagnosis and pinpoint teaching in reading and/or math skills for underachieving children.

Classroom and laboratory teachers work closely to identify program participants and formulate a laboratory schedule that does not cause any child to miss reading or math in the regular classroom.

Laboratory teachers identify individual needs by means of continuous diagnostic testing. They then select materials and methods from a wide variety of high-interest resources available in the laboratory to meet the child's needs. Children spend an average of one-half hour per day in the laboratory, in groups of one to three, working with the teacher on skill deficiencies. The program is designed in such a way that each child experiences success and moves toward the acquisition of more difficult skills armed with increased confidence.

A wide variety of readily available instructional materials and equipment, selected by project teachers, is available in the laboratory. Results can be achieved with limited resources if a diagnostic/prescriptive method is used in a success-oriented environment. Staff have identified materials according to priority.

With a few well-developed techniques, teachers have made participating children feel that the lab is "their lab" to such a degree that it has become necessary to have guest days to satisfy the desire of other children to participate even in a small way in the laboratory. Project Catch-Up's special events for parents consistently draw more parents than any other school function.

**evidence of effectiveness** The project utilizes pre- and posttesting (Comprehensive Test of Basic Skills in reading and math). For the past 10 years, the median student has consistently gained 1.5 months in reading and math skills for each month in the program (data validated by Research Management Corporation). Originating-site students are low achievers in a low-income urban community. Similar gains by adopters in rural and middle-income schools have been validated. Annual evaluation data are available.

**implementation requirements** A school district interested in adopting or adapting Project Catch-Up should be able to: provide a laboratory of any size (we started in a closet, but at present have a classroom); administer diagnostic tests to participating children; provide professional instruction to meet diagnosed needs; and use high-interest materials insofar as they are available. The project can be adopted by a grade level or a school, and it can offer instruction in reading, math, or both.

**financial requirements** Tests and instructional materials: from \$.50-\$20 per child depending on funds available. The project itself sells no materials; all are commercially available and thoroughly tested; many are already found in most schools. Equipment: three high-interest instructional machines, maximum cost \$300 per laboratory; most schools already have at least one such machine. Staff needs may be met by reassignment of personnel in any school with Chapter I funding.

**services available** Awareness materials are available at no cost. Visitors are welcome at project site on Fridays when school is in session. Project staff are available to attend out-of-state awareness meetings. Training is conducted at project site (adopter pays only its own costs). Training is also available at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (travel and per diem must be paid).

**contact** Fay Harbison; Newport-Mesa Unified School District; P.O. Box 1368; Newport Beach, CA 92663. (714) 760-3300.

**PROJECT**

Project CLIMB: Coordinated Learning Integration - Middlesex Basics

An individualized program for reading and mathematics skills acquisition.

**target audience** JDRP-approved for all students grades K-12.

**description** Project CLIMB is a diagnostic/prescriptive approach to the acquisition of mathematics and reading skills for all students. It provides curriculum, management, and training components.

The teacher-developed and teacher-tested curriculum component includes:

1. **Skills Arrays:** Students progress through a defined array of skills in both reading and mathematics that is based on precise steps involved in learning these basic skills.
2. **Criterion-Referenced Tests:** These serve as a needs assessment before teaching a skill and provide evidence of mastery before moving on to another skill.
3. **Student Record-Keeping Format:** Continuous progress is monitored for each student so that skills mastery is not limited to grade level.

The management design integrates and coordinates classroom and support personnel using existing instructional materials. The training component includes methods for: utilization of the curriculum components; identification and correlation of adopting district's curriculum materials to CLIMB skills arrays; administrative tactics for coordinating classroom instruction with support personnel; classroom implementation; and incorporating basic skills into content areas.

**evidence of effectiveness** Students' scores on standardized tests (Metropolitan, Stanford TASK) over a four-year period showed significant improvement. This gain has been maintained in 11 out of 12 grade levels in mathematics and 10 out of 12 grade levels in reading. The compensatory education population has decreased by 50%.

**implementation requirements** Teachers and administrators participate in a two-day training for effective utilization of CLIMB curriculum and management design. A follow-up training session is recommended. Teachers must be supplied with the CLIMB curriculum materials. The program can be adopted in either reading and/or mathematics at any or all grade levels.

**financial requirements** Start-up costs are approximately \$100/teacher for curriculum materials and supplies, including skills arrays, criterion-referenced tests on two grade levels, student record-keeping folders, class profile sheet, and training manual. Maintenance costs are minimal. Training costs are negotiable.

**services available** Awareness materials are available at no cost. Visitors are welcome at project site anytime by appointment. Project staff are available to attend out-of-state awareness meetings. Training is conducted at project site or adopter site. Implementation and follow-up services are available to adopters. All costs are negotiable.

**contact**

Barbara Brenner, Director; Project CLIMB; Middlesex Public Schools, Administration Offices; Kennedy Drive; Middlesex, NJ 08846. (201) 968-4494.



**PROJECT** PROJECT COAST: Cognitively Oriented Approach to Skills Teaching

A cognitively oriented program for mathematics, language development/writing, and the application of skills through the use of learning centers.

**target audience** Approved by JDRP for students of all abilities and socioeconomic backgrounds in grades K-3.

**description** The goals of Project COAST are growth in mathematics and communication skills through strategies that develop related concepts and provide opportunities for the application of skills. There are three program components: mathematics, language development/writing, and learning centers. A management system for small-group math instruction and the use of relevant manipulative instructional materials support a more individualized approach to concept and skill development. The understanding of mathematical concepts forms the "cubbyholes" within which skills are stored for easier retrieval.

Active units of study for various types of literature form the cognitive framework for expanding skills in oral and written communication. The resulting understanding allays the students' fears of not having "anything to write about." This process utilizes the language experience approach and naturally integrates all of the language arts (speaking, listening, writing, and reading) in a purposeful way. Communications and mathematics skills checklists based on Florida Minimum Performance Standards are available to aid the teacher in documenting student achievement.

Learning centers in the classroom allow children to make choices and work independently as they apply basic skills, solve problems, and make decisions. A well-planned and time-tested management system for centers provides the parameters within which the students are given the motivation and opportunity to be thoroughly involved in their own learning. The teacher's interactions and observations during this segment provide the basis for more appropriate direct instruction.

**evidence of effectiveness** Comprehensive Test of Basic Skills data reveal educationally significant program effects in reading, language, and mathematics. Up to three years after completion of the program, students continue to exhibit higher than expected levels of achievement in these three areas.

**implementation requirements** Several combinations of program components and training options will be made available in order to meet the specific needs, characteristics, and resources of each site. The adopting district must provide a facilitator (curriculum coordinator or administrative staff member) for an average of one hour per classroom per week to assist in the implementation and evaluation of the COAST program. The program can be adopted by as few as one district facilitator and two classroom teachers.

**financial requirements** The adopting district will allocate or secure funds to provide for (1) a part-time district facilitator for local implementation/evaluation, (2) the COAST consultant's travel expenses and per diem for a minimum of two days, and (3) time, space, and materials for program staff inservice workshops. COAST curriculum materials cost approximately \$33 per classroom. Other needed materials are either teacher-made or are those typically found in elementary classrooms.

**services available** A Follow Through Resource Center.

Awareness materials are available at no cost. Demonstration classrooms may be visited upon adoption. Project staff are available to attend awareness meetings (costs to be negotiated). Needs assessment, training, and follow-up services for classroom teachers and administrators are provided at adopter sites (costs to be negotiated).

**contact** Mary F. Hancock, Director; Project COAST; Rt. 2, Box 535; Santa Rosa Beach, FL 32459. (904) 231-4966. Or, David Bidwell, Director; Panhandle Area Education Cooperative (PAEC); 411 West Blvd. S; Chipley, FL 32428. (904) 638-4131.

**PROJECT** COMPREHENSIVE SCHOOL MATHEMATICS PROGRAM (CSMP)

An exciting, complete elementary-level mathematics curriculum from basics to problem solving for students of all ability levels.

**target audience** Approved by JDRP as a sequential mathematics curriculum for students of all abilities, grades K-3. This program has been used in other settings as a K-6 program, with entering sites limited to K-5 participation until completion of sixth-grade entry programs, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** An underlying assumption of the CSMP curriculum is that children can learn and can enjoy learning much more math than they do now. Unlike most modern programs, the content is presented not as an artificial structure external to the experience of children, but rather as an extension of experiences children have encountered in their development, both at the real-life and fantasy levels. Using a "pedagogy of situations," children are led through sequences of problem-solving experiences presented in game-like and story settings. It is CSMP's strong conviction that mathematics is a unified whole and should be learned as such. Consequently, the content is completely sequenced in spiral form so that each student is brought into contact with each area of content continuously throughout the program while building interlocking experiences of increasing sophistication as the situations become more challenging.

A feature unique to CSMP is the use of three nonverbal languages that give children immediate access to mathematical ideas and methods necessary not only for solving problems, but also for continually expanding their understanding of the mathematical concepts themselves. Through these languages the curriculum acts as a vehicle that engages children immediately and naturally with the content of mathematics and its applications without cumbersome linguistic prerequisites. These languages include: the Language of Strings (brightly colored strings and dots that deal with the fundamentally useful and important mathematical notion of sets); the Language of Arrows (colored arrows between pairs of dots that stimulate thinking about relations between objects); and the Language of the Papy Minicomputer. The Minicomputer, a simple abacus that models the positional structure of the numeration system, is used both as a computing device and as motivation for mental arithmetic. Its language can be used to represent all decimal numbers, positive or negative, and encourages creative thinking about the nature and properties of numbers. CSMP is flexible enough to facilitate whole-group, small-group, and personalized instruction, and is appropriate for all children from the "gifted" to the "slow learners." It recognizes the importance of affective as well as cognitive concerns and has been developed and extensively tested in classrooms nationally.

**evidence of effectiveness** As measured by Comprehensive Tests of Basic Skills, the Stanford Achievement Test, and others in 1973-77, CSMP students did better than non-CSMP students in relational thinking, estimation, large numbers, fractions, and word problems; show greater enthusiasm and interest in their math program; and learn traditional math skills and concepts as well as or better than students in more traditional programs.

**implementation requirements** School system signs cooperative agreement with CSMP and appoints local coordinator who undergoes 3-10 days of training (depending on highest grade level adopted) in St. Louis during spring or summer prior to first year of implementation. Coordinator trains all teachers new to CSMP before start of school. Smallest adoption unit is one teacher in one classroom. No training charge, but system pays expenses of attending training. Teachers and coordinators are required to buy training kits: K-3, \$10; 4-6, \$10. Optional adopter-site training is available; there is a fee for this service.

**financial requirements** One teacher and 30 students: kindergarten, \$155; first grade, \$225; second grade, \$270; third grade, \$310; fourth grade, \$310; fifth grade, \$220. Replacement cost for 10 students: kindergarten, \$10; first grade, \$40; second grade, \$47.25; third grade, \$60; fourth grade, \$80; fifth grade, \$55.

**services available** Awareness materials are available at no cost. Visitors are welcome anytime by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (adopter pays only its own costs) in June and July (several workshops for particular audiences). Training is also available at adopter site (all expenses must be paid, including trainer's travel plus fee of \$150/day and materials costs of \$10/person). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** Joyce Eaton, Director; CSMP Developer/Demonstrator Project; 3120 59th St.; St. Louis, MO 63139-1799. (314) 781-2900, ext. 310.

**PROJECT**

COMPUTER-ASSISTED-DIAGNOSTIC-PRESCRIPTIVE PROGRAM IN READING AND MATHEMATICS (CADPP)

A diagnostic/prescriptive pull-out program utilizing resource labs and computer assistance to prepare remedial reading and remedial mathematics educational plans and weekly prescriptions.

**target audience**

Approved by JDRP as a reading program for grades 3-9 and as a math program for grades 3-7.

**description**

CADPP was developed as a response to the SRA test scores of Buckingham County Public Schools' educationally disadvantaged students which showed an annually increasing gap between normal expected growth and actual growth. The resulting resource laboratory program combined with a computerized information retrieval system allows for accurate diagnosis of a child's needs in reading comprehension and computation and provides the teacher with prescriptions (materials and methods) that help in teaching to those needs.

A locally developed battery of standardized criterion-referenced tests is used for diagnosis and evaluation. The computer system prescribes learning activities based on individual achievement levels, learning modalities, and interests; channels students to the learning centers; tracks progress to ensure that prescriptions are not repeated; and maintains continuous progress reports for the students, teachers, and parents.

**evidence of effectiveness**

Three-year fall-to-fall testing (1976-78) with the Science Research Associates Achievement Series documented positive trends through standard score gains. Grade 3 students showed the highest gains in reading, with 23 NCEs; grades 6 and 7 evidenced 8 NCEs. Gains in math ranged between 22 NCEs for grades 4 and 5, and 6 NCEs for grade 3. Overall, the gap between scores of participating and nonparticipating students was narrowed.

**implementation requirements**

CADPP can be adopted by a single classroom unit or by several units. Extensive staff development and training in criterion-referenced design and development, instructional management systems, performance/process evaluation, monitoring, and individualized instruction via the learning station approach to management are required.

**financial requirements**

A fee of \$500 is charged for the CADPP software. Optional CADPP criterion-referenced tests are available at \$3 per test booklet (nonconsumable); however, if adopters do not use CADPP diagnostic tests, they must have access to diagnostic test results.

**services available**

Awareness materials are available at no cost. Visitors are welcome at project site by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (costs to be negotiated). Training is also available at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact**

Debra J. Glowinski, Federal Programs Director; Title I Office; Box 292; Dillwyn, VA 23936.  
(804) 983-2714 or -2863.

**PROJECT** CONCEPTUALLY ORIENTED MATHEMATICS PROGRAM (COMP)

A sequential, small-group mathematics program designed to meet the needs of all children.

**target audience** Approved by JDRP for students of all abilities, grades 1-8. This program has been used in other settings with grades 9-12, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** The Conceptually Oriented Mathematics Program is a management system that provides a list of sequential skills to be mastered in the basic skills area of mathematics. It is designed to meet individual needs through small-group instruction.

Students are tested to determine their individual strengths and weaknesses and are grouped accordingly. The program provides continuous progress through the use of materials organized into 25 instructional levels. Eight broad areas are developed for mastery in these 25 levels. Each level has been broken into two or more steps. (Step Z in each level provides additional materials for the highly motivated student.)

The program utilizes cooperative planning and teaching. The ideal instructional situation is one in which each teacher has no more than two instructional groups. It is the intent of the program to encourage teachers to be creative in their teaching and to adapt the program to the learning styles of their students.

Key Elements: placement testing; teaching by objectives via COMP guide books; small-group instruction; criterion-referenced testing; cooperative teaching and planning; continuous progress system for students; administrator involvement; school-community-parent relations.

**evidence of effectiveness** Data from 1971-72 pre- and posttesting of COMP students in grades 1-8 using Iowa Test of Basic Skills showed that 77% increased their percentile ranking pre to post. Further annual testing of the same students showed continued gains: 64% in 1972-73 and 58% in 1973-74.

**implementation requirements** One day of training prior to implementation is required. All teachers and administrators involved in adoption should attend. One day of training following implementation is also required. Adopter school's needs will determine the date. Adopter designates one staff member to serve as project contact person and coordinator.

**financial requirements** Exclusive of textbooks and the coordinator's salary, the basic cost is approximately \$45/teacher plus cost of test materials. Additional materials for instruction and enrichment can be added as finances become available.

**services available** Awareness materials are available at no cost. Visitors are welcome at demonstration sites anytime by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted only at adopter site. Implementation and follow-up services are available to adopters (all expenses must be paid).

**contact** L. Leon Webb, Director; 161 E. First St.; Suite 5; Mesa, AZ 85201. (602) 969-4880.

**PROJECT** CRANSTON'S COMPREHENSIVE READING PROGRAM K-12

A program to improve reading performance.

**target audience** Approved by JDRP for all students, K-12.

**description** Cranston's Comprehensive Reading Program (CCRP) is a district-wide, K-12 reading instruction and management system. The program incorporates skills sequences, mastery criteria, instructional pacing, continual performance monitoring, school-based and district-wide coordination and administration, staff development activities, and parent communication and involvement. CCRP organizes and coordinates the delivery of reading instruction for elementary and secondary school students using a variety of commercial reading texts and supplementary materials. It provides classroom and content-area teachers with a system to ensure effective instruction and monitoring of essential reading skills.

An important feature of the CCRP process is the use of the reading specialist as a consultant to classroom teachers and to the building principal, department chairpersons, and guidance personnel. The specialist's responsibility is to assist the teachers and department chairpersons in developing instructional strategies, monitoring progress, and conducting formal assessments. The specialist also provides corrective/remedial instruction to students when necessary.

Every student is given a diagnostic assessment by the classroom teacher. The assessment is used to place each student at the appropriate instructional level. Using the skills checklist and ongoing performance monitoring, the classroom teacher adjusts the level and pace of instruction and tracks each student's progress. Students requiring substantial help are served by Chapter I or Special Education personnel. The building reading specialist is responsible for coordinating all resource programs with the classroom-based developmental reading program.

**evidence of effectiveness** A longitudinal analysis compared the performance trend lines of students' achievement test scores over a ten-year period. The program was found to raise student performance at a .01 significance level. Also, in comparison to national norms, the students went from scoring below the norms at grades 2 and 4, to well above the norms at grades 6, 8, and 10. Student performance gains in adoption sites averaged 8.8 NCEs after one year, and were sustained or increased in year two.

**implementation requirements** Implementation is accomplished in four phases over an 18-month time span: (1) needs analysis and planning; (2) training; (3) curriculum and management system development; and (4) program installation. A district-wide task force conducts the first phase, with the district reading director responsible for coordinating the remaining ones. Training is provided by CCRP staff for reading specialists, principals, department chairpersons, and the district coordinator. Typically, implementation takes place in the elementary schools first, with the junior and senior high schools following.

**financial requirements** Materials: Needs Analysis and Planning Guide, \$5/task force member; Training Kit, \$10/trainee; Curriculum Writing Guides, \$5/team member. The district is responsible for all costs incurred in producing the curriculum guides for staff, printing skills checklists for students, and procuring and administering instructional placement tests. Staffing: Half-time reading specialist for each elementary school; full-time specialist for each secondary school. These positions can be filled by redefining the roles of existing personnel.

**services available** Awareness and selection materials available free. Visitations arranged. Awareness presentations available on request; travel cost reimbursement required. Training and consultation services for all implementation phases provided at adopter or demonstration site. Adopter must pay travel and materials costs; training and consultation fees negotiable. Implementation support provided through on-site visits, telephone, and correspondence.

**contact** Catherine M. Ciarlo, Director of Reading, or Beverly J. Montaquila, Project Coordinator; Cranston's Comprehensive Reading Program; Department of Reading Services; 50 Gladstone Street; Cranston, RI 02920. (401) 942-5990.

Developmental Funding: USOE ESEA Title I,  
USOE Right to Read, and Local

JDRP No. 82-28 Approved: 6/2/82

**PROJECT** DIAGNOSTIC PRESCRIPTIVE ARITHMETIC (DPA)

A basic arithmetic program with emphasis on developing, modeling, and mastering the basic concepts and skills.

**target audience** Approved by JDRP for students functioning at grade levels 3-5. This program has been used in other settings with grade levels 1, 2, and 6, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** DPA is the arithmetic component of a total mathematics program and includes counting, place value, addition, subtraction, multiplication, and division of whole numbers. Problem-solving skills are developed and reinforced through ongoing experiences with estimation and approximation, data collection, organization and interpretation, and real-life applications of arithmetic skills. Diagnostic tests for the major arithmetic topics (three levels) are used throughout the year to determine students' strengths and weaknesses both in concepts and skills. Prescriptions are then planned using the DPA Teacher's Manual and other DPA resource materials. Each of the more than 75 concept-developing and reinforcement activities in the Teacher's Manual has specific objectives related to the arithmetic instructional sequence and the diagnostic test items. The manual also includes descriptions of ongoing mathematics experiences, record-keeping procedures, classroom management techniques, and instructions for developing a variety of teacher-made materials.

DPA can be used in self-contained elementary grade classes as the arithmetic component of the mathematics program or as a co-curricula remediation program (PSEN; Title I). Both approaches are essentially the same. A topic section of the DPA diagnostic test is administered, and the results are analyzed for group and/or individual needs. These data are recorded on the analysis chart, which aids the teacher in forming instructional groups and planning a program. Each student begins at his/her level of understanding. He/she may work with or without the teacher in a large group, small group, or independently. The student may use concrete materials for modeling a basic concept and may work with a DPA activity for reinforcing a new skill. The student may complete a written activity for practice or may help in the school by applying arithmetic to a real-life situation.

This is a concept-based program that uses manipulatives and physical materials and is adaptable to special education students.

**evidence of effectiveness** Each year for the past nine years, DPA used the Stanford Diagnostic Arithmetic Test and Stanford Diagnostic Mathematics Test to pre- and posttest approximately 400 participants. The target group was comprised of educationally and economically disadvantaged students according to Title I criteria. These students achieved an average gain of 15 months in seven months of instruction.

**implementation requirements** To demonstrate its need and desire for DPA, a district must take the following steps: submit to DPA a statement of need and an implementation plan for the DPA program in the adopting district; provide for the release of participating teachers and supervisors for three full days of pre-implementation training; administer a standardized test as a pre/post instrument and provide DPA with a summary of results; employ ongoing DPA diagnostic tests for planning instruction; purchase the necessary commercial materials; identify a teacher or supervisor who will act as the DPA on-site coordinator and liaison; and encourage cooperative planning and exchange among program teachers.

**financial requirements** Start-up costs for curriculum and testing materials are about \$7 per pupil or \$200 per classroom or resource teacher. Maintenance costs are usually less than \$2 per pupil.

**services available** Awareness materials are available at no cost. Visitors are welcome anytime by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (adopter pays only its own costs). Training is also available at adopter site (costs to be negotiated). Follow-up services are available to adopters (all expenses must be paid).

**contact** Matthew Scaffa, Director, or Janet Castellano, Project Coordinator; Community School District #31; 211 Daniel Low Terr.; Staten Island, NY 10301. (212) 447-3300, ext. 36, 37.

**PROJECT**

FERGUSON-FLOISSANT WRITING PROJECT

An inservice program to increase student writing achievement.

**target audience** Approved by JDRP for teachers of students, grades 4-12.**description** The purpose of this staff training program is to change the methodology of teaching writing. Each day of the three-week inservice is divided into two parts. The morning session surveys current writing instruction methodology; in the afternoon, teachers develop their skills as writers. While a two-stage process is usually employed in traditional writing instruction (composing and evaluating), a four-stage writing process is employed in the writing project -- prewriting, composing, revising, and evaluating. Revision takes place in small critique groups.

After the training was completed, teachers reported they spent 10 hours each month on personal writing, whereas before training they had spent no time on this activity. They used the four-stage process with their students as well. While grammar and mechanics are typically taught separately from writing, project teachers combined grammar and mechanics with writing. They also reported an increase in prewriting activities such as free writing, focused writing, and non-stop writing. This increased the lag time between assignment and initiation of student writing. Students also used critiquing groups for the revision stage.

Trained and newly trained teachers met to share strategies. Project staff participated in training, organized meetings to discuss progress, and demonstrated model lessons.

**evidence of effectiveness** Based on an assessment of three posttests in paragraph writing, project students at elementary through senior high levels demonstrated higher gains in writing skills than control students after one and two years of instruction. Project students increased from a pretest score of 16.76 to a posttest score of 19.19 in the first year, and to 22.61 by the end of the second year.**implementation requirements** An adopter must send one, two, or possibly three district teachers to a five-day Leadership Training Seminar to equip the trained Teacher-Leader to run a three-week summer writing project in the local district. A leadership training manual will be provided at no cost to Teacher-Leaders. (Ideally, a district would train an elementary and a secondary teacher as co-leaders of the district's planned summer writing project.) This program must be adopted by districts, and the summer writing project should draw between 15 and 30 district teachers from all grade levels and all content areas.**financial requirements** This program requires no new student materials; only curriculum guides (priced at \$10 and \$18.50, respectively, for the elementary and secondary editions) are required for each teacher in the summer writing project. No honorarium is charged for consultants who lead the Leadership Training Seminars, nor is there any charge for follow-up consulting. The program's major cost is the stipend which the district would regularly pay teachers for summer inservice work. Based on one school with 30 teachers and 750 students, the per pupil cost for the start-up year is \$5.95. Recurring costs are \$2.82 per pupil. This reflects the inservice stipends, inservice consultant, curriculum guide, and evaluation.**services available** Awareness materials are available free of charge, and awareness presentations are available on an expense-shared basis. Leadership Training Seminars involve no cost except for the trainer's travel and per diem expenses (if training is done in the local district) or the participants' travel and per diem expenses (if the training is done in Ferguson-Florissant). Visitations are welcome anytime.**contact** Michael Thacker, Project Director; Ferguson-Florissant Writing Project; Ferguson Reorganized School District R-2; 1005 Waterford Drive; Ferguson, MO 63135. (314) 595-2239.

**PROJECT** PROJECT FUTUREPRINT

A program of diagnostic and prescriptive reading instruction.

**target audience** Approved by JDRP for grades 7-8.

**description** Students in each grade are divided into two heterogeneous groups, one group attending a Reading Center for 50 minutes and the other group remaining in a science class. These two groups rotate every three weeks, so that each group attends the reading program for half a year and the science class for the other half; thus, students are involved in reading throughout the year even though they are provided with a half year of instruction.

The Reading Center is a supportive, relaxed environment which differs drastically from a regular classroom. Here a wide variety of multi-sensory materials are provided for all students, accommodating various learning styles. When a student first enters the reading center, the teacher diagnoses his/her needs, strengths, and weaknesses. Together, the student and the teacher write a contract which sets goals and lists materials which will focus on that student's needs. The contract system works well because it involves the students in their own learning, and helps them to accept responsibility for their learning, while offering them a chance for challenge and success. Each day in the Reading Center, the student selects materials prescribed in the contract and records daily progress. After the contract is finished, the students complete an evaluation form indicating two things learned, reading skills that they need to work on, two lessons that were particularly helpful, and favorite lessons and comments. Once again, a new contract is written.

Two other features of the program include counseling and the Preschool Story Hour. Because self-concept is linked with achievement -- in this case, reading achievement -- counseling is seen as an important part of this supportive program. Academic, group, and individual counseling is available for students, parents, and teachers. The Preschool Story Hour is a weekly morning reading session in which junior high students read stories to preschool children who come to the junior high with their parents or their preschool class. This exercise improves self-concept and motivates reluctant readers. It is also an excellent community involvement program.

**evidence of effectiveness** Based on the results of the Comprehensive Test of Basic Skills, Reading subscale, project students outperformed comparable non-project students in both a one-year and a two-year study. These gains were also greater than the national norm group expected gains for the same time periods. The reliability of the project effect is evidenced in a nine-year study in which project students outperformed the norm group expectancies.

**implementation requirements** A school deciding to implement Project FUTUREPRINT will need to provide some space for a reading center -- a classroom, a library, or some separate space dedicated to a reading program. A minimum of one day of inservice is required -- either at the adopter site or the demonstration site; an additional day would be beneficial. The adopting school will agree to administer diagnostic reading tests, implement a contract system, select teachers with some expertise in reading, utilize an appropriate variety of high interest materials, and provide evaluation data. Participating teachers need a set of De Anza's reading publications.

**financial requirements** Costs will depend on the needs of the school. Inservice training and a minimum of materials can be purchased for under \$6,000. If facility must be altered or adapted, furniture purchased or staff hired, the cost would be greater. If schools have a facility, an appropriate variety of materials, sufficient cassette recorders and earphones, the cost could be considerably less.

**services available** Awareness materials are available at no cost. Visitors are welcome at project site by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is also available at adopter site (trainer travel and per diem must be paid). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** Ann Glaser or Charlotte Larson; California Demonstration Program in Reading; De Anza Junior High School; Ontario, CA 91761. (714) 983-2118 or -9501.



## **PROJECT**

GEMS: Goal-based Educational Management System

A goal-based educational management system developed to support diagnostic/prescriptive teaching for mastery learning.

### **target audience**

Approved by JDRP for grades K-6. This program has been used with grades 7-12, but no evidence of effectiveness has been submitted to or approved by the Panel.

### **description**

With GEMS, teachers can efficiently diagnose skills in reading and prescribe learning activities for mastering these skills. GEMS defines reading in terms of units of study (goal-units) for each grade level. The goal-units are divided into six strands -- phonics, structure, vocabulary, comprehension, study skills, and affective reading. Pre- and posttests are provided for each goal-unit, and placement tests are provided for each strand to help teachers diagnose the appropriate instructional level for each student. Multiple strategies and materials to aid in teaching for mastery are identified and coded to the GEMS Reading System. A GEMS Book is provided for each level; these books are intended to be used by the teacher as a guide in implementing the program with students. Each book contains introductory information; goal-units, pre- and posttests, and test keys; model strategies for each goal-unit; and an appendix of information and teacher resources.

GEMS reading incorporates three basic retrieval systems: paper and pencil, key sort cards, and computer. Retrieval systems are developed to monitor student progress and to aid teachers in grouping students in instructional sequences. Mastery tests are available to check for learning retention and competency relative to graduation requirements. GEMS makes it possible for teachers to pursue the goal of mastery learning by identifying and communicating to students what they are expected to learn, indicating the appropriate level for instruction, and accommodating a variety of teaching approaches to meet student needs. GEMS places accountability of student and teacher in proper perspective by helping teachers evaluate the quality of their own teaching as well as their students' performance. The staff development component of GEMS reading is designed to train teachers and administrators in the use of the management system for diagnostic/prescriptive teaching. Workshops include: the GEMS Book, Material Management, Procedural Guidelines, Reading Process, Directed Reading, Classroom Management, Testing, and Retrieval.

### **evidence of effectiveness**

The GEMS research design yielded statistically and educationally significant gains in reading comprehension and vocabulary for each grade level, grades 1-6, in 12 pilot schools. The Stanford Achievement Test was used in grades 1 and 2 and the Iowa Test of Basic Skills in grades 3-6. The research study was conducted over a two-year period (1976-78).

### **implementation requirements**

GEMS can be implemented by a grade level, a reading department, a school, or a district. Twelve hours of staff training are required to begin the implementation process. At least one follow-up session is recommended. A GEMS Book and an inservice manual are required for each teacher and administrator. Development of local leadership is emphasized.

### **financial requirements**

Costs are contingent upon group size, location, and levels implemented. Materials cost is \$50 per teacher for a grade-level GEMS Book with tests and strategies. Maintenance costs can be absorbed within a regular school budget.

### **services available**

Awareness materials are available at no cost. Visitors are welcome at project site anytime by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (costs to be negotiated). Training is also available at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

### **contact**

Beverly Lloyd, GEMS Project Director; Jordan School District; 9361 S. 400 East; Sandy, UT 84070. (801) 566-1521.

**PROJECT**HOSTS Math: Help One Student To Succeed

A diagnostic/prescriptive/tutorial approach. A computerized version of HOSTS Math is available.

**target audience**

Approved by JDRP for math instruction in grades 2-6. It has been used in other settings with kindergarten, first-grade and junior high students, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description**

HOSTS Math is a mastery learning model; however, HOSTS Math's flexibility allows it to be used in a regular classroom as well as in a resource room. Students are carefully placed in a precise sequence of math skills and progress from one skill to the next as mastery is demonstrated. Teachers are provided lesson plans which emphasize the manipulative, representational, symbolic approach to learning. Small group and/or one-to-one tutoring is used to remediate the deficiencies identified by the teacher. Assessment, recordkeeping, and review of materials are integral parts of the program available in paper and/or computerized format.

There is also a HOSTS Reading program.

**evidence of effectiveness**

The Comprehensive Test of Basic Skills was administered during the 1979-80 school year to HOSTS Math students. The gain of these students was twice as large as staff predicted it would be. The mean normal curve equivalent gain for target students was 13.0 NCEs. In addition, it was shown that intervention did not impair the educational development of average and above-average students.

**implementation requirements**

Teachers participate in three days of inservice training. Aides and tutors are subsequently trained by teachers. No special facilities or staff is needed. The required implementation materials include Teacher Guide, Record Forms, Lesson Plans, the Math Objectives Continuum, Criterion Tests, and Answer Sheets for each classroom or resource room. The district must be willing to serve as a demonstration site.

**financial requirements**

Start-up cost per school ranges from \$15 to \$90 per student, depending upon whether the program is implemented in the classroom or resource room. Second-year costs are minimal.

**services available**

Awareness materials are available at no cost. Visitors are welcome by appointment at the project site. Project staff are available to attend out-of-state awareness meetings. Training is conducted at project site or at adopter site. Implementation and follow-up services are available to adopters (all costs to be negotiated).

**contact**

William E. Gibbons, Executive Director; HOSTS Non-Profit Corporation; 5802 MacArthur Blvd., Vancouver, WA 98661. (206) 694-1705 or 693-1775.

**PROJECT** HOSTS Reading: Help One Student To Succeed

A diagnostic/prescriptive/tutorial approach. A computerized version of HOSTS Reading is available.

**target audience** Approved by JDRP for students who need remedial reading instruction, grades 2-12. It has been used in other settings with kindergarten and first-grade students, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** HOSTS Reading is a mastery learning program that utilizes citizens' and business participation (30,000 volunteers nationally) plus computer technology to improve student reading achievement. HOSTS Reading features a computerized data base involving the cross-referencing of learning materials for teaching. Materials have been indexed to learning objectives in the mastery of reading skills. The data base references 750 titles by 50 publishers. It has been compiled over a period of 11 years by teachers implementing HOSTS.

There is also a HOSTS Math program.

**evidence of effectiveness** Program evaluation consists of normative (CTBS, CAT) and criterion-referenced tests. Student achievement scores indicate that, on the average, students doubled their learning rate while in HOSTS Reading. Specific gains by grade levels are available in a detailed report. (Evaluation data collected 1973-82.) Data from adoption sites indicate student gains averaged over 14 NCE (Normal Curve Equivalency) scores.

**implementation requirements** Key school district personnel must investigate program. Superintendent and Board must approve program. Reading instructor, aide, and principal must participate in a four-day training session. Principal must tutor in program. District must be willing to serve as demonstration site.

**financial requirements** Start-up cost per school ranges from \$1,500 to \$3,900 depending upon resources available. Second-year cost ranges from \$100 to \$400 per school.

**services available** Awareness materials are available at no cost. Visitors are welcome anytime by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings. Training is conducted at project site or at adopter site. Implementation and follow-up services are available to adopters. (All costs are subject to negotiation).

**contact** William E. Gibbons, Executive Director; HOSTS Non-Profit Corporation; 5802 MacArthur Blvd.; Vancouver, WA 98661. (206) 694-1705 or 693-1775.

**PROJECT**

INDIVIDUALIZED LANGUAGE ARTS: Diagnosis, Prescription, and Evaluation

A project combining a language-experience approach with techniques derived from modern linguistic theory to enhance skills in written composition.

**target audience**

Approved by JDRP for grades 3-6. This program has been used in other settings with grades 1-2 and 7-12, language arts, English and content-area classes, college basic skills programs, adult education programs, special education programs, and independent and supplementary programs in written composition, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description**

At least three times a year, the teacher evaluates writing samples composed by students on self-selected topics. Utilizing criteria common to nearly all language arts programs, the teacher is then able to assign priorities to the needs of the whole class, groups of students, and individual youngsters. For each objective stemming from this diagnosis, a teacher's resource manual prescribes a variety of writing or rewriting techniques for all content areas involving writing. Motivation for writing is strengthened by a "communication spiral" that links composition to the other language arts and to real-life experience. A record-keeping system permits students, teachers, administrators, and parents to observe growth in writing proficiency from month to month and grade to grade. The program can be combined readily with existing language arts curricula and objectives.

**evidence of effectiveness**

Since 1971, evaluations utilizing holistic or criterion-referenced designs with writing samples from students, grades 1-12, in a variety of settings (urban, suburban, and rural) consistently show significant gains in vocabulary, sentence structure, organization, mechanics, and grammar for students in ILA classes.

**implementation requirements**

District makes a definite commitment to improving basic writing skills of all students. District sends initial cadre of teachers and administrators to New Jersey (or elsewhere by arrangement) for two-day training and purchases copies of Teacher's Resource Manual and Management Manual (for administrators). District assumes responsibility for extending program to other grades, classes, and/or schools in future years, with trained administrators conducting inservice programs. District reports to project (directly or through NDN Facilitator) on extent and quality of implementation.

**financial requirements**

District assumes (or shares with NDN Facilitator) the costs of releasing teachers and administrators for training workshops. District assumes (or shares with NDN Facilitator) per diem, travel, and lodging costs for project staff. Teacher's Resource Manual: \$10 per copy. Management Manual (for administrators): \$2 per copy.

**services available**

Awareness materials are available at no cost. Visitors are welcome anytime by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (travel and per diem must be paid). Training is conducted in New Jersey only during three to four weeks throughout the year (all expenses must be paid, including trainees' travel and per diem, and \$10 for manual). Training is also available at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact**

Jeanette Alder, Project Director; Woodrow Wilson School; Hauxhurst Ave.; Weehawken, NJ 07087. (201) 865-1506.

**PROJECT** PROJECT INSTRUCT

A program to correlate all language skills instruction around the sequence of skills used in the school's basal reader, with special emphasis on spelling; and to improve teacher skills in working with the "hard to teach."

**target audience** Approved by JDRP for students grades K-3 and low achievers in grade 4.

**description** Project INSTRUCT correlates reading, spelling, handwriting, and composition programs to make instruction more efficient and more effective. Learning tasks are simplified for students, instruction in each area reinforces instruction in the others, and the teacher makes more efficient use of time so that effective instruction occurs in all language skills areas. Learning tasks are divided into discrete units for ease in student mastery and teacher monitoring of individual student progress. INSTRUCT tailors its program to the needs of local adopters by offering a variety of program options. INSTRUCT options can be adopted in any combination. Options include:

**Correlating Language Skills -- Spelling, Handwriting, Composition:** All language skills instruction is based on the sequence of skills provided by the adopter's basal reading series. Program features include teaching students to spell high-frequency vocabulary words as they are introduced in the reading program; teaching students to spell phonetically regular words based on high-utility phonic generalizations as they are introduced in the reading program; and materials that reinforce reading and spelling skills.

**Word-Attack System:** INSTRUCT offers a system for monitoring decoding skills that extends from readiness to advanced levels. The word-attack system has the following elements: skills array, pre/post criterion-referenced tests, record keeping devices, and instructional supports (games, take-homes, parent-volunteer program, coded commercial materials).

**Direct Teaching Techniques:** INSTRUCT trains teachers to succeed with the hard-to-teach through direct multi-sensory instruction which provides multiple practices, immediate error correction, and positive feedback. Teachers acquire a concise method of teaching vocabulary words to mastery, using sight, phonic, word structure, and contextual methods. They learn classroom management skills to increase efficiency in planning and delivering instruction. They learn to use the limited time available in a way that provides sufficient practices so that even students who have difficulty will master the skills.

**evidence of effectiveness** Data gathered in 1973 with Metropolitan Achievement Tests subtests showed that students in Project INSTRUCT schools scored significantly higher than controls in reading (raw score subtest differential of 1.46 between INSTRUCT group and control group) and in word knowledge (raw score subtest differential 1.60). Progress of students in lower range of scores was even more significant than for the overall group.

**implementation requirements** Adopters complete a local adoption plan and provide necessary student materials. Administrators, teachers, and aides involved in implementation attend INSTRUCT training sessions at adopter site. Correlation of Language Skills requires two days of training; Word Attack, two days; and Direct Teaching Techniques, 40 hours, best divided into two or three sessions. Each basal reader series requires its own set of materials. Materials for most of the popular basals are now available at cost from INSTRUCT, or schools may develop their own. Reporting of evaluation results is now required by USOE in its contract with INSTRUCT.

**financial requirements** Materials for Correlating Language Skills and Direct Teaching Techniques cost less than \$2 per student. Start-up and maintenance for Word Attack cost approximately \$2 per student. INSTRUCT trainer costs (\$175 per day plus expenses) must be met by adopters.

**services available** Awareness materials are available at no cost. Visitors are welcome any time by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted only at adopter site (all expenses must be paid, including stipend). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** Carl Spencer; EDUPLEX, Inc.; 1931 Berkshire Rd.; Upper Arlington, OH 43221. (614) 488-8825.

**PROJECT**

KENOSHA MODEL: Academic Improvement Through Language Experience

An individualized program to improve communication skills utilizing the language experience approach.

**target audience**

Approved by JDRP for students grades K-2. This program has been used in other settings with grades 3-10, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description**

Public and nonpublic school classroom teachers refer low-achieving students to the Title I resource room for individual assessment. Following the educational assessment, the resource teacher selects those students in the greatest need. A Personalized Performance Plan is developed that considers the area of deficiency, the student's learning style, and the instructional techniques to be followed in correcting the deficiency. The plan is flexible and can be modified as the needs of the student change. The language experience approach to instruction is utilized. Instruction follows the assumption that students can speak about that which they have experienced, write about that which they have spoken, and read about that which they have written. At the parent project, a teacher and two aides serve each resource room. Instruction is individualized and takes place in small groups. This project serves approximately 1,200 students during the school year and 450 in the summer. Intensive inservice and parent participation are essential components of this program.

Target schools are established by low-income guidelines. Students served are selected from those scoring in the lowest three stanines on standardized tests. Kindergarten students are selected from those referred by classroom teachers.

**evidence of effectiveness**

Students evaluated are from low-income urban schools. The JDRP validation is based upon positive results on the Peabody Picture Vocabulary Test and the Peabody Individual Achievement Test. Recent results on the PPVT, TOBE, TASK and ITBS in grades K-10 show an average growth in excess of 1.5 months per month in the program.

**implementation requirements**

The staff must be committed to the language experience approach to instruction. Close liaison between the resource room and classroom is required. All teachers should have classroom experience plus additional education in communication skills. Potential adopters are encouraged to send staff members to visit the program.

**financial requirements**

In addition to the staff required for program implementation, approximately \$10 per student is required for materials.

**services available**

Awareness materials are available at no cost. Visitors are welcome any time by appointment at project site and additional demonstration sites in home state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (adopter pays only its own costs). Training is also available at adopter site (trainer travel and per diem must be paid). Implementation and follow-up services are available to adopters (travel and per diem must be paid).

**contact**

Tom Zuhlke, Program Director; Kenosha Unified School District; 625 52 St.; Kenosha, WI 53141.  
(414) 656-6378.

**PROJECT** LEARNING TO READ THROUGH THE ARTS PROGRAM (Formerly Title I Children's Program)

An intensive, individualized remedial reading program presented through the arts.

**target audience** Approved by JDRP for children, grades 4-6, who are reading at least one year below grade level and who are Chapter I (formerly Title I) eligible (some seventh-graders accepted as apprentices).

**description** Reading teachers, classroom teachers, and specially trained professional artists/artist teachers work with Chapter I eligible children at sites in each of the boroughs of Manhattan, Staten Island, Queens, Brooklyn, and the Bronx. At the developer site, children in grades 2-6 are served, as well as special education students. The program is also suitable for grades K-1 and 7-12, and adopters have used the program with those audiences. The program is associated with major cultural institutions in New York City: the Queens Museum, the Staten Island Children's Museum, the Bronx Museum of the Arts, the New York Aquarium, the Brooklyn Museum, and Ballet Hispanico of New York. An overall approach to improving reading is used in this intensive, diagnostic, prescriptive, individualized program presented through the arts. It integrates a total arts program with a total reading program. Listening, speaking, writing, and reading techniques are stressed in the reading-oriented art workshops, and a diagnostic/prescriptive approach to reading is employed in the reading workshops. Participating children meet with the classroom/reading teachers in small groups or individually for an average of three hours per week. Students receive additional reading instruction for at least one and a half hours a week in reading-oriented arts workshops in such areas as dance, music, theater, crafts, sculpture, painting, printmaking, super-8 film, and photography. The resources of museums, cultural institutions, universities, resource centers, and libraries are used, and special programs related to the content of project workshops are scheduled for students on field trip/special event days. There is an annual Learning to Read Through the Arts exhibition of work by participating students and/or a Performing Arts and Film Festival. A series of parent workshops is also held. Preservice and inservice training are available.

**evidence of effectiveness** At the time of validation, participating students in a six-month program improved an average of 1.78 school years (based on a 10-month school year) as measured by the California Achievement Test (Reading) Level 2, and 8.4 months (based on a 10-month school year) as measured by the California Achievement Test (Reading) Level 3.

**implementation requirements** Reading teachers/classroom teachers, professional artists, and/or artist teachers are trained in the Learning to Read Through the Arts methodology. Teacher-made pupil-oriented materials, instructional devices, filmstrips, records, tape recordings, media libraries, books on the arts, and art and audiovisual supplies are used. Program hours and times are adaptable to adopters' needs and scheduling requirements.

**financial requirements** Training materials and curriculum guides cost approximately \$85 per teacher. Cost of program implementation depends on available personnel. Cost of art supplies and equipment depends on the reading-oriented workshops that are implemented. Excluding personnel, it costs approximately \$7 to \$10 per student to implement the program.

**services available** Awareness materials are available at no cost. Visitors are welcome at project site anytime by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (adopter pays only its own costs). Training is also conducted at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** Bernadette C. O'Brien, Project Director; Learning to Read Through the Arts Program; Division of Curriculum and Instruction; P.S. 9; 100 West 84th St.; New York, NY 10024. (212) 787-0470 or -7582.

**PROJECT** MODEL CLASSROOMS' Computerized Classroom Management System (CLASS)

A classroom management system that allows each student to work within the regular classroom at his or her individual math, reading, and language achievement levels. A computerized version of this program is available.

**target audience** Approved by JDRP for all students of all ability levels, grades 1-6. Software can also be used for secondary programs, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** This Washington State program was developed by Urban Rural Racial Disadvantaged (URRD) funds to remedy the basic skills deficiencies of disadvantaged students. The classroom management system was subsequently refined for use by all students in regular classrooms. The program usually takes place in the morning and last until lunch. During this time, students work independently and in small groups on assignments keyed to their individual achievement levels. These assignments are determined in student-teacher conferences. Bicultural students can receive assignments in their native language if they prefer. This classroom management system teaches students how to become responsible for their own learning. They, with their teacher determine the rules and procedures to be followed in the classroom, and they perform the daily chores required to maintain an orderly work environment. Student progress is assessed weekly. Students have access to their personal progress records and are responsible for suggesting the direction of their program for the following week.

Training workshop is conducted either at the adopter site or at a regional workshop. During the workshop, participants learn to select and organize placement tests, cross-reference materials, design class profile sheets, establish a student-managed classroom organizational plan.

Model Classrooms' Computerized Classroom Management System (CLASS) consists of three separate programs: a file initialization program which establishes a student record file, and assignments file, and a chapter objectives file; a student update program; and a report generator which prepares and prints student prescriptions, class profiles, and student summaries. The CLASS system is available for the Apple II.

**evidence of effectiveness** Standardized achievement tests are used to measure gains. Evaluation results indicate that the mean Normal Curve Equivalency (NCE) gains in math and reading are significant, ranging from 5.0 to 14.3 NCEs. There is also demonstrated improvement in attitude toward school among students with previously negative attitudes.

**implementation requirements** Workshop participants must supply the following materials and equipment: a textbook for any subject or objectives and assignments for students, an Apple II with two disk drives, and a display screen. CLASS is also available for use on the Northstar or TRS 80 computer. A printer will be supplied by MODEL CLASSROOMS, but you can bring your own. If you use a regular TV for display, you'll need an R.F. modulator. CLASS can be implemented in any classroom environment with an unlimited number of students.

**financial requirements** Cost for the training workshop is \$150 per participant. All participants receive a comprehensive instructional manual on the application of CLASS in the classroom management setting. The disk with the three software programs is also included in the \$150. No special materials are required when participants return to their classrooms.

**services available** Awareness materials are available at no cost. Training is conducted at a regional site usually after school or on a Saturday. Implementation, software modification services, and follow-up are available to adopters.

**contact** Sherry Avena; Model Classrooms; 4095 173rd Place S.E.; Bellevue, WA 98008. (206) 746-0331.



**PROJECT**

NEW ADVENTURE IN LEARNING: Success Strategies for Reading and Language (NAIL)

Comprehensive language arts and classroom discipline.

**target audience**

Approved by JDRP for students of all abilities, grades K-3, and elementary school faculties. This program has been used in other settings with grades 4-8, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description**

This interdisciplinary program, emphasizing basic language and reading skills, trains regular classroom teachers to utilize diagnostic, prescriptive, and language experience techniques more commonly used by reading clinicians. Such clinical approaches are combined with proven traditional methods to help teachers meet the wide range of pupil performance found in today's classrooms and remedial classes. Strategies useful for working with remedial, normal, and gifted students include: ongoing teacher diagnosis of reading, language, and thinking skills; special remediation of severe language deficits; efficient classroom organization and management; large-group, small-group, and individual study; attention to spoken vocabulary, psycholinguistics, reading, grammar, standard English, writing, and critical thinking skills; a wholesome yet stimulating learning environment; and effective discipline.

This program is a combination of individualized techniques and basal reader instruction, a systematic management system with learning activities that are motivating yet appropriate for elementary-age children, a concern for academic achievement, and a concern for the child's self-concept.

Adoption may involve the total curriculum project or any one of three program components: Psycholinguistics, Oral Language, and Reading. Training for effective classroom discipline accompanies each component. A five-day seminar at the D/D site is available for training leadership teams from adopter school systems selecting total curriculum adoption. Seminars provide in-depth training to prepare leadership teams for training classroom teachers; all training materials, including instructional modules for each professional staff member and an implementation/management kit, are also provided. Training workshops are also available at adopter's home district for classroom teachers and administrators. The number of days required for these workshops depends on the number of components chosen.

**evidence of effectiveness**

Developmental research with approximately 1,000 K-3 pupils showed significant gains in reading (measured by Gilmore Oral Reading Test and Comprehensive Test of Basic Skills [CTBS]), psycholinguistics (Illinois Test of Psycholinguistic Abilities), mental age (Peabody Picture Vocabulary Test, CTBS), I.Q. measures (Wechsler Intelligence Scale for Children), and attitudes toward school.

**implementation requirements**

For component adoptions: participation in a two- or three-day workshop at adopter site (or a central location) is required. For total curriculum adoption: a local trainer/coordinator must participate in a five-day training seminar at D/D site or in a three- to five-day total curriculum workshop at adopter site. Certified trainers available in AL, AZ, CO, FL, GA, ID, IN, KS, KY, MI, NY, OH, SC, TN, TX, VA, and WV.

**financial requirements**

Training cost to be negotiated. Start-up costs for student materials, \$0-\$10 per child, depending on what is already available at adopter site.

**services available**

Awareness materials are available at no cost. Visitors are welcome anytime by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site in spring and early fall. Training is also available at adopter site. Implementation and follow-up services are available to adopters.

**contact**

June Johnson, Director; New Adventure; W. T. Moore Elementary School; Rt. 17; Dempsey Mayo Rd.; Tallahassee, FL 32308. (904) 877-8595.

**PROJECT** THE NEW JERSEY WRITING PROJECT

A teacher training program that improves student writing.

**target audience** Approved by JDRP for teachers and students grades 7-12, all ability levels. It has been implemented K-6 as well, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** The New Jersey Writing Project is a state-wide writing program based on a thorough knowledge of the composing process. This project is predicated on the following assumptions: writing is a process and a mode of learning; teachers of writing should write; teachers teaching teachers accomplishes efficient curriculum change; theory about and assessment of writing should enhance classroom practices.

The program involves three stages: teacher training, implementation and staff development, and assessment. The teacher training stage is a three-week summer institute for teachers from multiple districts in the same geographic region. Each day of the training program is divided into a writing/sharing morning session and a theory presentation in the afternoon. The second stage is a two-part program. First, returning teacher consultants introduce writing as a process into their classrooms. Within the confines of the regular English period each teacher provides time for students to write in class. All students are instructed in the process of effective editorial feedback. Teachers do not have to edit each student's paper because students do that for themselves and for others. Second, in addition to implementation in the classroom the returning teachers begin staff development programs suited to the unique needs of district curricula. The third stage involves the development and use of assessment instruments and procedures. This evaluative phase encompasses the following components: students' writing samples; training for teachers in holistic scoring; and teacher and student writing attitude surveys.

**evidence of effectiveness** Writing samples obtained in October and May from 1,400 students in eight treatment districts and seven control districts representing urban, suburban, and rural New Jersey were scored using a holistic method developed by Educational Testing Service. Regression analysis, adjusting posttest scores for pretest scores, indicated that the difference between treatment and control groups was highly significant ( $p \leq .001$ ), amounting to 45.5% of the standard deviation of the posttest distribution.

**implementation requirements** The program should be adopted by a group of districts wishing to work jointly on student writing. Training is required. One or two district teachers receive intensive training and return to their schools to train others.

**financial requirements** Costs are limited to training. Training for a group of 25 teachers from 10-20 districts at adopter site: a trainer for three weeks, \$1,500; travel and residency for the trainer, if required, approximately \$1,500; payment or credits for participating teachers as per local option; paper and supplies, \$300; texts per participant, approximately \$25; two release days per participant for evaluation data analysis.

**services available** Awareness materials are available at no cost. Visitors are welcome any time by appointment at project site and additional demonstration sites in home state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site in three-week sessions during July and August (adopter pays only its own costs). Training is also available at adopter site, usually in three-week full-day sessions in June, July, or August (all expenses must be paid, including trainer's stipend, cost of training materials, and trainer's travel and per diem). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** Linda Waitkus, Project Director; South Brunswick Township Public School; 1 Executive Dr.; Monmouth Junction, NJ 08852. (201) 297-7800.

## **PROJECT**

PEGASUS-PACE: Continuous Progress Reading Program: Personalized Educational Growth And Achievement; Selective Utilization of Staff -- Personalized Approach to Continuous Education

An objective-based reading management system -- a comprehensive developmental program.

**target audience** Approved by JDRP for students in grades K-6.

**description** Project PEGASUS-PACE seeks to accelerate students' reading achievement and to help teachers enhance their effectiveness through a locally developed, personalized program of continuous learning. The curriculum structure consists of performance objectives and corresponding diagnostic instruments for 17 sequential reading levels (K-8). Learners are grouped and sub-grouped according to their established needs; the personalized instruction employs a variety of approaches to the teaching of reading. Teachers conduct formative evaluation of specific skills and use a graphic chart to track each student's mastery at a given level.

Learning activities are selected or developed by the teachers in accordance with the diagnosed needs of the students. These activities and lesson plans are contributed to an accessible learning-resources file organized according to PEGASUS-PACE levels and skills.

The PEGASUS-PACE Continuous Progress Reading Program is compatible with any organizational staff arrangement such as open-space, nongraded, or self-contained classrooms. Teachers may continue to use any strategies they have found successful.

The PEGASUS-PACE Program may be used in conjunction with basal readers and a variety of other instructional materials already available in local schools.

This project's adoption site, PEGASUS, in Princeton, Illinois, has also been approved by JDRP (January 9, 1979, JDRP No. 79-1).

**evidence of effectiveness** In addition to meeting the core criteria for pre/post summative evaluation, assessed through a comprehensive evaluation design, the project met a large number of non-linear-based objectives. Before the project was developed, achievement scores of students at the primary target school had shown a steady trend of regression. At the end of the third developmental year, more than 75% of students who had entered the program as first-graders scored at or above the median of national norms on the appropriate level of the Gates-MacGinitie Reading Tests.

**implementation requirements** The program is implemented by classroom teachers rather than by special reading teachers. Some training is necessary both prior to and during implementation. A two-day workshop is offered prior to implementation. Adopter sites are expected to schedule release time on a regular basis for staff development. Adopter schools receive permission to reproduce copyrighted materials. For all 17 levels, a Master Volume is available; it contains: Objectives and Skills Check Sheet, Teacher's Guide and Key, Learner-Use Diagnostic Instrument. For levels 9-16, Learner-Use Answer Sheets are also included.

**financial requirements** The Master Volume costs \$55; reproduction costs have proved to be extremely low (between 40¢ and 80¢ per student per year). Cost of locally purchased file folders for Resource File is approximately \$45. Cost of locally purchased file folders for student records varies with number of students. Informal reading inventories for each teacher cost approximately \$6 each. Expenses for initial training at the adopter or D/D site vary as do costs of training a local resource person (Associate Trainer).

**services available** Awareness materials are available at no cost. Visitors are welcome anytime by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site from October to April (adopter pays its own costs). Training is also available at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (all expenses must be paid).

**contact** Marie Sinclair, Project Director; Tuscaloosa City Board of Education; 1100 21st Street East; Tuscaloosa, AL 35405. (205) 759-5705.

**PROJECT** PRE-ALGEBRA DEVELOPMENT CENTERS

A complete one-year program to develop students' basic conceptual/computational mathematics skills and prepare them for algebra.

**target audience** Approved for JDRP for regular mathematics classes at the seventh- and eighth-grade levels, eight-week summer mathematics programs for students entering high school, and remedial mathematics programs at the high school level.

**description** The curriculum design develops students' basic computational and conceptual skills through five units of concentration: Ratios and Proportions, Fractions, Decimals, Percent, and Metric Measures.

The program's curriculum materials are based on mathematics principles, called Tools of the Trade, which provide a foundation for teaching all concepts and for further learning in mathematics. Tools of the Trade include: Ratios and Proportions, One -- Its Name and Properties, Place Value, and the Additive and Subtractive Properties of Numbers. The program's original instructional approach involves mathematics laboratory instruction, regular classroom instruction, and individualized diagnosis and remediation (LCD technique) coupled with reading in mathematics.

Training covers math lab techniques, individualizing for math instruction, techniques for building a conceptual foundation for mastering basic mathematics skills, and use of the program materials.

Key Elements: three-day intensive training, use of Pre-Algebra unit packs for instruction, use of the laboratory classroom diagnosis and remediation technique (LCD), use of Tools of the Trade for instruction, evaluation of the program's effectiveness.

**evidence of effectiveness** Evaluation studies showed that approximately 80% of project students scored an average gain of two grade levels (Stanford Achievement Test) and were subsequently enrolled in algebra. A longitudinal study of the program shows that 92% passed algebra with a high degree of success, 85% took additional math courses beyond algebra, and 15% took four years of high school mathematics.

**implementation requirements** The program operates in regular classrooms. The regular class schedule can be adjusted to accommodate all phases of the program. Required are: three-day intensive training, the program text materials, and materials for the lab, including manipulatives and diagnosis/remediation kit.

**financial requirements** Adoption costs depend on the number of students to be taught, teachers to be trained, and attendance centers involved. Text materials: \$7.50 per student. Laboratory materials: approximately \$1,000 (may be used by as many as 500 students).

**services available** Awareness materials are available at no cost. Visitors are welcome by appointment at project site and additional demonstration sites out of state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (adopter pays only its own costs). Training is also available at adopter site (trainer travel and per diem must be paid). Implementation and follow-up services are available to adopters (all expenses must be paid).

**contact** Dorothy Strong; Pre-Algebra Development Centers; 228 N. LaSalle St., Room 838; Chicago, IL 60621. (312) 641-4062.

## **PROJECT** PROVISO READING MODEL

A program of structured sequential activities for language arts, mathematics, and science courses to remedy serious reading problems among students in grades 9-12.

**target audience** Approved by JDRP for grades 9-12.

**description** The Proviso Reading Model is a four-year program. Ninth-grade students identified as disabled readers enroll in the program's Level I courses in English, general science, and math fundamentals. In tenth, eleventh, and twelfth grades, students who have not yet developed the skills required to enter one of the district's nonremedial English curricular sequences are enrolled in program courses for Levels II, III, and IV. The Proviso Reading Model is based on four convictions: that poor readers can improve, even in high school if reading is a major thrust of the total curriculum; that a sound high school reading program must be based on a definition of reading as a thinking skill; that the skills that make up what is generally defined as reading (linear reading) may better be learned through carefully devised visual literacy (media reading), composition, oral communication, mathematical computation, language, and listening activities within courses in English, science, and mathematics than in pull-out tutorial or remedial activities not part of the regular curricular offerings; and that materials and strategies attractive enough to make reluctant students excited about learning do exist. The organization of Level I allows for a variety of teaching strategies. Activities can be directed by a single teacher with a general background in language, composition, and reading. If there are enough students, the course can be taught by a team of three teachers, each of whom directs the activities of one specific area -- reading, media, or composition. Math and science are taught by regular classroom teachers using materials devised by district reading specialists. In Levels II, III, and IV, students continue to develop linear and visual reading skills while applying these to the development of skills in composition, speech, and media. A curriculum guide, with single copies of all instructional materials, is available for each level.

**evidence of effectiveness** As a result of participation in the Proviso Reading Model program, the average seven-month growth in reading skills demonstrated by project students exceeded the average growth demonstrated by the national norming population on the Stanford Achievement Test.

**implementation requirements** A successful adoption requires no specialized facility nor additional staff. It does require active administrative support and staff members with demonstrated concern and interest in the teaching of reading (if no academic background). Above all, staff members must be willing to use highly structured sequential materials. Adopter school needs will determine the number of training days (1-3) and follow-up meetings.

**financial requirements** Curriculum guides for each course cost \$20 per copy. A wide variety of commercially available materials may be used. Adopter assumes the cost of releasing staff for training and follow-up. (Costs for trainer's travel and per diem can be negotiated.)

**services available** Awareness materials in limited quantity are available at no cost. Visitors are welcome at demonstration site by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at adopter site or at demonstration site (costs to be negotiated). Follow-up and assistance with evaluation are available to adopters (costs to be negotiated).

**contact** Dale Crawford, Project Director, or Mary Lou Crawford, Project Coordinator; Proviso Township High Schools, District No. 209; 807 S. First Ave.; Maywood, IL 60153. (312) 344-7000, ext. 200 or 300.

## **PROJECT**

PROJECT R-3: Readiness, Relevancy and Reinforcement

A motivational basic skills program that interrelates the reading and mathematics curricula through gaming/simulation activities involving career awareness.

### **target audience**

Approved by JDRP for students of all abilities, grades 7-9. This program has also been used with elementary, high school, and alternative school audiences, but no evidence of effectiveness has been submitted to or approved by the Panel.

### **description**

Project R-3 was jointly designed in 1967 by the San Jose Unified School District and the Education Systems Organization of Lockheed Missiles and Space Company with the help of consultants from San Jose State University. Its competency-based curriculum interrelates reading and mathematics and supplies reinforcement through gaming/simulation, intensive involvement (a three-day study trip), parental involvement, and an inservice training program for staff development. The main objective of Project R-3 is the upgrading of essential reading and mathematics skills. By deeply involving the students in classroom games and simulations, the program seeks to motivate them to achieve in learning experiences: to make them ready to learn, to make learning relevant, and to reinforce positive attitudes and behavior.

The project utilizes the diagnostic/prescriptive individualized approach in reading and math. Reinforcement of skill areas is provided through gaming/simulation activities that involve team learning, the decision-making process, and career awareness development.

### **evidence of effectiveness**

The overall reading achievement gain for 1972-73 on the Comprehensive Test of Basic Skills (CTBS) Form R Level 3 exceeded normal expectations by three months. Per-month average gains were 1.4. The overall mathematics achievement gain for 1972-73 on CTBS was two years for eight months in the program. Highest gains were in Computation and Concepts (2.3 and 1.9). Lowest gain was in Math Application (1.3). An outside evaluator is contracted for both product and process evaluation.

### **implementation requirements**

Reading and mathematics teachers should have a knowledge of the diagnostic/prescriptive approach to individualized instruction. Teachers must be receptive to team planning. All staff should develop expertise in gaming/simulation. Approximately 50 hours of inservice work are accomplished by each staff member in a given year.

### **financial requirements**

The basic materials of a secondary-level reading program can be utilized. Specially prepared math contracts cost approximately \$150 for a complete set of masters which can be duplicated. A complete set of consumable math contracts for 250+ students can be purchased for \$5.50 per set (19¢ per contract). Eighteen simulation booklets containing teacher guide and student materials cost \$8 per book. Other costs: reproduction of gaming/simulation activities and contracts; secondary instructional aides.

### **services available**

Awareness materials are available at no cost. Visitors are welcome at project site anytime by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at the project site (costs to be negotiated). Training is also available at adopter site (trainer travel and per diem must be paid). Implementation and follow-up services are available to adopters (costs to be negotiated).

## **contact**

Pauline E. Perazzo; 1635 Park Ave.; San Jose, CA 95126. (408) 287-1111 or -1112.

**PROJECT** READING/ENGLISH ROTATION PROJECT

A rotating classroom approach to teaching reading/language arts skills.

**target audience** Approved by JDRP for grades 7-9. It has been implemented in K-12, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** An organizational pattern was designed to take into account the characteristics of the students and to identify and meet their individual needs. Students are divided into small, flexible groups of six to 10, which move from station to station. Different materials and activities at each station are specifically planned to build a success pattern for the individual child. A rotation group consists of 60 children. Each group of 20 moves to three different classrooms during a two-period time block of one hour and 50 minutes. One classroom is equipped as a reading laboratory where basic reading skills are emphasized. A second classroom reinforces reading skills through various reading activities selected to provide sequential development of skills. In the third classroom, the English teacher again reinforces the reading skills through various English/reading skill exercises and through the language-experience approach to reading. This is a team-teaching approach that emphasizes the integration of the basic communication skills as opposed to the "pull-out" model.

**evidence of effectiveness** The mean gain for the 104 participants during 1972 was 1.3 years (Gates-MacGinitie). The average achievement prior to the project was 2.65 years in six years of schooling. Over a period of 13 years, participants have averaged one month's growth in reading per month of instruction as measured by standardized achievement tests.

**implementation requirements** Two teachers, one lead reading teacher, and up to four paraprofessionals are desired. This staffing equals one rotation and/or 60 students, which equals three classrooms. Materials already found in most schools are used. Three days of staff development training are required.

**financial requirements** \$15 per student, excluding personnel.

**services available** Awareness materials are available. Visitors are welcome October through April by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (adopter pays only its own costs). Training is also available at adopter site (trainer travel and per diem must be paid). Follow-up services are available to adopters (costs to be negotiated).

**contact** Marcelyn Hobbs, Program Director; Reading/English Rotation Project; Norris School; McDuffie County Schools; Thomson, GA 30824. (404) 595-3527.

**PROJECT** SCHOOL VOLUNTEER DEVELOPMENT PROJECT

A delivery system of school volunteer services that directly addresses critical learner needs for grades 2-6 in reading and mathematics.

**target audience** Approved by JDRP for students in grades 2-6 who are functioning one or more years below national norms in reading and mathematics, for teachers desiring tutor assistance, and for volunteer community members. It has been used in grades K-1 and 7-12, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** The School Volunteer Development Project includes an overall plan for a delivery system of volunteer services and the accompanying support materials, recruitment procedures to generate a resource pool of volunteers, training for volunteers and teachers who use these services, and evaluation of each phase of the project, along with an overall evaluation of the system. The system, designed to locate, process, and evaluate volunteer services in Dade County (Florida) Public Schools, is transportable and easily adoptable in rural or urban settings.

The community is the backbone of the project, with volunteers selected from high school and college students, parents, senior citizens, and community-minded people from business and industry. Orientation and preservice training for volunteers are provided in addition to inservice training for classroom teachers.

This project also has the capability to recruit, train, and place volunteers in classes for the educable/trainable mentally retarded and learning-disabled.

The multimedia Starter Kit for the utilization of volunteer services contains two administrative reference books, handbooks, and training materials (one filmstrip-tape) for training volunteers, teachers, and administrators. Three training modules with tapes, a course outline for cross-age tutor training, and two additional reference books are offered as optional items.

**evidence of effectiveness** A pre/posttest control group design was used to evaluate two specified outcome objectives for reading and mathematics, grades 2-6, with the Stanford Achievement Test and Metropolitan Reading Achievement Test. Results of data analysis indicate that pupils in grades 2-6 performing one or more years below national norms who were tutored by project volunteers made significant achievement gains over nontutored control groups (seven months for each month of tutoring).

**implementation requirements** The basic requirements for adoption are that a school or district purchase the project materials, appoint a person (staff or volunteer) to coordinate the program, provide training for that person in the implementation of the program, and operate the program in at least one school for one year.

**financial requirements** Based on a paid coordinator, the total per-pupil cost per school year is \$2.25 (31¢ for start-up, 38¢ for management, \$1.56 for operation). This cost can be reduced to approximately 70¢ if the adopting school or district uses a staff member or volunteer to coordinate the program.

**services available** Awareness materials are available at no cost. Visitors are welcome at project site on the third Thursday and Friday of each month. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (all expenses must be paid). Training is also available at adopter site (all expenses must be paid). Implementation and follow-up services are available to adopters (all expenses must be paid).

**contact** Johanna Goetz, Coordinator of Training; School Volunteer Development Project; 1410 N.E. Second Ave.; Miami, FL 33132. (305) 371-2491.



## **PROJECT**

STAMM: Systematic Teaching And Measuring Mathematics

A complete mathematics curriculum for kindergarten through Algebra II-Trigonometry, including alternative high school courses.

### **target audience**

Approved by JDRP for students of all abilities, grades K-8. This program has been used in other settings with grades 9-12, but no evidence of effectiveness has been submitted to or approved by the Panel.

### **description**

The major objective of the program is to provide continuous progress in mathematics for the entire school experience of all students, kindergarten through senior high school. The STAMM program represents a complete system that can be adopted or adapted by other districts. A framework of objectives and assessment by criterion-referenced tests are basic to STAMM. Careful monitoring of student progress, measurement of mathematics competencies, and alternative courses at the high school level are featured. The program may be used successfully in many different classroom situations, including small-group instruction, large-group instruction, individualized instruction, team teaching, and math lab. Resource material is provided for each objective; textbooks, manipulative materials, and teacher-made resources may be incorporated as well.

Since STAMM is based on continuous progress, it is important for a school using STAMM to keep complete records on each student and to test each student's progress frequently. This enables a teacher, in the fall, to continue a student from where he/she left off in the spring. A teacher with one grade level of students may need to be familiar with more than one level of the program to accommodate continuous progress.

The basic skills continuum for grades K-8 is covered in levels A, B, C, D, E, F, GE, G, and H. High school courses are defined for Mathematics Competencies, Algebra I, Geometry, Algebra II, Trigonometry, Applied Math, Vocational Math, and Rapid Calculation.

Special materials are packaged for Chapter I (formerly Title I) and special education emphasis for use in regular classrooms and labs.

### **evidence of effectiveness**

Approximately three fourths of all Jefferson County students now score above the national norm on the Comprehensive Test of Basic Skills at grades 4, 6, and 8. This achievement has been consistent from 1973 through spring 1980. Prior to implementation, roughly half the students scored above the national norm.

### **implementation requirements**

STAMM guides, tests, and workbooks may be used by a single teacher or an entire school system. The more levels involved in implementation, the greater the gains from the continuous-progress aspect of STAMM. A two-day training session prior to implementation is recommended. Weekly or monthly meetings are recommended for the local staff. STAMM does not dictate teaching style, and may be used in any classroom setting. Textbooks may be used as an integral part of the program, but experience advises that they be supplemented with teacher-made or STAMM resource materials.

### **financial requirements**

STAMM teachers' manuals, K-12, \$17 each. Each teacher needs one manual for each level or course taught. Test books and workbooks: \$3.25 each for single copies, \$3 each for 11-100 copies, and \$2.75 each for 101-250 copies, \$2.25 each for 251-500 copies, and \$2 each for more than 500 copies.

### **services available**

Awareness materials are available at no cost. Visitors are welcome at project site any time by appointment. Project staff are available to attend out-of-state awareness meetings (travel and per diem must be paid). Training is conducted at project site on February 15-16, 1983, May 3-4, 1983, and July 12-13, 1983. Training is primarily available at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

### **contact**

Glyn H. Sharpe, STAMM Project Director; Jefferson County Schools; 1005 Wadsworth Boulevard; Lakewood, CO 80215. (303) 231-2381.

**PROJECT** TALK: Teaching Activities for Language Knowledge

A program improving expressive and receptive vocabulary skills and language, grades K-3.

**target audience** Approved by JDRP for elementary students grades K-3 scoring at the 50th percentile or below on a standardized reading test.

**description** A language specialist teaches 30-minute oral language lessons twice each week in K-3 classrooms. The participating classroom teacher remains in the classroom during lessons demonstrated by the language specialist, teaches weekly follow-up oral language lessons assigned by the language specialist from the TALK lesson manual, and completes a brief evaluation of the TALK lessons conducted. A TALK lesson manual includes lessons in listening skills, grammatical skills, describing and defining, personal and social awareness, choral speaking, story-telling, creative dramatics and puppets, and speaking and hearing science.

**evidence of effectiveness** Statistically, TALK has shown that all K-3 students can significantly improve their receptive and expressive vocabularies. Tests utilized: Wechsler Preschool and Primary Scale of Intelligence vocabulary subtest, Wechsler Intelligence Scale for Children vocabulary subtest, and, as a receptive measure, the Peabody Picture Vocabulary Test, Form A or Form L.

**implementation requirements** The adopting district must provide a speech and language clinician or an elementary teacher with a background in language development or reading for one hour per week for each classroom receiving TALK. The TALK program can be adopted by as few as one language specialist and two classroom teachers in a school district. After language specialists have been trained in program methods and procedures, they can train other personnel in the local district. TALK staff assist each adopting district by designating an evaluation battery to assess the effectiveness of the program as it is implemented. A certified psychologist must be available during the pre- and posttesting periods.

**financial requirements** A minimum of two hours of release time per week must be provided for a speech and language clinician or teacher to service two classrooms. Each language specialist and classroom teacher must have a copy of the TALK instructional manual, \$40. A TALK training manual, \$10, is suggested for each school district.

**services available** Awareness materials are available at no cost. Visitors are welcome at project site anytime by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). One-day training sessions are conducted at project site or adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** Roberta Stiles, Project Coordinator; Muldoon Center; Rockford School District #205; Rockford, IL 61102. (815) 964-7019.

**PROJECT** TEAMS-GAMES-TOURNAMENT (TGT)

An instructional method using cooperative teams and game tournaments to increase student learning of basic skills.

**target audience** Approved by JDRP for pupils of all ability levels, grades 3-12.

**description** Teams-Games-Tournament (TGT) is an instructional method that reorganizes the classroom by dividing pupils into four- or five-member groups for study and peer tutoring on worksheets. Individual group members then play instructional games against members of equal ability from other groups to score points for their teams. The TGT instructional method is appropriate for any curriculum unit (grades 3-12) that offers basic skills or factual information to heterogeneous groups.

Teachers may use only the TGT Teacher's Manual or may include the worksheets and games already developed by the Center which cover specific instructional objectives. TGT is designed to supplement traditional lecture or drill methods, individualized instruction, or performance-based instruction. The TGT instructional process is carefully sequenced to enhance academic achievement, but teachers may adapt and change elements to meet certain objectives.

TGT curriculum units are designed for six to eight weeks' use in each class period, although shorter units may be completed in three to four weeks. The units help to improve basic skills, promote positive pupil attitudes toward schoolwork and classroom experiences, and increase cooperation through peer tutoring.

**evidence of effectiveness** Ten experimental studies have demonstrated positive TGT effects on academic achievement in math and language arts. Each study employed a control group and pre- and posttest measures of standardized achievement (Stanford Achievement Test in Mathematics, Hoyum-Sanders English Tests), plus treatment-specific tests. Four experimental studies have shown very positive TGT effects on classroom race relations.

**implementation requirements** Individual teachers can implement TGT through use of teacher's manual and construction of own worksheets and games. For school or district implementation, there should be general awareness training followed by workshop training (one day). If TGT's published curriculum materials are used, no teacher development of materials is required.

**financial requirements** Basic starter kit for use with teacher-made worksheets and games is available for \$5. Objectives-based curriculum materials (worksheets and game sheets) available for reproduction: Language arts, grades 3-8, 100 objectives, \$40; 20 usage objectives, \$20. Mathematics, grades 3-8, 20 basic objectives per grade level, \$20 per grade level.

**services available** Awareness materials are available at no cost. Visitors are welcome anytime by appointment at project site and additional demonstration sites out of state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (adopter pays only its own costs). Training is also available at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** Ruth H. Carter, Dissemination Coordinator; Center for Social Organization of Schools; 3505 N. Charles St.; Baltimore, MD 21218. (301) 338-8249.

**PROJECT** TRAINING FOR TURNABOUT VOLUNTEERS

A cross-age tutor-training program that prepares students in grades 7-9 to serve as reading or math tutors with students in grades 1-6 who are achieving below grade level.

**target audience** Approved by JDRP for tutors in grades 7-9 to tutor grades 1-6.

**description** The Training for Turnabout Volunteers (TTV) project includes an extensive multimedia training program as well as an overall plan for a delivery system for cross-age tutors. As the training program is structured, students in grades 7-9 participate in a total of 26 training sessions which provide them with tutoring skills and strategies that can be applied within the tutee's basic skills curriculum. The training program is divided into three mini-courses: General Volunteering Skills (GVS), Tutoring in Reading, and Tutoring in Math. Each mini-course consists of a series of videotaped lessons for initial concept development, mini-paks (workbooks) with practice and extension activities for the tutor, and reinforcement activities that can be used by the tutors with their tutees. After preservice training in the GVS mini-course, students attend inservice training in the reading or math mini-course once a week and tutor four times.

The TTV delivery system for cross-age tutors includes procedures and support materials for recruiting, screening, and placing cross-age tutors, training for the teachers who direct their activities, and strategies for monitoring and evaluating the program.

The TTV project is transportable and easily adoptable since it requires no special staffing, facilities, or curriculum. TTV is used in conjunction with the adopting school or district's reading or math program and can be dovetailed into the school's program as an elective or extra-curricular activity.

**evidence of effectiveness** Results of data analysis indicate that, overall, the training program was effective in that it taught the skills necessary for better tutoring, and that tutee performance was significantly enhanced in reading and math as a result. The field-test study documented that the elementary students who were tutored by TTV-trained tutors increased their reading or math achievement scores as much as 1.5 grade levels more than the tutees who were tutored by untrained students. In addition, the achievement gains of the tutors indicate that those who learned tutoring skills and used them with their tutees showed greater gains in reading and math than the untrained tutors.

**implementation requirements** The basic requirements for adoption are that a school or district purchase the project materials, appoint a person to coordinate the program, provide training for that person in the implementation of the program, and operate the program in at least one school for one year.

**financial requirements** Implementation costs are based upon the training needed for installation and the teacher and student materials needed for 30 TTV reading tutors and 30 TTV math tutors each semester. Per pupil costs are \$10.08 for installation and 62¢ for each subsequent year, making the per pupil costs \$3.77 over three years, which is the projected period of use for the student materials.

**services available** Awareness materials are available at no cost. Visitors are welcome to attend a two-day demonstration/implementation workshop that is held the third Tuesday and Wednesday of each month. Project staff can attend out-of-state conferences. Training is conducted at the project site or the adopter's site. Costs are negotiated for all services.

**contact** Johanna Goetz, Coordinator; Training for Turnabout Volunteers; Dade County Public Schools; 1410 N.E. Second Ave.; Miami, FL 33132. (305) 371-2491.

## **PROJECT**

VRP: Reading Power in the Content Areas (Vocational Reading Power)

A staff-development project designed to help content area teachers minimize the gap between student reading abilities and reading requirements of printed instructional material.

### **target audience**

Approved by JDRP as a staff development project for vocational programs whose students report a broad range of ethnic and socioeconomic backgrounds, grades 11 and 12. This program has been used in other settings at the postsecondary level and in junior and senior high nonvocational programs, but no evidence of effectiveness has been submitted to or approved by the Panel.

### **description**

VRP is a staff development program designed to make content-area teachers aware of the gap between student reading abilities and the reading requirements of printed instructional materials and to provide teachers with methods of minimizing the effects of that gap. VRP has successfully been adopted in more than 400 secondary vocational and nonvocational schools. The goals of the project are: to narrow the gap between student reading ability and the skill level required to read printed instructional materials; to enrich the knowledge, attitudes, and skills of content-area teachers as these relate to the use of textbooks and other reading-related activities; and to increase student learning of content.

The program consists of five components. Testing trains teachers to use formal and informal tests and inventories to assess the reading abilities of their students. Readability Analysis provides teachers with the knowledge and tools to analyze the reading levels of printed instructional materials, to apply this knowledge when selecting texts, and to modify and improve use of the printed materials to fit students' reading abilities. Fifteen Reading in the Content Area Modules provide for additional staff development in content-area reading. The modules, which are designed to be used in group or individual inservice, provide basic strategies and procedures that can be incorporated into any classroom curriculum. Vocabulary Development focuses on practical vocabulary activities that the teacher can incorporate into the total curriculum. In addition, for vocational adopters, project-developed vocational student reading-support materials in the form of 32 Occupationally Specific Key Word Glossaries are available. Instructional Materials System involves the development of a resource system that provides teachers with ready access to a wide variety of instructional materials in their fields.

### **evidence of effectiveness**

Using the Gates-MacGinitie, Survey F, pretest comprehension data indicated 70% of project students were reading below eleventh-grade level and 20% below seventh-grade level. Posttest data revealed percentages of 57% and 12% respectively. Pre- and posttest gains were significant at the .05 level. A pre/post teacher training test indicated significant growth in teacher knowledge of test utilization and reading-related activities.

### **implementation requirements**

A minimum of one staff person with a background in curriculum development and/or reading acts as part-time director/coordinator. Involvement of administrators, content-area instructors, and reading consultants (if used) is required. Once the district completes a training and implementation plan, the D/D provides a training workshop lasting two or three days, depending upon the needs of the adopting/adapting district. Staff development time must be provided.

### **financial requirements**

No new equipment or staff are required. Cost of individual Key Word Glossaries varies; entire set of 32, \$95. Adopters of this component may purchase glossaries for each student or one or two per classroom. Cost of individual Reading in the Content Area Modules varies; entire set of 15, under \$400. Adopters of this component typically purchase a minimum of five modules and a maximum of one complete set. Training manual: \$12 each. (Prices subject to change.)

### **services available**

Awareness materials are available at no cost. Visitors are welcome any time by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted only at adopter site (all expenses must be paid, including travel and trainer fee of \$150 per day). Implementation and follow-up services are available to adopter (costs to be negotiated).

### **contact**

Eileen Ostergaard, or Carol Burgess; The EXCHANGE; 110 Pattee Hall; University of Minnesota; Minneapolis, MN 55455. (612) 376-8234.

SECTION A-10: SPECIAL EDUCATION/LEARNING DISABILITIES\*

ACTIVE: All Children Totally Involved Exercising -- New Jersey . . . . . A-10.3

ELSMERE PROJECT -- New Jersey. . . . . A-10.4

ERIN: Early Recognition Intervention Network -- Massachusetts. . . . . A-10.5

MARRS: Mainstream Amplification Resource Room Study -- Illinois. . . . . A-10.6

MODIFICATION OF CHILDREN'S ORAL LANGUAGE -- California. . . . . A-10.7

OKLAHOMA CHILD SERVICE DEMONSTRATION CENTER FOR SECONDARY LD STUDENTS -- Oklahoma. .A-10.8

PRECISION TEACHING PROJECT -- Montana. . . . . A-10.9

the RUTLAND CENTER -- DEVELOPMENTAL THERAPY MODEL FOR TREATING EMOTIONALLY  
DISTURBED CHILDREN -- Georgia. . . . . A-10.10

project SKI\*HI -- Utah . . . . . A-10.11

SYSTEMATIC INSTRUCTIONAL MANAGEMENT STRATEGIES (SIMS) -- Minnesota . . . . . A-10.12

the TEACHING RESEARCH INFANT AND CHILD CENTER CLASSROOM FOR MODERATELY AND  
SEVERELY HANDICAPPED CHILDREN -- Oregon. . . . . A-10.13

\*See Sectional Cross-Reference Index, p. D-9, for related programs.

**PROJECT** ACTIVE: All Children Totally Involved Exercising

A diagnostic/prescriptive physical education program that provides teachers with the skills, strategies, and attitudes necessary to initiate a physical activity program for handicapped and normal individuals.

**target audience** Approved by JDRP for handicapped, ages 6-60, nonhandicapped; grades K-9, physical education teachers, special education teachers, recreation teachers, and paraprofessionals. It has been used in other settings with pre-K and grades 10-12, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** Project ACTIVE has been developed to serve handicapped individuals, but is equally applicable to slow learners and normal and gifted children. ACTIVE offers a training program to provide teachers with those skills/strategies necessary to implement an adapted physical education program, diagnostic/prescriptive curriculum manuals and materials addressed to the entire gamut of handicapped conditions, and consultant services to assist implementers during the installation phase. Program strengths include extreme flexibility for adoption/adaptation, a total curriculum package that can be implemented immediately at minimal cost, compliance with the federal mandate requiring "written education programs for the handicapped population," unlimited support services at no cost to enhance successful implementation, and accountability features to enhance administrator/community support. Student instruction is based on instruction format (i.e., the program is structured to ensure that trainees acquire the skills, knowledge, and attitudes stressed), with emphasis on trainee exposure to handicapped individuals in a field setting. Participants are trained to diagnose and assess pupil strengths and deficiencies and to prescribe motor, perceptual-motor, physical fitness, posture, nutrition, and diaphragmatic breathing tasks accordingly. ACTIVE has developed low motor ability, low physical vitality, postural abnormality, nutritional deficiency, and breathing problem components for mentally retarded, learning disabled, and emotionally disturbed student populations.

No special facilities are required. Comprehensive programs can be initiated in limited space. A 30' x 60' area removed from other teaching stations is ideal. If P.E. equipment is available, cost per school varies between \$50 and \$300. District commitment includes implementation of at least one aspect of the ACTIVE program in three or more classes that meet for a minimum of three 20-minute periods per week for one year, allocation of time for the trainee to train at least one staff member, and transmission of pre/post data and end-of-year evaluation report to project.

**evidence of effectiveness** Testing of 80 teachers trained in 1973-74 on the Teacher-Cognitive-Psychomotor Test showed 80% mastery on 25 competencies. Pre- and post-testing of matched experimental and control groups at a six-month interval in 1973-74 on the Township of Ocean Motor Ability Test showed experimental groups' performance comparable to normal groups' performance and minimal gains for control group.

**implementation requirements** Program may be implemented in a single class, a school, or an entire district. Five discrete curriculum components enable the district/agency to adapt the program to students with varying abilities in grades pre-K through 12. Training programs are adapted to comply with needs of the teachers and schools. Existing personnel can be used to obviate the need for additional staff (e.g., by inclusion of the ACTIVE program in the special education curriculum or by use of the team teaching approach). Instructional facilities may vary from 30' x 30' to 30' x 60'. Implementation schedule for each trainee must be submitted to project prior to training.

**financial requirements** Complete training model kit (12 manuals and three packets of spirit masters), \$85. (Kit manuals provide guidelines for planning an individualized-personalized physical education program for students with any type of handicap. Other supplementary materials are available. Unit orders are available and must be prepaid.) Installation costs are minimal. Personnel can be reassigned. Regular P.E. equipment can be used.

**services available** Awareness materials are available at no cost. Visitors are welcome at project site two days per month between October and May and at additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (all expenses must be paid). Training is conducted at project site during the last two weeks of each month from October to May (adopter pays only its own costs plus cost of texts). Training is also available at adopter site (adopter pays own costs, including \$30 for mini-course or \$45 for maxi-course per trainee and cost of texts). Implementation and follow-up services are available to adopters (all expenses must be paid).

**contact** Thomas M. Vodola, Director; Project ACTIVE; Township of Ocean School District; Administration Building; 163 Monmouth Rd.; Oakhurst, NJ 07755. (201) 531-6600, ext. 365.

**PROJECT**

ELSMERE PROJECT

A basic skills vocational program for trainable mentally retarded, ages 5-21, that serves as a model for districts implementing special education programs in compliance with P.L. 94-142.

**target audience**

Approved by JDRP for students ages 5-21 classified by child-study teams as trainable mentally handicapped (TMH).

**description**

The Elsmere Project meets the individual needs of TMH students by providing individualized instruction in five essential areas: academics, socialization, independent living, prevocation, and vocation. For each area, the curriculum has a double orientation. First, the program emphasizes the acquisition of self-sufficiency to the highest degree possible. The project prepares students to function in the community, to work, travel, shop, enjoy leisure time, and relate to others. Second, vocational skills are presented through these learning areas. Thus, skills and attitudes necessary for engaging in work are emphasized in all learning areas.

Each student is exposed to a simulated work atmosphere, punching a time clock and so on. Students are involved in rudimentary training and work activities such as assembling, packaging, and collating. More accelerated students participate in a formalized vocational training program which reflects community manpower needs. On-the-job training is provided for students in the final stages of the training program. Each student's level of functioning is determined by the Glassboro Trainable Assessment Profile (G-TAP), a project-developed instrument also used to measure student growth over time.

Because area business leaders are potential employers of TMH citizens, community involvement is an integral part of the project. On-the-job training and student job placement occur through community involvement. Advisory groups and service organizations assist the project by providing information on the skills necessary to prepare students for particular jobs.

Parent interest and participation is another component in the success of the Elsmere Project. Parents are provided the background required to perform activities at home that reinforce vocational skills taught at school.

**evidence of effectiveness**

Data collected three years after project implementation at the Glassboro site indicate that project students score significantly higher in independent living, socialization, and prevocational skills than a matched control group. In addition, 75% of Elsmere graduates have jobs in sheltered or competitive settings.

**implementation requirements**

The Elsmere Project is best adopted at the school level, but smaller units (one, two, or three classrooms) can make partial adoptions. A three-day training workshop must be attended by teachers and participating administrator(s). Adopter agrees to use project-designed student evaluation scale and to furnish data for comparison. Strong administrative support helps to ensure successful adoption.

**financial requirements**

Start-up costs for training and curriculum materials: approximately \$122 per teacher. Costs for vocationally related equipment and supplies vary depending on resources available. Maintenance costs are minimal.

**services available**

Awareness materials are available at no cost. Visitors are welcome at project site by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (adopter pays only its own costs). Training is also available at adopter site (all expenses must be paid, including trainer's fee). Implementation and follow-up services are available to adopters (travel and per diem must be paid).

**contact**

Pat DeMaris, Project Director; Elsmere School; Ellis St.; Glassboro, NJ 08028. (609) 881-5669.



## **PROJECT**

ERIN: Early Recognition Intervention Network

A competency-based training program for teachers, coordinators, and parents in modification of environment and adult intervention to assist young children with special needs in regular and special education settings.

### **target audience**

Approved by JDRP for children ages 3-7 with mild to severe handicaps in mainstream or special settings, competency-based training programs for regular and special teachers, program coordinators, and parents.

### **description**

The ERIN System is being utilized for children ages 2-7 and their parents both in special pre-school classroom/home programs serving children with moderate to severe special needs and in regular early childhood (nursery, Head Start, day care) and primary (K-1) programs serving mainstreamed mild to moderate special needs children integrated with their peers.

Personnel involvement/training requires each teacher to implement a sequenced program of observation and curriculum modification weekly for two or more children with special needs. The sequence of units fits into the progression of the school year. The order of units can be changed to meet a system's individual needs. A local coordinator is trained to take over local training and monitoring of the program. The ERIN training program for adults (special or regular teachers and coordinators) provides the equivalent of three to six college credits through attendance at a week-long institute and on-site consultation by ERIN staff. A coordinated parent program for both special and mainstream children is optional.

The child's Individual Education Program is implemented in large and small groups and individually. The teaching adult organizes his/her own learning environment to facilitate participation (social-emotional-affective), body awareness and control, visual-perceptual-motor, and language skills. Depending on the age of the child, these are organized into self-help, developmental concept, and academic readiness content areas. Initially, the curriculum approach focuses on general classroom/home modifications of the physical space and daily time units, learning materials and their organization into learning sequences, the grouping of children, and teacher cueing/monitoring. This is followed by the teaching of specific skills to subgroups and/or individual children by the teacher, parent, or volunteer, with much greater intensity in specialized programs.

### **evidence of effectiveness**

Specialized programs: preschool children (moderate to severe special needs) gained five extra months' development during a six-month period (McCarthy Scales of Children's Abilities). Mainstream programs: K-1 children (mild to moderate special needs) showed greater gains than control children on McCarthy Scales, Metropolitan Readiness Test, and Preschool Screening System.

### **implementation requirements**

Initial five-day Institute for teacher/coordinators plus classroom follow-up by local coordinator, with on-site visit(s) by ERIN consultant during the first year. Strong administrative support and a multiyear involvement of geometrically decreasing ERIN support is necessary for implementation of a range of regular and special classroom and home teaching components.

### **financial requirements**

Costs of program replication include Institute fees, cost of teacher curriculum kits and a coordinator's training kit, cost of staff training, and travel and per diem for ERIN staff member providing follow-up monitoring. Maintenance involves no appreciable increase in most districts' current operating expenses. Materials required for program implementation, other than those stated above, are already found in most early childhood classrooms. All financial arrangements must be negotiated with an ERIN staff member.

### **services available**

Awareness materials are available at no cost. Visitors are welcome anytime by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (all expenses must be paid, including workshop fees). Training is also available at adopter site (all expenses must be paid, including workshop fees). Implementation and follow-up services are available to adopters (all expenses must be paid).

### **contact**

Peter and Marian Hainsworth, Directors; ERIN Inc.; 376 Bridge St.; Dedham, MA 02026.  
(617) 329-5529.

## **PROJECT**

MARRS: MAINSTREAM AMPLIFICATION RESOURCE ROOM STUDY

The use of technology in soundfield amplification to improve communication/instruction for students in mainstream classes having hearing-related academic difficulties.

### **target audience**

Approved by JDRP as an instruction technique in regular classrooms, grades 4-6, for students possessing educationally significant hearing losses.

### **description**

The project is directed toward improving the basic academic skills of fourth-, fifth-, and sixth-grade target students while maintaining their participation in the "mainstream" of school activities. Regular classroom (least restrictive) placement eliminates much of the stigmatizing, labeling, segregating, and expense and scheduling complications of special education and Chapter I resource room programming. It provides educational opportunities to all students who may have minimal hearing losses, those with additional handicaps (including LD, BD, and ED students), and average, below average and bright students as well. In addition the project is designed to improve reading and literacy levels of low income/disadvantaged, rural/handicapped elementary school children. By improving academic skills of students, the number of students who will have successful educational experiences will increase.

The regular teacher conducts classes as usual for all students while wearing a lightweight cordless microphone, using amplification when lecture and oral instructions are required, and switching the microphone off when working with individual students or small groups. The cordless microphone permits the teacher to move freely about the classroom to instruct from any area while maintaining a consistent signal approximately 10 decibels above the average noise level in the room. This level of amplification is maintained based on periodic sound readings in each classroom. Typical teacher usage is three hours per day or 15 hours per week.

The use of amplification in no way alters the teachers's habits or mobility, and no modification of instructional techniques, scheduling, curriculum, or use of facilities or materials is required.

### **evidence of effectiveness**

Analysis of data indicated that at all grade levels target students achieved T-scores on reading and language arts achievement tests (basic skills) closer to the mean of the population after only one year of treatment. Target students maintained improved academic scores for as many as three years. This positive change was observed regardless of mainstream grade assignment, subtest observed, or years of treatment. All of the positive changes were significant beyond an alpha = .05. The changes were equal to or greater than those obtained as the result of resource room instruction.

### **implementation requirements**

Install and use soundfield amplification equipment in classroom.

### **financial requirements**

Purchase of soundfield amplification equipment, approximately \$1,000 per classroom amplified. Installation of equipment, approximately \$10 per classroom. Maintenance and batteries average less than \$50 per classroom per year.

### **services available**

Awareness materials are available at no cost. Visitors are welcome at project sites any time. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

### **contact**

Dr. Lewis S. Sarff, Director of Research; Wabash & Ohio Valley Special Education District; Box E; Norris City, IL 62869. (618) 378-2131.

**PROJECT** MODIFICATION OF CHILDREN'S ORAL LANGUAGE

A special program for training staff to work with students having language disabilities.

**target audience** Approved by JDRP for language-handicapped students, preschool to adult.

**description** This project is based on materials and instructional methods of the Monterey Language Program. These language-teaching programs combine modern linguistic theory with advanced behavioral technology applied to teaching. The programs are universal: designed for any individual with a language problem, regardless of the reason for that language-learning disability. The curriculum and individual program design include a screening procedure, individual placement, automatic branching, and continuous data collection for evaluation. With the Monterey Language Program, it is possible to obtain accurate pre- and posttest measures of a student's progress in syntactical and overall expression. The program also helps language-deficient individuals acquire language skills in a short period of time. It is completely individualized and performance-based instruction. In addition to providing materials, an objective of the project is to provide teachers with an instructional strategy and to assist them in becoming proficient in techniques for using the materials. Implementation of the program includes training, on-site supervision, refresher conferences, and data monitoring. Language remediation services may be expanded without increasing staff by using aides, parents, or other volunteers.

The language program is effective with children and adults defined as language delayed, deaf, hard-of-hearing, mentally retarded, or physically handicapped, and with the non-English-speaking or English-as-second-language individuals. It is particularly valuable in early childhood education centers, classes for the educable and trainable mentally retarded, and speech-correction centers.

**evidence of effectiveness** Evaluation of significant language behavior in students was done through the Programmed Conditioning for Language Test. In 1973, mean pretest score for group was 13.2%; posttest, 98.6%. Other standardized tests were also used to demonstrate gains, e.g., the Peabody Picture Vocabulary Test, the Northwestern Syntax Screening Test, and the Boehm. Data were collected over a two-year period. Students had varying language disabilities.

**implementation requirements** An initial four- to five-day training workshop is required. Follow-up on-site visits are required at scheduled intervals. From two to four instructors should be selected for additional training, so they in turn can become trainers of new people in the district. Unit for training ranges from 10-20.

**financial requirements** The cost for adoption varies according to the location of the adopting agency, number of project participants, and degree of implementation. Cost for required program materials is: \$124 per participant. Maintenance costs are minimal.

**services available** Awareness materials are available at no cost. Visitors are welcome by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted only at adopter site (costs to be negotiated). Follow-up services are available to adopters (costs to be negotiated).

**contact** Betty H. Igel; Monterey Learning Systems; 900 Welch Rd., Suite 11; Palo Alto, CA 94304.  
(415) 324-8980.

**PROJECT** OKLAHOMA CHILD SERVICE DEMONSTRATION CENTER FOR SECONDARY LD STUDENTS

An individualized diagnostic/prescriptive teaching intervention system that has proven highly successful with learning-disabled adolescents.

**target audience** Approved by JDRP for learning-disabled students in grades 7-12.

**description** The major goal of this project is to provide each identified learning-disabled student of secondary school age within the target population with a specific prescriptive learning program enabling that student to develop skills and knowledge at a rate commensurate with his/her ability level. The model is basically a diagnostic/prescriptive intervention system. Components include: a professionally staffed learning lab, a prescriptive diagnostician who has particular ability in developing educational intervention programs for individual students, and a media library for use by the learning disabilities teacher to implement intervention strategies.

Students placed are those who were noted in a psychoeducational evaluation to have a specific learning disability of a perceptual, conceptual, or integrative nature.

The curriculum provided within this diagnostic/prescriptive project follows the curriculum offered in the regular classroom where possible. A student with a reading disability might spend two periods daily in the learning lab during English and social studies periods. Another student with a math disability might spend only one period each day in the learning lab during regular math class time. At other times, LD students are integrated into the regular curriculum. This arrangement, the least restrictive alternative, does not necessitate that curriculum content be similar in the regular and learning lab classrooms. The content for the learning lab is determined by a prescription from the prescriptive teacher aimed at helping the student remediate or compensate for his/her learning disability.

**evidence of effectiveness** A three-year evaluation design showed a significant increase in verbal I.Q. (Wechsler Intelligence Scale) and reading achievement (WRAT and Durrell Reading Test) as compared to control group (actual gain in reading achievement 274% of expected gain) and a reliable increase in areas of personal and social self-esteem (Piers-Harris Self Concept Scale). One in five students in the program (18%) is successfully mainstreamed after one year in the program.

**implementation requirements** A classroom to use as a learning lab. A certified LD teacher to staff the learning lab and a prescriptive diagnostician to write prescriptions and provide follow-up. A three-day training workshop from the Oklahoma Child Service Demonstration Center. Equipment and materials appropriate for LD adolescents. A commitment to the model and its use by the adopting school district. Expenses of a staff member from the developer project for a one-day follow-up consulting visit to adopter site. Pre/post Wide Range Achievement Test scores of all students in program must be provided to developer project. Adaptations are possible.

**financial requirements** Start-up costs (excluding salaries) vary from \$500-\$2,500 per learning lab to provide for equipment and materials. A variety of high-interest, low-vocabulary commercial materials is recommended. Equipment required (tape recorders, language masters, filmstrip viewers, calculators) is commonly found in learning labs. Other costs: travel, lodging, and meals for two trainers during two-day training and one or two follow-up visits.

**services available** Awareness materials are available at no cost. Visitors are welcome any time by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (travel and per diem must be paid). Training at project site is conducted only as scheduled in November - January (all expenses must be paid). Training is also available at adopter site (all expenses must be paid, including cost of Training Manual). Implementation and follow-up services are available to adopters (all expenses must be paid).

**contact** Celia Kinzie, Director; Oklahoma Child Service Demonstration Center; Hillside School; Rt. 3; Cushing, OK 74023. (918) 225-4711 or -1882.

**PROJECT** PRECISION TEACHING PROJECT

A precision teaching model designed to remediate and build basic skills through practice and drill, setting performance standards, continuous measurement, and data-based decisions.

**target audience** Approved by JDRP for all students, grades K-4. It has been used in other settings, but no evidence of effectiveness has been submitted to or approved by the Panel. The State of Montana has validated the use of Precision Teaching in grades K-12.

**description** The overall intent of the Precision Teaching Project has been to develop a model for the delivery of educational services to elementary students who have been identified as experiencing learning deficits. Precision teaching procedures have been used not only in identifying these students, but also as remediation tactics. (Precision teaching is a set of measurement procedures based on direct, daily assessment.) A resource room is provided for students with more severe learning deficits, while the regular classroom deals with basic skills and minimal problems. One-minute practice sheets are used extensively as a means of building basic tool skills to a level where students are capable of competing within the regular classroom. Direct and daily measurement procedures are employed, using both the manager and the student in recording and charting. Curricular decisions are based on available data.

Resource teachers as well as regular classroom teachers use the precision teaching procedures, which include curriculum materials developed within the project. Instructional methods include one-minute practice sheets from the Precision Teaching materials bank and data-based decisions made from the standard behavior chart.

**evidence of effectiveness** Of the 19 experimental/control group comparisons analyzed in 1973 using standardized achievement tests and one-minute probes, 15 variables measured showed the experimental group to be superior on the posttest. In 1976, a follow-up study of the students identified and remediated in 1973 showed the experimental group still superior in 79% of variables as measured by the California Achievement Test, Wide Range Achievement Test, and one-minute probes. In 1979, a longitudinal study using standardized tests (ITBS) showed that Precision Teaching-trained students (K-4) scored significantly higher than control counterparts in math, reading, and spelling.

**implementation requirements** An adoption commitment can be made by any unit -- district (urban/rural), single school, or classroom. For on-site training, units should be limited to 20, and for off-site training to 25. Adopting units should include building or program administrator, support personnel (e.g., psychologist), and regular education and/or special education teachers. Initial training requires three days and is available at project or adopter site, and additional follow-up training (three days maximum) is provided at adopter site. Equipment costs are minimal. In most cases existing facilities can be used. Adopting units agree to implement all five components.

**financial requirements** Training Manual, \$8 (one per trainee); chart paper, \$35 per ream (two sheets per child); Materials Directory, \$3 (one per school); practice sheets, 10¢ per sheet (minimum of 500 sheets). Optional: One-minute timer, stopwatch, or timing tape (one per trainee); Implementation Handbook, \$5 (one per school); Mathematics Notebook, \$52 (one per school, includes 500 practice sheets); Language Arts Notebooks I and II, \$52 each (one per school, include 500 practice sheets each).

**services available** Awareness materials are available at no cost. Visitors are welcome anytime by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state meetings (costs to be negotiated). Training is conducted at project site between October and April (all expenses must be paid, including a \$300 training fee and cost of training materials). Training is also available at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** Ray Beck, Project Director; Precision Teaching Project; 3300 Third Street Northeast; Great Falls, MT 59404. (406) 791-2270.

## **PROJECT**

THE RUTLAND CENTER -- DEVELOPMENTAL THERAPY MODEL FOR TREATING EMOTIONALLY DISTURBED CHILDREN

A community-based psychoeducational facility that offers a developmental curriculum to severely emotionally disturbed or autistic children from birth to 16 years, their parents, and teachers.

### **target audience**

Approved by JDRP for severely emotionally disturbed or autistic children from birth to age 8, their families, and teachers. This program has been used in other settings with children to age 16, but no evidence of effectiveness has been submitted to or approved by the Panel.

### **description**

The Rutland Center Developmental Therapy Model is the result of eight years of intensive effort by the Rutland Center staff. Developmental Therapy is a therapeutic curriculum for social and emotional growth used in a classroom setting with groups of four to eight individuals. On the assumption that disturbed or autistic children go through the same stages of development that normal youngsters do, but at a different pace, the curriculum guides treatment and measures progress by focusing on the normal developmental milestones that all children must master. Developmental Therapy has thus established itself as a "growth model" rather than a "deficit model." The model is composed of four curriculum areas (behavior, communication, socialization, and preacademics) arranged in five developmental stages, each requiring different emphases and techniques. Special services to parents are an integral part of the approach. Developmental Therapy also emphasizes concurrent placement with nonhandicapped children. This mainstreaming aspect of the model requires that regular school experiences mesh smoothly with intensive Developmental Therapy experiences.

In response to P.L. 94-142, two resources are available that emphasize how to plan, implement, and evaluate an Individualized Education Program (IEP) using the developmental approach. The National Technical Assistance Office offers four types of technical assistance in the treatment of severely emotionally disturbed preschool children. This assistance, which includes information dissemination, program planning and design, training, and program evaluation, is provided through site visits and exchange of audiovisual materials. The Developmental Therapy Institute provides on-site, year-long assistance to individuals, schools, and agencies concerned with training personnel to serve school-age severely emotionally disturbed and autistic children. Institute staff provide assessment of training needs, design an inservice instructional sequence, and implement the training program at the agency site with periodic visits.

### **evidence of effectiveness**

The model assumes five distinct stages. Progress through stages is measured by the Developmental Therapy Objectives, 171 statements outlining a sequence of developmental milestones. Mastering these objectives makes normal growth possible. Each child's treatment focuses on appropriate objectives, and children are grouped by similar major objectives. Data collected clearly show sequential mastery and steady progress by children.

### **implementation requirements**

Agencies interested in adopting the Rutland Center Developmental Therapy model must: use the Developmental Therapy curriculum, including concurrent placement in a normal setting whenever possible; provide referral, intake, and diagnostic services; provide a minimum of one supervisor, two teachers, and two support personnel; provide release time for training; and include parents and regular teachers in the treatment process. Since travel expenses depend on the number of visits required, the number of individuals involved, and distances traveled, they are negotiated separately.

### **financial requirements**

The cost of the program is approximately \$1,800 per child. This figure includes diagnostics, services to parents and children, teachers, and program evaluation. Cost figure is based on operating the 24 centers supported totally by state funds (Georgia Psycho-educational Center Network).

### **services available**

Awareness materials are available at no cost. Visitors are welcome anytime by appointment at project site and additional sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (costs to be negotiated). Training is also available at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

### **contact**

Karen R. Davis, Project Director; National Technical Assistance Office; 125 Minor St.; Athens, GA 30606. (404) 542-6076 or 549-3030. Mary M. Wood, Director; Developmental Therapy Institute; College of Education; 570 Aderhold Hall; University of Georgia; Athens, GA 30602. (404) 542-1685, ext. 50 or 70.

**PROJECT** PROJECT SKI\*HI

A comprehensive program providing identification, hearing aid management, communication, auditory, and language facilitation through home management for hearing-handicapped children birth to age 6.

**target audience** Approved by JDRP for hearing-impaired infants and young children birth to age 6 and their families.

**description** SKI\*HI is a comprehensive program that provides screening, audiological, diagnostic, and assessment services and a complete home intervention curriculum for hearing-impaired children (birth to age 6) and their families.

The program is designed to provide services to a state-wide or larger population area; however SKI\*HI effectively meets the needs of regional, district, rural, small, and private agencies. It includes a system for hospital screening for high-risk infants. A diagnostic and supportive entry process ensures efficient, expeditious entry of children and families into the program.

A complete home intervention curriculum is provided. It includes a home hearing aid program, a home communication program, a home auditory program, a home total communication program, and a home language program. Psychological, emotional, and child-development support are provided for parents in the home. Weekly, monthly, and comprehensive quarterly assessment of child and family is performed. Part-time parent advisers living in the area visit homes weekly to deliver the curriculum. A format for home visits is provided.

A support system of ongoing audiological services, a hearing aid evaluation and loaner system, video units and tapes for total communication, hearing aid molds, psychological services, parent group services, and a comprehensive evaluation system are provided.

**evidence of effectiveness** The Discrepancy Evaluation Model is used. REEL, the SKI\*HI Receptive Language Test, the SKI\*HI Language Development Scale, and observational checklists are used. Pre/post measures showed a gain of 16 months in language after 11 months of treatment; significant differences in treatment and comparison groups were seen. Early-treatment group showed higher gains than late-treatment group.

**implementation requirements** One full-time or part-time professional to make home visits is the minimum requirement. This person must have basic SKI\*HI training in delivery of a home intervention program for hearing-impaired infants. Travel is necessary. For maximum effect, a hearing aid bank, hearing screening, and audiological, psychological, and child development services should be provided. Earmolds, library books, video-playback units, and total communication tapes should be provided. In larger programs, supervision and administration are necessary.

**financial requirements** Complete services for 11 months (including all direct and supportive services) cost approximately \$1,549 per child. Start-up costs are minimal.

**services available** Awareness materials are available at no cost. Visitors are welcome anytime by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is available at adopter sites (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** Dr. Thomas C. Clark, Director; Project SKI\*HI; Department of Communicative Disorders UMC10; Utah State University; Logan, UT 84322. (801) 750-1369 or -1382.

## **PROJECT** SYSTEMATIC INSTRUCTIONAL MANAGEMENT STRATEGIES (SIMS)

A program using management strategies and a structured, sequenced curriculum to help teachers plan appropriate instructional programs for disabled readers.

### **target audience**

Approved by JDRP for disabled readers grades 1-12 needing basic coding skills, and for learning disabilities teachers serving that population. This program has been used in other settings with special education groups, but no evidence of effectiveness has been submitted to or approved by the Panel.

### **description**

A discrepancy model for solving performance problems provides the framework for the SIMS curriculum. The SIMS curriculum consists of a hierarchical sequence of 53 objectives needed to acquire the basic coding skills of reading and spelling.

The curriculum contains word and sentence lists for each of the 53 objectives to monitor the accuracy of skill acquisition for each individual child. Additional word lists for each objective are designed to monitor the proficiency with which a student decodes words of a particular pattern. There are four stories for each of the 53 objectives. Written language worksheets with controlled reading levels matching the word list level provide activities simultaneously developing the student's writing skills. Comprehension Questions and worksheets for Scanning Stories are used to develop independent study skills. SIMS teachers are trained to use data decision rules to plan appropriate instructional interventions.

### **evidence of effectiveness**

Scores from the Wide Range Achievement Test administered to students grades 1-12, 1976-77, were compared to groups with and without SIMS treatment. Analysis of covariance (with pretest score and grade as covariants) confirmed that SIMS students performed significantly better than non-SIMS students (positive  $< .001$  level).

### **implementation requirements**

SIMS can be adopted as a comprehensive program of materials and procedures, or partially as instructional management strategies to be used with commercially available materials. A two-day teacher training workshop must precede adoption. Adoption site must provide a liaison person. Pre- and posttest data must be supplied by adopter. Follow-up is recommended.

### **financial requirements**

For the installation year, the cost per teacher trained is \$84 for materials, plus \$95 for Teacher Inservice Training Package which is used in training all teachers. SIMS Concept Assessment Test, SIMS Reading and Spelling Program, Comprehension Questions and Scanning Stories, and SIMS Written Language Program, \$65 for total package.

### **services available**

Awareness materials are available at no cost. Visitors are welcome at project site anytime by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (adopter pays only its own costs). Training is also available at adopter site (trainer travel and per diem must be paid). Implementation and follow-up services are available to adopters (travel and per diem must be paid).

### **contact**

Karen Nelson, SIMS Project Coordinator; Division of Special Education; Minneapolis Public Schools; 1501 Aldrich Ave. N; Minneapolis, MN 55411-3398. (612) 529-4189.



**PROJECT** THE TEACHING RESEARCH INFANT AND CHILD CENTER CLASSROOM FOR MODERATELY AND SEVERELY HANDICAPPED CHILDREN

An individualized skills instruction program for moderately to severely handicapped children.

**target audience** Approved by JDRP for moderately to severely handicapped children ages 1-8, including mentally retarded, cerebral palsied, autistic, emotionally disturbed, deaf/blind, and hearing impaired.

**description** The model is a complete classroom management system with staff roles of teacher, aide, and volunteer clearly specified. Children are assessed on skills selected from the Teaching Research Curriculum for Moderately and Severely Handicapped. Test results are used to determine which skills will be taught. The deficit skills are prioritized by the parent and educational staff. After priorities are established, instructional programs are prepared for each child.

A program prescribes the skill to be taught, the way in which the materials are to be presented, and the feedback to be given to the child. Trained volunteers play an important role in this model. They are taught how to deliver cues and feedback and how to record the child's appropriate and inappropriate responses to instruction. Maintenance of volunteer skills is objectively monitored by the teacher. Volunteers implement the instructional programs with each child and record child performance data in a specified manner. The teacher uses the daily data to make teaching decisions concerning individual programs for the following day and to ascertain whether sequencing, cue presentation, or feedback need to be altered.

When group instruction occurs, the teacher interacts with each child according to his/her individual instructional program. In this model, group instruction is provided only by the teacher or aide. Generalization of acquired skills is also stressed in this model. Teachers implementing the model also learn a system for managing inappropriate behaviors. Some instructional programs are selected by parent and teacher to be taught in the home, and these are coordinated with programs in the school. Teaching periods in the home vary from 10 to 30 minutes. Approximately 85% of the parents of project children participate in home instruction.

**evidence of effectiveness** Using a multiple baseline approach, it was demonstrated that within the Teaching Research Infant and Child Center a mean of 7.9 skills per month was acquired by a child without instruction, while 64.4 skills per month were acquired with instruction. Replication-site children acquired a mean of 9.1 skills without instruction and 90.1 skills with instruction.

**implementation requirements** The model can be used by an individual classroom. Inservice training of the teacher is required. Training for the aide and supervisory staff is recommended. Inservice training includes a one-week training session at Teaching Research and follow-up technical assistance visits to the trainees' work site.

**financial requirements** Adoption of the Data-Based Classroom Model requires no special staffing ratios or unusual curricular materials. Therefore, standard operating costs for a special education classroom would apply. Costs incurred in training include: tuition, \$310; travel to Monmouth, OR, and travel to trainees' work site for follow-up technical assistance.

**services available** Awareness materials are available at no cost. Visitors are welcome at project site by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (costs to be negotiated). Training is also available at adopter site (costs to be negotiated). Follow-up services are available to adopters (costs to be negotiated).

**contact** Torry Piazza Templeman; Teaching Research; Western Oregon State College; Todd Hall; Monmouth, OR 97361. (503) 838-1220, ext. 401.

SECTION A-11: **ARTS/COMMUNICATION/TECHNOLOGY\***

project COFFEE (Cooperative Federation for Educational Experiences)  
-- Massachusetts . . . . . .A-11.3  
INDIVIDUALIZED PRESCRIPTIVE ARITHMETIC SKILLS SYSTEM (I PASS) -- Rhode Island. . . .A-11.4  
MEDIA NOW -- Iowa. . . . . .A-11.5  
MERRIMACK EDUCATION CENTER CAI PROJECT -- Massachusetts. . . . . .A-11.6  
URBAN ARTS PROGRAM -- Minnesota. . . . . .A-11.7  
UTILIZING COMPUTERS IN THE TEACHING OF SECONDARY MATHEMATICS -- New Jersey . . . . .A-11.8

\*See Sectional Cross-Reference Index, p. D-9, for related programs.

**PROJECT** PROJECT COFFEE (Cooperative Federation for Educational Experiences)

A comprehensive instructional and occupational training and counseling program.

**target audience** Approved by JDRP as an alternative occupational education program in high technology for alienated/disaffected secondary students.

**description** Project COFFEE was developed in response to the employment demands of high technology and the increasing number of alienated, disaffected secondary school-age students as a comprehensive instructional program. Project COFFEE has uniquely integrated four components: an academic component that provides relevant (occupational and life-coping) basic skills instruction based on an individualized educational plan; an occupational component that provides hands-on educational experiences in an adult-like high technology work environment while reinforcing basic skills; a counseling component that provides occupational and emotional support utilizing state, regional, and local social service agencies; and a physical education component that offers a program of recreational activities adapted to enable students to develop a sense of self-accomplishment and group cooperation. Each occupational program features job entry skills, job placement skills, shadowing experiences, and a related work-study program. Occupational components include: electronic assembly, data processing, building and grounds maintenance, horticulture/agriculture, and distributive education.

Project COFFEE was developed by a regional cooperative federation of seven school districts and a highly successful partnership with high technology business and industry. This partnership has provided educational assistance in curriculum development, staff training, occupational training materials, equipment acquisition, competency-based assessments, internship experiences, and more. Materials include: program manual, basic skills curriculum guide, guidelines for industry/education linkage, guidelines for inter-agency collaboration/community outreach, procedures manual for development of competency-based assessments, and diagnostic needs assessment survey manual for student survival skills course.

**evidence of effectiveness** Three years' scores (1978-1981) on the Stanford Achievement Test documented positive trends through scale score gains not only during the program but when compared to three years' scores prior to entry in project COFFEE. Three-year testing with the Tennessee Self Concept Scales documented significantly higher gains for project students than for members of two comparable groups. Students participating in the data processing and electronic assembly program demonstrated acquisition of entry-level skills as measured by a competency-based assessment instrument. Students demonstrated a statistically significant decrease in absenteeism when compared to a large group of comparable students.

**implementation requirements** Support of educators, parents, community, school board, local special service agencies, and related business/industries is essential. The project may be adopted by a single school district or by a federation of school districts (cost effective). The program functions extremely well as a "school within a school"; therefore, no additional building site is required. Staffing of the program requires team teaching by a special needs instructor and an occupational instructor for each occupational component adopted. Implementation of a realistic work environment with state-of-the-art equipment is required. An effective communication plan with students, parents, educators, local social services agencies, and related business and industry is required.

**financial requirements** Cost of replicating the program is approximately \$2,500 to \$3,000 per student or \$45,000 to \$50,000 per training program (15 to 20 students). Effectiveness of the program is greatly enhanced by maximum utilization of existing government-supported social service agencies and industry/education initiatives.

**services available** Awareness materials are available at no cost. Visitors are welcome at the project site by appointment. Project staff can attend out-of-state awareness meetings (costs to be arranged). Training is available for potential out-of-state adopters at their site or at developer/demonstrator site. Follow-up technical assistance is also available. Materials are available at nominal charge.

**contact** John R. Phillip, Project Director, or Margaret V. Reed, Project Evaluator; Project COFFEE; Oxford High School Annex; Main Street; Oxford, MA 01540. (617) 987-1626 or -1627.

**PROJECT**

INDIVIDUALIZED PRESCRIPTIVE ARITHMETIC SKILLS SYSTEM (IPASS)

A computer managed criterion-referenced testing and instructional program in basic mathematical skills utilizing microcomputers.

**target audience** Approved by JDRP as a supplementary mathematics program for grades 5 and 6.

**description** IPASS was designed to increase the achievement of intermediate grade students in mathematics through the use of advanced technology in the form of microcomputers. IPASS employs microcomputers and specially designed software as an integral part of both instruction and the management of student progress in a compensatory education setting. IPASS is an efficient and highly cost-effective project.

IPASS includes locally developed criterion-referenced tests, instructional and management software, cross-referenced tests, cross-referenced instructional resource file, and guides for teachers and students.

IPASS objectives can be used to supplement most mathematic curricula without modification.

**evidence of effectiveness** Gains shown by students between pre- and posttesting on Metropolitan Achievement Tests in 1980-1981 are substantial and significant -- 14 NCEs at grade 5 and 15 NCEs at grade 6. At both grades, those gains were about twice the size of national Chapter I gains for math projects at the same grade levels using the same testing cycles. The results represent gains from nine different school settings. Gains across sites are similar and have been similar in the past. Previous years' evaluations of the project do show sizeable gains for both grades in all project years.

**implementation requirements** IPASS is designed as a "pull-out" program in which the student receives two 30-minute sessions per week. Using two microcomputers and a teacher or aide, up to 40 students per week can be served. IPASS can be adapted to a classroom or laboratory setting. IPASS software is available in tape format for TRS-80 Model II/III 16K cassette systems. A disk version is also available for TRS-80 Model I/III disk system (32K minimum). At least one printer must be available for the test correction, diagnosis, and prescription. An intensive training program is required to fully implement IPASS. However, no special computer skills are required. Provision is made within the IPASS program for locally available instructional resources to be merged into the remediation activities.

**financial requirements** A fee of \$250 is charged for the IPASS software, including computer programs, criterion-referenced tests, student profile sheets, instructional resource file, and procedure guides for teachers and students. One copy of these materials is included and permission is given to reproduce any and all materials and programs in quantities necessary for the adopting school district.

**services available** Awareness materials are available at no costs. Visitors are welcome at any time by appointment. Project IPASS staff members are available to explain and demonstrate IPASS at both in-state and out-of-state awareness meetings (cost to be negotiated). Training is conducted at the project site and is also available at an adopter site (cost to be negotiated). Implementation and follow-up services are available (costs to be negotiated). Telephone hot-line is available to adopter districts at any time during normal hours.

**contact** Robert R. Reynolds, Director; Project IPASS; Pawtucket School Department; Park Place; Pawtucket, RI 02860. (401) 728-2120.

## **PROJECT** MEDIA NOW

A production-centered laboratory course of study in mass media technology and production techniques that helps students understand and cope with the influences of the mass media.

**target audience** Approved by JDRP as a media study program for students in grades 7-12.

**description** Media Now was developed by the Southwest Iowa Learning Resource Center to help students cope with the influences of communication technology. Students on the high school level, through a systematic, hands-on exploration of mass media techniques and influences, develop critical viewing and listening skills to help them cope with the persuasive power of the mass media.

Recent studies and observations suggest that teenagers rate the mass media as an overwhelming influence on how they interact with their family and social environment. Of the 10 most listed influences, over half were mass media related. Parents and youth leaders have also expressed a need to provide teenagers with information to make them less susceptible to mass media technology.

This course contains 623 reading, writing, and production tasks organized at four levels which motivate students to evaluate, interpret, analyze, and better appreciate media technology. The program can be conducted in the traditional classroom time periods and is often offered by the language arts department, although other discipline areas can also incorporate selected components. The program design includes performance objectives and "learning by doing" as a part of the management system. The course organization includes 50 "learning packages" grouped under seven modules which include Production, Hardware, Aesthetics, Genre, Evaluation, Message Interpretation, and Presentation. Modules can be taught with existing staff by utilizing Media Now course materials which include the 50 learning packages, student lab manuals and a teacher's guide. Various hardware items normally available in most schools will be needed depending upon selected objectives.

Students, teachers, and others involved with the program will: change media use patterns by viewing and listening critically to selected media messages; evaluate, interpret, analyze, appreciate, and communicate through various communication forms; read, manipulate, listen to, watch, experiment with, and selectively use communication technology; and photograph, record, talk, create, act (drama), discuss, film/videotape, and gather data during the course.

**evidence of effectiveness** Research (1972-74) employed project-developed instruments in a pre/posttest control group design; testing included 25 Iowa high schools encompassing inner-city, suburban, large rural, and small rural districts. Field testing and evaluation have included 140 Iowa school districts. Significant gains (as compared with control students) were scored by Media Now students. Continued evaluation results (1980-81) show that Media Now provides students with the knowledge and skills required for informed media consumption and skilled media production.

**implementation requirements** Adopters of Media Now must purchase one Media Now Course of Study, which includes 50 LAPs and appropriate manuals, or individual modules or packages. The program can be adopted by an individual teacher, or may be used in a team approach. At least two staff members from adopting schools must be trained in a two-day workshop. Media Now can be used in a normal classroom setting where minor furniture movement is possible. Darkroom facilities are helpful but not mandatory. Basic media production equipment is needed depending upon selected goals and objectives.

**financial requirements** Media Now full course of study, \$960; Student Learning Activity Guide (SLAG), \$9 (one per student recommended); Student Learning Activity Book (SLAB), \$9 (one for every two students recommended); Teacher Activity Book (TAB), \$12. All modules and packages are available on an individual basis; training fees negotiated.

**services available** Awareness materials available at no cost. Visitors welcome by appointment. Staff available for out-of-state awareness meetings (cost to be negotiated). Training is conducted at adopter sites or at demonstration site (cost to be negotiated). Implementation and follow-up services available to adopter (cost to be negotiated). Toll-free telephone consultation available at (800) 831-5886.

**contact** Ron Curtis, Director Media Now; experience education; 401 Reed Street; Red Oak, IA 51566. (800) 831-5886 or (712) 623-4913.

**PROJECT**

MERRIMACK EDUCATION CENTER CAI PROJECT

A computer-assisted instructional program to augment the basic skill areas of reading and mathematics.

**target audience**

Approved by JDRP for compensatory education students, grades 2-9.

**description**

This project provides individualized, structured, and sequenced reading drill and practice and tutorial services for students in Title I classrooms. As part of a comprehensive system, the program combines commercially available courseware with supportive organizational arrangements including personnel training, materials, manuals, hardware and software maintenance, learning environment management, and technical assistance.

Based upon each student's measured strengths and weaknesses, a reading specialist places him/her in the appropriate instructional level. Daily, all eligible students receive 30 minutes of individually tailored basic skills remedial instruction. Materials for instruction have been organized in a series of age/grade curriculum strands that are available in both computer-assisted instruction (CAI) and paper-and-pencil form. Two thirds of classtime is spent in small group or tutorial sessions with the teacher. The remaining third is spent interacting with the CAI system. Information is presented to each student in small chunks. Depending on what type of response a student makes, the computer takes an appropriate step -- for a correct response, reinforcement and new material; for an incorrect response, a chance to try again. The teacher can assign the student a special drill for remediation when necessary.

The computer management system thus keeps track of each student's progress, and generates reports for use by teacher and administrators. Procedures have been adapted to serve a multi-school district delivery system, and a management technical assistance system exists to guide implementation of the program as a supplement to the regular program.

This project has been identified as an NDN Technology Lighthouse Center. In addition to the JDRP approved program, visitors to the project site can see other applications of the uses of computers in education.

**evidence of effectiveness**

Experimental groups whose regular instruction program is augmented by computer-assisted instruction in reading outperformed their Title I comparison groups on Metropolitan Achievement Tests.

**implementation requirements**

Adopter would install a cluster of eight terminals, a central processing unit, and a printer in a computer laboratory setting (single classroom is adequate). Classroom teachers can use the system with very little training. No additional staff is required.

**financial requirements**

Host computer services 96 terminals (12 clusters of eight terminals). Each cluster services 240-300 students during the normal school week. Cost is turnkey except for telephone connection which varies with installation site. Cost includes training, technical assistance, full maintenance, lease-purchasing of equipment, insurance, evaluation assistance, all courseware, stand-by terminal tests, etc. Cost of cluster of eight terminals is \$30,950 for years one and two. Cost reduces to \$13,350 year three and thereafter.

**services available**

Awareness materials (including evaluation report) available at minimum cost. Visitation scheduled bi-weekly. Project staff available to attend awareness meetings in and out of state (costs to be shared). Training done at adopter site as well as project site.

**contact**

Richard Lavin, Director; Merrimack Education Center Computer-Assisted Instruction Program; 101 Mill Road; Chelmsford, MA 01824. (627) 256-3985.

**PROJECT** URBAN ARTS PROGRAM

A program used to improve instruction in all the arts and to expand school use of community art facilities.

**target audience** Approved by JDRP for grades 7-12. This program has been used in grades K-6, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** Since 1970, Minneapolis Schools' Urban Arts program has enabled students to learn from artists and arts organizations. Responding to two basic needs -- for better use of the arts in education and better use of a community's arts resources -- Urban Arts adapts its key practices to each school's needs and resources. The initial training session focuses on identifying such needs and resources through conferences with teachers and administrators and develops a local plan for Urban Arts practices that fits each school. Five strategies are used: arts practicum workshops for students' arts support crews as curators, camera persons, stage managers, graphics designers, and writers; placing artists in classrooms with students and teachers; activating teachers' arts talents and skills to develop an arts collaborative; connecting arts events and exhibitions to curriculum; and joining the community in arts celebrations.

The program's goal is to give all students the opportunity to learn with artists and the arts while developing their own aesthetic judgements. Understanding of the arts is acquired by training, practice, and experience through an instructional manner that is direct, immediate, and personal. Basic to the program is the idea that the community is an appropriate place to learn the arts. Workshops with students and teachers are held where the arts are created, housed, and performed. Existing arts facilities in the community -- museums, galleries, workshops, concert halls, theaters, and studios -- are used extensively.

Adoption requires three to six days of training workshops for teachers and community arts persons to adopt the five basic strategies and to set up a management group. Local artists supplement teachers, and teachers with special talents often work as artists for the program. Three workshops are provided for adopters (a minimum of eight and a maximum of 60 persons per training session) at the adopter site, with a visit to the original site optional. The program can be replicated in districts of any size, including those in rural areas. Urban Arts has been adopted for programs for the gifted and talented in many locations.

**evidence of effectiveness** An interjudge strategy of evaluation has yielded a reliable and consistent success rating for program goals and objectives. Fifty randomly selected students kept daily journals, which were analyzed and categorized as Personal Reports of Subjective Experience, an evaluation procedure copyrighted by Creative Humanistics, Inc.

**implementation requirements** The Manual for Adopting Urban Arts provides guidance for planning and implementing a custom-made program for each school that employs variations of the five program strategies. Implementation results from plans made during training for use of available resources in the school and community.

**financial requirements** Annual maintenance has ranged between \$3,000 and \$36,000, depending on school size and program complexity.

**services available** Awareness materials are available at no cost. Visitors are welcome at project site by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted only at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated). Training for adopters provides the service of an experienced arts consultant for six days.

**contact** Wallace Kennedy, Project Trainer; Urban Arts Developer/Demonstrator Project; Exchange at the Teacher's Center; 110 Pattee Hall; 150 Pillsbury Drive, SE; Minneapolis, MN 55455. (612) 376-8234.

## **PROJECT**

### UTILIZING COMPUTERS IN THE TEACHING OF SECONDARY MATHEMATICS

A program of microcomputer-based instructional materials and techniques to improve mathematics skills.

## **target audience**

Approved by JDRP for students of all skill levels, grades 9-12.

## **description**

A need for greater student achievement and motivation in math was apparent to teachers in the Asbury Park School District when a survey of enrollment in higher level math courses showed that a majority of students were not electing math courses beyond the one-year basic math course. Because computer literacy now ranks as a basic skill area, microcomputer-based instructional materials and techniques were developed which, when used as specified, would improve students' skills in the areas of secondary level mathematics -- Mathematics II, Algebra I, Algebra II, and Trigonometry. Using this approach, students are given the opportunity to experience computer simulations, tutorial exercises, and basic programming capabilities as they relate to the particular objectives for student achievement in both required and advanced math courses. The program uses 30 computer-based teaching units which are integrated into the existing curriculum. For each unit, one or more computer programs exist for students' use as an integral part of the daily lesson plans. When students reach project topics in the normal course of study, they are assigned to a classroom equipped with computer terminals. The teacher provides an introduction to the topic if necessary, utilizing conventional techniques such as lecture, question and answer, and blackboard presentations. Students are then instructed either to access specific computer programs designed to apply the concept or skill that was the objective for the lesson, obtain detailed explanations of concepts or skills, or receive instructions as to how to proceed with independent investigations utilizing the information provided. During this time, the teacher serves as a resource person providing individualized assistance. A follow-up discussion is held at the end of the class period and work is assigned from the text or from a worksheet generated as part of the computer program. Each unit and its objectives are easily cross-referenced to the text in use by page and skill area, thus making it possible for the instructor to identify and coordinate computer activities with regular course offerings. No more than one normal class period is necessary for the duration of a lesson utilizing the computers.

This project has been identified as an NDM Technology Lighthouse Center. In addition to the JDRP approved program, visitors to the project site can see other applications of the uses of computers in education.

## **evidence of effectiveness**

As expected, both treatment and comparison groups gained from pretest to posttest on standard achievement tests but differences between the two groups were from .8 to 1.4 standard deviation (SD) units greater for the treatment groups. Gains for the four treatment courses ranged from 1.7 to 3.4 SD units. On criterion-referenced tests, students in the treatment groups made gains in SD units that were noticeably greater than students in comparison groups: 2.9 in General Mathematics; 1.8 in Algebra I; 1.0 in Algebra II; and 1.2 in Trigonometry.

## **implementation requirements**

No additional or special staff is necessary to replicate the project. At least five days of on-site training and installation by project is required. A minimum of seven stations (terminals or microcomputers) is sufficient to conduct the project. District with limited computer access may wish to implement the project in a lab or small group setting with fewer stations.

## **financial requirements**

Start-up costs are largely dependent on the availability of computer hardware. Various hardware configurations and on-going costs associated are available from the project, ranging from \$3 per student (based on 300 students) to \$143.

## **services available**

Awareness materials are available upon request. Visitors are welcome at the project site by appointment. Project staff are available to attend awareness and training sessions out of state (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

## **contact**

Jack DeTalvo, District Supervisor of Instruction; Utilizing Computers in the Teaching of Secondary Mathematics; Asbury Park Board of Education; 1506 Park Avenue; Asbury Park, NJ 07712. (201) 774-0888.



SECTION A-12: GIFTED AND TALENTED/HEALTH/PHYSICAL EDUCATION/SPECIAL INTERESTS\*

COMPUTERONICS: Gifted Child Project -- Florida . . . . .	.A-12.3
CRITICAL ANALYSIS AND THINKING SKILLS (CATS) -- Utah . . . . .	.A-12.4
EVERY CHILD A WINNER With Movement Education -- Georgia. . . . .	.A-12.5
HAVE A HEALTHY HEART -- Washington . . . . .	.A-12.6
INDIVIDUAL PROGRESS PROGRAM -- Washington. . . . .	.A-12.7
INSTITUTE FOR CREATIVE EDUCATION -- New Jersey . . . . .	.A-12.8
KIDS KITS (Kids Interest Discovery Studies Kits) -- Colorado . . . . .	.A-12.9
MUSCOGEE HEALTH PROJECT (Health Through Science) -- Georgia. . . . .	A-12.10
OMBUDSMAN -- North Carolina. . . . .	A-12.11
PEOPEL: Physical Education Opportunity Program for Exceptional-handicapped Learners -- Arizona. . . . .	A-12.12
SCHOOL HEALTH CURRICULUM PROJECT (SHCP) -- California. . . . .	A-12.13
SEQUENTIAL PHYSICAL EDUCATION REFORM: The M-5 Project -- North Carolina. . . . .	A-12.14
TALENTS UNLIMITED -- Alabama . . . . .	A-12.15

\*See Sectional Cross-Reference Index, p. D-9, for related programs.

**PROJECT** COMPUTERONICS: Gifted Child Project

A course in programming, problem solving, and computer literacy.

**target audience** Approved by JDRP for gifted and high-achieving students in grades 6 and 7. This program has been used in other settings with gifted and high-achieving students in grades 5 and 8 and with students of a wide range of abilities in grades 5-8, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** Computeronics is a 35-40-hour course in programming, problem solving, and computer literacy. The project was developed to meet an identified need for problem solving materials for gifted and high-achieving middle school students. A survey by the National Council of Teachers of Mathematics to determine priorities for school mathematics for the 1980s showed that problem solving received the highest ranking for curriculum emphasis. In addition, 90% felt that problem solving should place emphasis on the use of computers. The increased availability of microcomputers in homes and schools has made it imperative that educators find ways to maximize their use in the classroom for all students as well as the gifted and talented.

Computeronics provides students an opportunity to: learn a simple programming language; use computers to solve problems; and see the ways that computers affect their lives. The course consists of two units. "Computers in Society" conveys information about the history of computers, their present and future uses, and computer-related careers. The student text, which employs a magazine format, includes articles, photos, ads, and a glossary. Because of the rapid change in technology this unit is easily augmented through inclusion of current magazine and newspaper materials. "Problem Solving with Computers" teaches students to program using the BASIC computer language. Students use their programming skills in solving word problems. This unit uses a combination of paper and pencil and hands-on activities. This combination allows as many as 10 students to work with a single computer. The materials are not hardware specific and can be easily adapted to a variety of delivery systems.

Both units use a mastery learning approach: each unit objective must be mastered before a student moves on to the next. The management system built into student lesson books, activities, and mastery answer book allows students to move at their own pace. Suggestions for teachers are included in the teacher's guides which include both facilitative and directive classroom organization.

**evidence of effectiveness** The nonequivalent control group design was used to evaluate the Computeronics course on fifth- through eighth-grade high achieving and gifted students. Pre and posttests were administered to the experimental and control groups. The Computeronics Criterion Referenced Test (CCRT) with KR-20 reliability of .90 (n=898) was used to assess student knowledge of computers and BASIC programming. The data was analyzed with an analysis of covariance which statistically adjusts for the difference in the experimental and control group pretest means.

**implementation requirements** Adopting teachers need teacher materials and two days of training. Students need course materials and access to a computer. The program has been implemented successfully with Apple, Atari, Commodore Pet, Ohio Scientific Instruments, Radio Shack microcomputers, and with computer terminals. Training costs for the project will depend upon a number of factors such as time and location, and should be negotiated with the project staff.

**financial requirements** "Computers in Society" materials include a Teacher Guide for \$7.25; Student Lesson Book, \$3.50; Activity Packet, \$1.25; Parent Report Pad, \$1.85 (one per class); and Mastery Record Pad, \$65 (one per class). "Problem Solving with Computers" materials include the Teacher Guide, \$11; Student Lesson Book, \$4.95; Activity Packet, \$2.40; Sidetrips, \$3.25 (one for every four students); Parent Report Pad, \$3 (one per class); and Mastery Record Pad, 45¢ (one per class). The Teachers's Test Manual, \$2.95; Student's Test Packet, 60¢; and Mastery Answer Book, \$3.50 (one for every four students) are used for both units.

**services available** Visitors are welcome by appointment at the project site and designated demonstration sites. Project staff is limited, but efforts will be made to attend awareness meetings. Training is conducted based upon written request of interested adopters. Training sessions can accommodate 25-30 participants. A major effort is being made to provide certified trainers in a number of locations to expedite cost effective program implementation. Cost for training should be negotiated with the project office. Information on materials and training can be obtained by contacting the project office.

**contact** Pristen Bird, Director; COMPUTERONICS; Leon County School Board; 925-A Miccosukee Rd.; Tallahassee, FL 32304. (904) 487-1520.

## **PROJECT** CRITICAL ANALYSIS AND THINKING SKILLS (CATS)

A program offering students a sound, systematic, and practical way of making more rational decisions, constructively criticizing positions taken by others, and identifying and solving problems.

### **target audience**

Approved by JDRP as a high school program for students of average abilities. This program has been used in other settings for junior high and elementary grades, but no evidence of effectiveness has been submitted to or approved by the Panel.

### **description**

With practice, students learn a systematic way of analyzing issues by applying a six-step procedure. The six-step procedure is based on four RULES FOR GOOD CRITICAL THINKING. These rules are PRECISE DEFINITION, RELEVANCE, SOURCE CREDIBILITY, and WIDE RANGE. The six steps are: STEP 1. Specify the parts of the proposed policy, law, action, etc., which is at issue and define any unclear words or phrases. STEP 2. Determine the appropriate areas of concern for the issue. The major areas of concern which the students are required to use are based on traditional concepts related to the origin and development of the United States. These major areas include: ECONOMIC (productivity, incentive, inflation, balanced budget, etc.), FREEDOM (freedom of choice, maintaining personal freedom), SAFETY (national defense, public safety), and LEGAL (obeying the law, obeying the Constitution). STEP 3. Obtain predicted consequences, both good and bad, for each of the areas of concern identified in STEP 2 and any other identified areas. STEP 4. Identify the most important good and bad predicted consequences (from Step 3). STEP 5. Assess the sources of each predicted consequence (identified in Step 4) for credibility. STEP 6. Make a decision by weighing the good side against the bad side and check this decision for consistency with the confidence ratings obtained in Step 5.

Many teachers and administrators have formed a semester-long course in Critical Thinking. However, there is no need to form a separate course for CATS because the program is typically integrated into existing courses and programs such as history, literature, American government, speech, debate, economics, and gifted and talented programs.

When CATS is used in existing classes, students learn course content in more depth and learn how to apply an analysis procedure to issues, a procedure they can use the rest of their lives. Students learn how to focus their thinking so that they can reason things through more systematically and thoroughly. Students learn how to critically read and thus can avoid being unduly influenced by media bias. Students learn how to format and write concise, to-the-point essays and reports. Students learn how to apply principles of private enterprise to economic policy issues.

### **evidence of effectiveness**

A field test conducted in 1974-75 in urban-suburban areas of Salt Lake City, Utah, used a pre/post, control-group design. Program students made significant gains on a measure of critical thinking ability; controls did not. Also, program students were rated significantly higher on in-class research papers, as judged by independent experts.

### **implementation requirements**

Teachers receive training in a one- to two-day workshop. Those trained at the workshop implement the program's essential elements for at least one semester (approximately 20 weeks) and provide data on the implementation to CATS. Follow-up by mail, phone, or onsite (optional) is provided approximately 20 weeks after beginning implementation. No special equipment or facilities are required.

### **financial requirements**

Costs for initial training include: trainer, \$200 per day; travel and per diem, actual expenses; workshop materials, \$30 which includes the CATS Instructional Package, MAKING RATIONAL DECISIONS. The Package consists of a book and 11 manuals showing how to implement CATS in the classroom.

### **services available**

Awareness materials are available at no cost. Visitors are welcome at project site by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted only at adopter site (except in rare instances; costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

### **contact**

Terry P. Applegate, or W. Keith Evans; UURI; Research Park; 420 Chipeta Way, Suite 170; Salt Lake City, UT 84108. (801) 581-6738 or 277-7395.

## **PROJECT**

EVERY CHILD A WINNER With Movement Education

An individualized movement education program providing mainstreaming and success experiences for all children regardless of physical or mental ability.

**target audience** Approved by JDRP for students grades K-6.

**description** The program design provides developmental movement experiences for children centered on themes of space awareness, body awareness, quality of body movement, and relationships. These themes are taught through creative games, creative dance, and educational gymnastics. Competition is found in the program only when child-designed. The project slogan, "Every Child A Winner," finds expression through the discovery learning approach to teaching movement. Students are encouraged to reach their personal potential, and "winning" occurs as each child does his or her best.

Every Child A Winner -- Lesson Plans includes 31 behaviorally stated objectives, with lesson plans written to enable teachers to meet these objectives. Training is designed to help classroom teachers and physical educators implement the lessons. The lessons are designed to enhance the child's self-concept, to improve academic skills, and to improve physical fitness and motor skills.

Phase I Training (three days) includes an accountability model for program implementation, teaching techniques for Every Child A Winner movement lessons, and sessions on public relations related to successful implementation of the program. Phase II Training (two-day continuation) provides detailed information on refining students' movement skills and assistance in implementation in the upper grades.

The program should be implemented first in K-3, with a plan for expanding to K-6.

**evidence of effectiveness** Evaluation was conducted on students grades 1-6 over a three-year period. Pre- and posttesting on a random sample included the Washington State Fitness Test, AAHPER Fitness Test, Minnesota Motor Skills Test, California Inventory of Personality, and the SRA Math and Reading Test. The data showed improvement in all areas, physical fitness and motor skill levels being elevated significantly ( $p < .05$ ).

**implementation requirements** Program can be conducted by classroom teachers and/or physical educators. Pupil-teacher ratio 1:30. Five-day training is essential, with a plan for additional inservice at the adopter site. Facilities needed are a multipurpose room or indoor area large enough for participation, as well as outdoor space to conduct movement lessons. Schedule of 30 minutes per day, five days per week. Equipment for each child beginning at kindergarten or K-3 from list supplied by project. Training materials and resource books are required. A signed agreement between the project director and adopter is required.

**financial requirements** Training materials: one copy per training participant, Every Child A Winner . . . A Practical Approach to Movement Education, \$10 each. Resource book list and equipment list supplied by project. Costs vary depending on the number of students involved.

**services available** Awareness materials are available at shared cost. Visitors are welcome by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (costs to be negotiated). Training is also available at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** Martha F. Owens; Every Child A Winner; Irwin County Schools; Box 141; Ocilla, GA 31774. (912) 468-7098.

**PROJECT** HAVE A HEALTHY HEART

A heart health curriculum and aerobic fitness program for regular classroom, physical education, science, and health teachers and their students.

**target audience**

Approved by JDRP for students in grades 4-6. Evidence of effectiveness for this program in grades 7-8 has been submitted to but not approved by the Panel.

**description**

There is evidence to suggest that several factors associated with heart disease are related to habits acquired in childhood. The developers of this three-month program assume that educating children about such relationships and teaching them health-promoting habits have great potential for reducing the impact of heart disease. Conducted either within the regular classroom or as part of a physical education or health period, this supplemental health course consists of separate fitness and lifestyle units, each with its own set of student materials. Developed in cooperation with sports medicine physicians and members of the American Heart Association's Heart, Health, and the Young Committee, the Fitness Book (third-grade readability level) contains information on setting up and maintaining a personal aerobic fitness program. Developed in cooperation with cardiologists, biomedical researchers, and dieticians, the Lifestyle Booklet (fourth-grade readability level) conveys information on the effects of smoking, overweight, stress, heredity, exercise, cholesterol, and hypertension on heart disease. Skillpaks containing mazes, puzzles, word scrambles, quizzes, and other activities reinforce concepts taught in the two student booklets. Student materials are used in the classroom for approximately 30 minutes two or three times a week. Students also participate in an aerobic fitness program. (No medical release was required for participating students at the project site. Local physicians determined that students healthy enough to take part in school physical education program activities could participate without risk.) They perform aerobic exercise at their target rate for approximately 20 minutes three times a week. Teachers supervise and participate in all student activities. Project-developed teacher materials include a teacher's manual, a fitness program kit, four videotapes, and resource/enrichment packets.

**evidence of effectiveness**

An experimental versus control group pre/posttest design was used to determine program effectiveness. Experimental group gains were significant at the  $p < .001$  level while control group gains were not statistically significant.

**implementation requirements**

HAVE A HEALTHY HEART can be implemented in regular classrooms, science or health classes, physical education programs, or a combination of all of the above. No special materials are required. Participants should come to the workshop prepared to do aerobic dance, dissect beef hearts, and make smoking machines. Running shoes should also be worn.

**financial requirements**

The cost for a one-day training workshop and required materials is \$125 per participant. Materials include the following: An implementation manual, Fitness and Lifestyle tests, beef heart dissection packet, smoking machine packet, relaxation packet, Fitness Booklet, Lifestyle Booklet, student booklet skillpaks, sweatbands, Heart decal, HHH button, and an HHH t-shirt.

**services available**

Awareness materials are available at no cost. A color awareness videotape is available on loan. Training is usually conducted at a regional site. Follow-up services are available.

**contact**

Sherry Avena; Have a Healthy Heart; 4095 173rd Place, S.E.; Bellevue, WA 98008. (206) 746-0331.

## **PROJECT**

### INDIVIDUAL PROGRESS PROGRAM

A complete academic program for gifted students.

### **target audience**

Approved by JDRP for students in grades 2-5 who show such an accelerated rate of academic/intellectual growth that their needs cannot be met with grade level teaching and materials.

### **description**

The IPP is a curriculum model for gifted students in grades 2-5 who are in the top two percent as measured by academic/intellectual tests. The program accelerates students through a basic skills core curriculum at a level commensurate with their own ability. This curriculum integrates all disciplines under the "umbrella" of the social studies, and crosses all age and grade levels. A theme is applied to the curriculum, which rotates every three years.

Six manuals have been developed for use with the program: one for a general program description; three for curriculum -- one for each year of the cycle; one describing the use of affective measures in the program; and one as a specific tool for staff using the model. Within these manuals are lists of all texts used and additional curriculum employed by the staff.

Through standardized achievement and intellectual test scores, students are identified for inclusion in the program. When they enter the program, they are diagnosed for level of proficiency in the areas of reading/language arts and mathematics. Once students have been tested for individual levels of competency, they are grouped for instruction within each classroom according to the appropriate level, resulting in multiage/multigrade groupings. Diagnosis is continued by testing at intervals throughout the year in order to monitor mastery of basic skills and ascertain strengths and weaknesses. Scheduling is arranged so that students may move between classrooms in order to work with their intellectual peers in each academic area. In addition, an enrichment component, which focuses on foreign language, art, the media, folk dance, and computer basics, operates on a six-week rotating schedule.

Management tools help teachers maintain student schedules and teach the students how to manage their independence and time. In addition to academic achievement, it is expected that each child will complete independent projects in areas of interest. A fairly structured format is provided for the younger grades, while the older students have a more open-ended structure. The community functions as a primary resource for all of the disciplines; resources are either brought into the classroom or students are taken out into the field. Considerable attention is also given to social/emotional growth. Activities in interpersonal skills, self-awareness, and communications are part of the curriculum manuals.

### **evidence of effectiveness**

For pretesting, both treatment and control students were given three subtests from an above-level form of the California Achievement Test-Reading, Language and Math. These tests are normally appropriate for students one to two-and-a-half years above the actual grade level of the students. Over all four grades, the treatment group performed significantly better than the control on each of the subtests. Project students progressed in terms of test performance as much as the norms indicate is appropriate for older students. Comparisons of each grade's subtests revealed that project students maintained or exceeded their relative position within the above-level group.

### **implementation requirements**

The Individual Progress Program can be adopted by one or more classrooms in a district. Implementation of the IPP involves a three- to six-day workshop for the adopting district staff, workshop length depending on the knowledge base of the adopting team. Consultants can also assist staff with planning and adaptation of their existing curriculum materials to the IPP model. Each adopting district will be required to give pre- and post- above-level standardized achievement tests to monitor the success of the implementation. The assessment will be conducted by the IPP staff.

### **financial requirements**

The manuals are designed to provide the program model, including assessment, scheduling, curriculum outlines, and samples of lesson plans and units. The staff and classroom costs are baseline and the textual and resource materials specified by the district are utilized within the classroom. Thus, the need for additional materials is reduced. First year cost is \$5,465; recurring year cost is \$1,704. Should a longer workshop be desired, the fee becomes negotiable based on a per person flat rate.

### **services available**

Visitors are welcome at demonstration site by appointment. Project staff are available for awareness sessions (costs to be shared) and training sessions (costs are negotiable). A one-day follow-up is required and would be negotiated into the cost of the training session.

### **contact**

Barbara Norsen; Individual Progress Program; Seattle Public Schools; 815 Fourth Avenue North, Seattle, WA 98109. (206) 587-4368 or -5050.

**PROJECT** INSTITUTE FOR CREATIVE EDUCATION

A sequentially ordered curriculum that teaches a creative problem-solving process using tasks linked to a wide variety of subject areas.

**target audience** Approved by JDRP for heterogeneously grouped, whole classroom use, grades 4-6.

**description** Institute for Creative Education activity is based on the belief that creative problem solving is essential to a quality learning experience. The project-developed curriculum teaches a process that helps students develop abilities to solve current and future problems. Creativity is considered a thinking activity that results in an original solution to a problem or situation. The project's goal has been to develop students' abilities to respond creatively to problems or tasks with fluent, flexible, original, and elaborate answers.

Unique to this program are the sequentially ordered activities or lessons that teach the process of creative problem solving in an order clearly understandable by students and teachers. The students become decision makers and the teacher facilitates their thinking.

Another feature of this program is a two-day teacher training component. During this training (for an estimated audience of 25), teachers learn the format of the curriculum and the basic elements contributing to reinforcement, consciousness raising, and productive thinking (actual tasks to be performed). Following training, teachers are given the curriculum and asked to use the program lessons or activities once a week. Teachers are directed to use the lessons in sequence so that students will easily understand the process, ultimately reaching the higher-level activities in which problems or tasks are more complicated. These higher-level activities are linked to academic principles and require that students create new or unique solutions that work; a finished product is also a requirement of higher-level activities.

The Institute for Creative Education has prepared several manuals to help adopters. These include an evaluation manual to help adopters and an administrative manual with the necessary information for smooth implementation and project management. The Institute staff are available for consultations, follow-up activities, and new lesson development. Costs can be negotiated.

**evidence of effectiveness** Similar treatment and control groups were pre- and posttested with the Torrance Test of Creative Thinking, figural forms A and B. The creative thinking abilities of project students in grades 4-6 improved significantly above the .05 level. A full report is available from the project.

**implementation requirements** The Institute curriculum can be implemented in schools of any size and composition provided that teachers are trained in Institute concepts. It can be used by whole classrooms or cross-grade groupings and in large- and small-group settings. A group of 25 teachers is ideal for training (two days). The entire adopting staff should attend a one and one-half hour awareness session before training. An administrator or project coordinator should be trained with the teachers so that proper follow-up activities can be carried out. The only materials required (for curriculum and project administration) are supplied at cost, approximately \$50 per teacher for curriculum, \$15 for training manual.

**financial requirements** Teacher training is the main expense. One Institute staff member will administer two days of training. If done on release time, the cost of substitutes must be met by the adopter. No additional staff or equipment are needed. Minimum upkeep (involving only such consumables as paper, pencils, craft materials, wood, etc.) is needed after initial implementation.

**services available** Awareness materials are available at no cost. Visitors are welcome anytime by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (all expenses must be paid, including consultation fee to be negotiated; cost of materials, \$60-\$65 per teacher; plus trainer stipend). Training is also available at adopter site (all expenses must be paid). Implementation and follow-up services are available to adopters (travel and per diem must be paid). These services are highly recommended for quality adoptions.

**contact** Ms. Verne Kelly, Director; Institute for Creative Education; Educational Improvement Center -- South; Box 209; Route 4, Delsea Dr.; Sewell, NJ 08080. (609) 228-6000.

**PROJECT**

KIDS KITS (Kids Interest Discovery Studies Kits)

A program to generate active, self-directed learning on topics of student interest using organized sets of multimedia materials.

**target audience**

JDRP-approved for students of all abilities, grades 1-6.

**description**

KIDS KITS is a multimedia approach to gifted and talented education, special education, regular classroom instruction, and learning center activities. Based on a school-wide survey of student interest, kits such as Indians, Astronomy, and the Human Body are compiled by the library media staff and teachers. Kits contain books, filmstrips, tapes, models, study prints, etc., suitable for all grade levels, a variety of learning modalities, and a range of abilities. Through immediate hands-on experience with many kinds of materials, students become involved in reading, writing, listening, viewing, research, and discussion/sharing. Independent learning is promoted when students ask and answer questions on topics of interest to them. Structured activities can be guided by library staff or teachers. Individuals, pairs of students, and small or large groups can use the kits in the library media center or in the classroom. Following kits use, students create products such as study prints, transparencies, tapes, models, photographs, or filmstrips, which can be added to the kits. Students are encouraged to share their learning with families, classmates, teachers, and students from other classes through product displays, presentations, and informal discussions.

**evidence of effectiveness**

Interview data collected at the developmental site and at two adoption sites (one rural and one suburban) indicated that with kits usage, students demonstrate: (a) greater specificity, complexity, and multiplicity in their descriptions of the purpose of their learning activities; (b) more awareness and use of learning resources; and (c) a greater number of applications of the information gained. At the developmental site, where students had participated for one to three years, results were significant at the .001 level. At the adoption sites, after six months, the significance levels varied from .02 to .007.

**implementation requirements**

Staff at the adopting school develop 8-10 kits. The school identifies a staff member to serve as the program coordinator -- usually the library media specialist/aide or a teacher. The coordinator receives training in kit materials selection, program operation, and evaluation. Classroom teachers receive two hours of inservice training in how to use KIDS KITS to supplement their instructional program. Library media staff and/or teachers train students in the use of KIDS KITS, operation of audiovisual equipment, and production methods.

**financial requirements**

A wide variety of commercially available multimedia materials is used to compile the kits. Much of this material is already found in most schools. Costs vary considerably depending on the amount of new materials purchased. Most schools already have appropriate audiovisual equipment. Other materials available to adopter include Program Manuals, Activity Cards, and Discovery Cards.

**services available**

Awareness materials are available at no cost. Visitors are welcome anytime by appointment at project site. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact**

Jo Ann C. Petersen; Warder Elementary School; 7840 Carr Drive; Arvada, CO 80005. (303) 423-1227.



**PROJECT** MUSCOGEE HEALTH PROJECT (Health Through Science)

A comprehensive health education curriculum.

**target audience** Approved by JDRP for all students in a normal classroom setting in grades K-12.

**description** The Muscogee Health Project is a K-12, comprehensive health education program designed to be implemented by teachers with a minimal background in health education. The curriculum is based on clearly defined health objectives with a format which includes: general objective, measurable objective, content, activities, resources, student materials, and teacher materials. Primary emphasis is placed upon building a cognitive base followed by establishing positive health attitudes and behaviors. The decision-making process is the primary vehicle used to relate these three components. Learning activities include: class discussions, group and individual work, experimentation, use of films and filmstrips, student reports, field trips, outside speakers, and teacher presentations.

A series of tests have been systematically developed to measure the attainment of the listed health objectives. The diagnostic use of the results from administering these tests is strongly encouraged along with determining growth in health on the part of the students by analyzing pre- and posttest data.

**evidence of effectiveness** Experimental and control students were pre- and posttested using the Muscogee Health Tests during the 1979-80 school year. The students involved were from heterogeneous "general" classrooms. On each grade level the gains achieved by experimental students exceeded the gains of control students. The gains of the experimental students were educationally and statistically significant on each grade level.

**implementation requirements** Implementation requires that the adopter/adaptor follow the Muscogee Health Project curriculum guides and devote 30 hours of instructional time for grades K-7, 45 hours to grade 8, and one semester to each of the high school courses. At least 85% of the objectives listed for the Muscogee Health Project must be addressed per grade level of implementation. Teachers implementing the program must receive one day of inservice training by project staff. The minimum commercial materials identified by the parent project must be provided to teachers implementing the program.

**financial requirements** Expenses for LEAs implementing the Muscogee Health Project include the following: travel expenses (including per diem) for trainer; coordinator and teacher training, \$300; student materials for each level range from \$50-\$225. A large number of the commercial materials listed as a minimum for implementation are presently found in most school systems.

**services available** Awareness materials are available at no cost. Inservice and consultant assistance can be provided by the project staff. Visitors to the parent project are welcome by appointment.

**contact** Dr. Ronnie Shehane, Project Coordinator; Muscogee County School System; 1532 Fifth Avenue; Columbus, GA 31901. (404) 324-5661, ext. 246.

**PROJECT** OMBUDSMAN

A school-based semester-long drug education/primary prevention program.

**target audience**

Approved by JDRP for students of all abilities, grades 5-6. This program has been used in other settings with grades 7-8, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description**

Ombudsman is a structured course designed to reduce certain psychological and attitudinal states closely related to drug use. Ombudsman does not emphasize information about drugs per se, although some drug topics are included for discussion as part of specific exercises.

The course has three major phases. The first phase focuses on self-awareness and includes a series of exercises permitting students to gain a wider understanding and appreciation of their values as autonomous individuals. The second phase teaches group skills and provides students with an opportunity to develop communication, decision-making, and problem-solving techniques that can be applied in the immediate class situation as well as in other important group contexts such as with family and peers. The third phase is in many ways the most important: the class uses the insights and skills gained during the first two phases to plan and carry out a project within the community or school. During this phase, students have an opportunity to experience the excitement and satisfaction of reaching out to others in a creative and constructive way.

The program must be presented to a given classroom of students for a minimum of two hours per week for a full semester.

**evidence of effectiveness**

Pre- and posttesting of experimental and control groups (1977) illustrated Ombudsman's impact on a series of high-risk states related to drug use. Longitudinal comparisons of Ombudsman graduates and non-Ombudsman students (1977) have demonstrated that program graduates are more likely to give up drug use.

**implementation requirements**

The program can be conducted by classroom teachers or other professional or school personnel. A two-and-one-half- to three-day training session for at least eight professionals is required prior to implementation. Two professionals must teach at least one Ombudsman program per semester. Training takes place at the adoption site or the project site. Eight to 30 participants from one or more school districts can be trained simultaneously.

**financial requirements**

One Ombudsman teacher's manual must be purchased for each trainee. A supplemental package of related books and filmstrips can be purchased for each school implementing Ombudsman. The cost of this material is approximately \$120 per school. Equipment required includes a filmstrip projector, a movie projector, and other normal materials.

**services available**

Awareness materials are available at no cost. Visitors are welcome at project site anytime by appointment. Project staff are available to attend out-of-state awareness meetings (travel and per diem must be paid). Training is conducted at project site (all expenses must be paid including cost of training materials). Training is also available at adopter site (all expenses must be paid including cost of training materials). Follow-up services are available to adopters (all expenses must be paid).

**contact**

Bob Giduz, Dissemination Coordinator; Charlotte Drug Education Center; 1416 E. Morehead; Charlotte, NC 28204. (704) 374-3211.

## **PROJECT**

PEOPEL: Physical Education Opportunity Program for Exceptional-handicapped Learners

A specially designed, success-oriented physical education program for high school students with unique needs utilizing supervised peer tutors (student aides) to emphasize individualized learning and instruction.

## **target audience**

Approved by JDRP for handicapped students and nonhandicapped peer tutors, grades 9-12. This program has been adapted for use in middle and elementary schools, but no evidence of effectiveness has been submitted to or approved by the Panel.

## **description**

Project PEOPEL was developed to help schools meet the needs of both handicapped (exceptional) and nonhandicapped students through peer tutoring in a success-oriented physical education experience. PEOPEL is designed for students who because of some physical, mental, social, or emotional condition will benefit more from an individualized program than from general physical education. Through individualized learning in physical education, students develop mental, social, emotional, and physical abilities at their own pace. The emphasis on the individualized learning of a variety of physical activities is made possible by utilizing peer tutors, called PEOPEL Student Aides, who have completed a special training/orientation class and are under the direct supervision of the physical education teacher. This provides a one-to-one instruction ratio in a coeducational setting with up to 30 students per class (15 exceptional learners and 15 student aides). Each student experiences fun and daily success in a variety of individual, dual, or team activities. The organization of PEOPEL classes is similar to that of general physical education classes. In addition, students are pretested to determine entry skill level based on performance objectives within the Unit of Instruction. The PEOPEL Teacher's Guide has 35 separate Units of Instruction, which were developed with task-analyzed performance objectives. Unit of Instruction Performance Objectives are included for history, basic rules, etiquette, terminology, safety, and skill progressions. Other PEOPEL materials are the Administrative Guide and Student Aide Training Manual.

PEOPEL inservice training is designed to assist physical education teachers and staff in implementing the peer teaching components of PEOPEL within their school. Training encompasses both administrative and instructional considerations, as well as short- and long-term planning. Staff training participants should include an administrator, counselor, special educator, physical educator, and school nurse from each adopting school. One day of staff training is required for three or fewer adopting schools; one and one-half to two days of training for four or more schools.

## **evidence of effectiveness**

Evaluation of high school students was conducted over a three-year period by pre- and posttesting on a four-item composite Physical Fitness Battery and the Wear's Physical Education Attitude Scale. The data showed significant gains in fitness and attitudes of PEOPEL students ( $p < .05$ ) with minimal or no gains in control group ("adapted P.E." with no student aides).

## **implementation requirements**

Program implementation is flexible according to the needs of students, a class, a school, or a district. Instructional procedures enable a school/district to implement PEOPEL with student aides and exceptional students with varying abilities in grades 9-12. No special equipment or facilities are required. Inservice training is designed to meet the needs of the participating teachers, programs, and schools. With inservice training, existing teaching personnel who have a sincere interest can implement the program.

## **financial requirements**

Training materials (PEOPEL guides, manual, and assessment charts), \$10 per participant. Training materials provide administrative and instructional guideline considerations for programming in physical education with trained student aides. Other materials and costs available upon request. Implementation costs based on teacher's salary at 30:1 student-to-teacher ratio. General physical education equipment is used.

## **services available**

Awareness materials are available at no cost. Visitors are welcome at project site anytime by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (adopter pays only its own costs). Training is also available at adopter site (all expenses must be paid). Follow-up services are available to adopter.

## **contact**

Ed Long, Director; Project PEOPEL; Phoenix Union High School System; 2526 W. Osborn Rd.; Phoenix, AZ 85017. (602) 251-3867. Larry Iomer, Coordinator; 3839 West Camelback Rd.; Phoenix, AZ 85019. (602) 841-3124.

**PROJECT** SCHOOL HEALTH CURRICULUM PROJECT (SHCP)

A comprehensive health education program designed to foster student competencies to make decisions enhancing their health and lives.

**target audience** Approved by JDRP for students of all abilities, grades 5-7.

**description** The SHCP includes a planned sequential curriculum, a variety of teaching methods, a teacher training program, and strategies for eliciting community support for school health education. It involves students, teachers, educational administrators, other school staff, community health personnel, and the families of participating students. Through group and individual activities, children learn about themselves by learning about their bodies. There is one 10-12 week unit for grades 5 and 6 and a semester course for grade 7. Grade 5 studies the respiratory system, grade 6 the circulatory system, and grade 7 the nervous system. Every unit emphasizes the relationships between one's own behavior and the functioning of the system being studied. Access to a variety of stimulating learning resources, including audiovisuals, models, community health workers, and reading materials, is abundantly provided. The curriculum is designed to integrate with the lives and personality development of children by providing situations in which they may assume responsibility, research ideas, share knowledge, discuss values, make decisions, and create activities to illustrate their comprehension and internalization of concepts, attitudes, and feelings. The curriculum has been developed to enhance other school subjects such as reading, writing, arithmetic, physical education, science, and the creative arts. As teachers become familiar with the subject matter during training, they simultaneously learn teaching methods. Instead of the traditional classroom approach, the teacher uses a learning center approach, which allows children to move about the room, explore resources, and work together in groups. During training, teachers are given packets of materials that help them develop and explain health-related concepts to students. All of the classroom work is described in the packets, and supplemental ideas are included for variety. The SHCP requires that adopting schools send a full team to one of the various SHCP regional training centers to receive training. This team should consist of two classroom teachers from the level for which the unit is being adopted, the principal, and one or two other school support personnel. Training is offered on condition that the participants provide a training workshop for others. By teaching the unit and carefully following the highly structured plan of the curriculum, teachers gain the experience necessary to present a workshop. The team is then able to train other classroom teachers in their own school and in other schools to use the SHCP effectively.

**evidence of effectiveness** Twenty-four separate studies were completed between 1964 and 1978 to ascertain the effectiveness of the curriculum. A recent review and synthesis of these studies indicates that fifth-, sixth-, and seventh-grade units were effective in increasing health-related knowledge and providing positive health-related attitudes.

**implementation requirements** Implementation of the SHCP requires a school team comprised of two classroom teachers, the principal, and one or more curriculum support persons to: receive training in the grade level being adopted; utilize SHCP activities for a minimum of 10 weeks during the school year; utilize SHCP teaching materials; involve school administrators, parents, and representatives of community health organizations in the project; and offer a SHCP training workshop for others after the first year.

**financial requirements** Teacher training costs, totaling approximately \$2,500, can be shared by as many as eight teams (32 members including 16 teachers). Nonconsumable instructional materials cost about \$3,500 per district per grade level. Consumable instructional materials cost about \$500 per district per grade level.

**services available** Awareness materials are available at no cost. A Project Facilitator has been appointed in each state to supply information and assistance. Visitors are welcome anytime by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (all expenses must be paid). Training is conducted at project site (all expenses must be paid). Training is also available at adopter site (all expenses must be paid). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** Kathleen Middleton, Director; Health Curriculum Projects; National Center for Health Education; 211 Sutter St., 4th Floor; San Francisco, CA 94108. (415) 781-6144.

**PROJECT**

SEQUENTIAL PHYSICAL EDUCATION REFORM: The M-5 Project

A logical, sequential, self-directed program in physical education that fosters knowledge about physical education and positive attitudes toward becoming and staying physically fit.

**target audience**

Approved by JDRP for students of all abilities, grades K-6.

**description**

The project's mission is to give students and their teachers knowledge about physical education and positive attitudes toward becoming and staying physically fit. Activities are built around major skill areas through the use of a variety of techniques that include specially designed learning centers and individualized learning activities.

The program endeavors to enable each child to develop physically, emotionally, socially, and mentally through the medium of physical activity. At the beginning of each school year, students are requested to complete a health appraisal form which aids teachers in recommending individual programs. As soon as the forms are returned, physical fitness testing begins, with each child being tested on the following skills: bench push-ups, curl-ups, squat-jumps, standing broad-jump, and the 30-yard dash. After testing, skill level needs are determined and the M-5 program begins.

All students visit six movement activity centers two days a week for approximately five minutes. The centers are designed to develop fitness and movement skills through sequential activities from lower to higher levels; as skills are developed, students progress to the next higher skill level, which allows students to gain the foundations needed in a logical and sequential manner. One day a week is spent in self-testing to determine improvement, the remaining two days in movement motivators: bean-bag activities, group and creative games, gymnastics, hoop activities, parachute activities, and yarn-ball activities. In addition, students are encouraged to be self-directive and to develop interest and proficiency in worthwhile recreational activities. It is expected that through this effort students will develop physically, emotionally, socially, and mentally as they engage daily in physical education.

**evidence of effectiveness**

Students were pre/posttested on the five-item Kirchner Fitness Test for Elementary School Children. Results of analysis of third-year pre/post data on project children revealed that over 91% achieved gains that were significant at the .01 level. Evaluation reports and JDRP application are available upon request.

**implementation requirements**

Obtaining Movement Activity Center Curriculum Card File; providing inservice staff development time for instructional workshop for classroom teachers and physical education staff; obtaining materials and equipment necessary for physical education activities. Beyond this point, only mutually agreeable aspects of adoption are involved, the extent of which must be determined by adopters.

**financial requirements**

The start-up costs for an average-sized elementary school (500-600 students) are approximately \$2,120 if everything on the equipment list and material list is purchased. These costs include \$1,090 for materials and \$850 for equipment. Potential adopters should examine the materials and equipment lists very carefully, since many of the items may already be available in the schools.

**services available**

Awareness materials are available at no cost. Visitors are welcome anytime by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (adopter pays only its own costs). Training is also available at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact**

Carolyn M. Morphy, Director; McBee Institute of Creative Education, Inc.; P.O. Box 1315; Marion, NC 28752-1315. (704) 756-4871.

**PROJECT** TALENTS UNLIMITED

A structured attempt to apply a multiple-talent theory approach to the regular classroom situation.

**target audience** Approved by JDRP for grades 1-6.

**description** Talents Unlimited is designed to help teachers recognize and nurture multiple talents in children of varying ability levels, including talents in the areas of productive thinking, communication, forecasting, decision making, and planning, as well as in the academic areas. The program is a structured attempt to implement and evaluate at the elementary classroom level the multiple-talent theory as defined by Dr. Calvin Taylor; it is based on sound educational and psychological research in learning. Replicable models for teacher training, student instruction, and evaluation have been developed. The program can operate within any organizational pattern.

The Talents Unlimited process model focuses on regular classroom instructional programs, not on gifted programs per se.

**evidence of effectiveness** Experimental groups outperformed control groups at the .001 level of significance on Talents Unlimited Criterion Reference Tests and Torrance Tests of Creative Thinking. Also evident were a trend of increased achievement performance and a major impact on positive self-concept as measured by pre- and posttesting with the Cooper-Smith Self-Esteem Test. Evaluation was conducted in 1974.

**implementation requirements** Adopting schools are given permission to replicate the three program models: teacher training, student instruction, and evaluation.

**financial requirements** Per-pupil start-up cost is approximately \$5.98. Per-pupil maintenance cost is approximately \$4.20.

**services available** Awareness materials are available at no cost. Visitors are welcome at project site on the first Monday and Tuesday of every month. Project staff are available to attend out-of-state awareness meetings (travel and per diem must be paid). Training is conducted at project site (adopter pays only its own costs). Training is also available at adopter site (all expenses must be paid). Implementation and follow-up services are available to adopters (all expenses must be paid).

**contact** Florence Replogle; Talents Unlimited; 1107 Arlington St.; Mobile, AL 36605. (205) 690-8960.

**OTHER PROJECTS APPROVED BY JDRP**

- SECTION B-1: ADULT EDUCATION
- SECTION B-2: ALTERNATIVE SCHOOLS/PROGRAMS
- SECTION B-3: BILINGUAL/MIGRANT EDUCATION
- SECTION B-4: CAREER/VOCATIONAL EDUCATION
- SECTION B-5: EARLY CHILDHOOD/PARENT INVOLVEMENT
- SECTION B-6: ENVIRONMENTAL EDUCATION/SCIENCE/  
SOCIAL SCIENCE
- SECTION B-7: ORGANIZATIONAL ARRANGEMENTS/ADMINISTRATION
- SECTION B-8: PRESERVICE/INSERVICE TRAINING
- SECTION B-9: READING/LANGUAGE ARTS/MATHEMATICS/WRITING
- SECTION B-10: SPECIAL EDUCATION/LEARNING DISABILITIES
- SECTION B-11: ARTS/COMMUNICATION/TECHNOLOGY
- SECTION B-12: GIFTED AND TALENTED/HEALTH/PHYSICAL  
EDUCATION/SPECIAL INTERESTS

SECTION B-1: ADULT EDUCATION\*

FLIT: Functional Literacy -- Virginia. . . . . B-1.3  
JEFFERSON COUNTY ADULT READING PROGRAM (JCARP) -- Kentucky . . . . . B-1.4  
NEW YORK STATE EXTERNAL HIGH SCHOOL DIPLOMA PROGRAM (EDP) -- New York. . . . . B-1.5

Sectional Cross-Reference Index, p. D-9, for related programs.



**PROJECT** AIRS: Andover's Individualized Reading System

A diagnostic/prescriptive reading program designed to teach basic skills and foster enjoyment of literature.

**target audience** Approved by JDRP for students of all abilities, grades 1-6.

**description** Andover's Individualized Reading System (AIRS) was developed to provide quality education by promoting: consistency of curricula throughout the system; competence in teaching skills; enjoyment of literature by students; and significant growth in reading scores.

AIRS basic skills for grades 1-6 are defined by a comprehensive set of behavioral objectives to which all instructional activities, materials, and tests are keyed. Reading instruction is teacher-directed in grades 1 and 2, where lesson plans are correlated to the Economy Company's Keys to Reading texts, which build a strong phonetic base. To this program AIRS adds handwriting lessons, dictations, spelling, sight word study, and criterion-referenced posttests. AIRS also provides skill books for teaching comprehension and word meaning to students in grades 1-6 and structural skills in grades 2-6. Each booklet contains lesson(s), follow-up(s), reinforcement practices, and a posttest. Students spend a portion of their reading time using individualized reading and literature books. Student achievement at all levels is monitored using criterion-referenced tests in phonics, structural skills, word recognition, comprehension, and word meaning. Progress throughout the program is outlined by continuums for each grade level. Records are kept for groups and individuals. Since its approval by JDRP, additional components have been developed to make AIRS a total language arts program. They include grammar, spelling, capitalization/punctuation, and grammar/word usage. Students spend 10-12 hours a week on the total language arts program.

**evidence of effectiveness** When AIRS was introduced in the Andover Schools in 1972, students in grades 1-6 performed at or slightly above the 50th percentile in reading comprehension. For the past five years, students have performed decidedly above the 50th percentile. In 1981 the mean scores of students in grades 1-11 were at the 91st percentile or above, as measured by ETS, while mean scores of students in grades 2, 4, 6, 8, and 9 were 95 or higher.

**implementation requirements** Three days of inservice workshops at adopter sites for teachers and supervisors are recommended. Program is designed to be used by an entire system as a total language arts program or by a single school. Individual AIRS components, such as comprehension, may be adopted to supplement an existing program. A complete set of materials for each component adopted is needed.

**financial requirements** Teacher's Manuals (four at lower levels), \$5.50 - \$11.50 each. Pupils' Lesson Unit (nonconsumable), \$150 - \$547 for 15. Consumable tests, \$6 - \$18 per set. Consumable record-keeping materials, \$2 for 35. Individualized Reading, one year, approximately \$13.75 plus trade books. Phonics, Individualized Reading, and Comprehension programs use commercially available publications: basal for grades 1 and 2, trade books for grades 1-6, and skill booklets for reinforcement.

**services available** Visitors are welcome by appointment. Exemplary project staff assists in program planning and conducts workshops that include presentations and demonstrations for each component being implemented. Follow-up consultations by project staff: average of three visits, length determined by size of adoption. Awareness materials and teacher guides provided for trainees prior to workshop sessions. Financial arrangements must be made.

**contact** Gary B. Chadwell, Director, or Theresa G. Murphy, Executive Director; Andover Public Schools; Shawsheen School; Andover, MA 01810. (617) 470-1700, ext. 313.

## **PROJECT**

**BASIC: Basic Adaptable Skills for the Individual Child**

Four separate but interrelated programs consisting of highly structured, sequential, individualized curricula in readiness, mathematics, and reading.

### **target audience**

the Panel.

Approved by JDRP for grades K-4. This program has been used in other settings with grades 5 and 6, but no evidence of effectiveness has been submitted to or approved by

### **description**

Individually Prescribed Instruction (IPI) curricula were developed at the University of Pittsburgh's Learning Research and Development Center. The IPI program was designed to meet the individual developmental needs of young children in the following basic areas: Primary Education Program and Perceptual Skills, which emphasizes prereading and math objectives in a hierarchical order for preschool, kindergarten, and special education students in quantification, classification, visual motor, auditory motor, general motor, and letters and numerals; New Reading System, a phonetic approach emphasizing mastery of specific reading skills; Math, stressing individual progress with continuous growth in numeration/place value, addition, subtraction, multiplication, division, fractions, money, time, systems of measurement, geometry, and application; and Intermediate Reading, stressing individual and group instruction in comprehension skills.

Each BASIC component emphasizes student-management skills, positive reinforcement, continuous testing, accurate and well-defined record keeping, and parent involvement. The curriculum is characterized by five critical elements: structured curricula for each content area comprised of a series of behavioral objectives arranged in a hierarchical order by unit and level; an assessment system comprised of criterion-referenced tests matched to curriculum objectives; a management system designed to provide individual programs and learning experiences; individualized instructional materials, sponsor-developed commercial resources, and teacher-constructed materials; and a monitoring and record-keeping system depicting the location and mastery level of each student in each area.

### **evidence of effectiveness**

Participation in BASIC results in increased levels of achievement in reading and math.

### **implementation requirements**

The decision to replicate any part of BASIC should be jointly shared by administrators, teachers, and parents. Teachers are trained in implementation and monitoring. The Resource Center assists with preservice training and inservice training and provides continued assistance for the first two years. Special emphasis is placed on the individual school's management needs and evaluation.

### **financial requirements**

Cost of replication varies with school size, degree of implementation, and equipment already available.

### **services available**

A Follow Through Resource Center.

Awareness materials are available at no cost. A slide-tape and videotapes are available on loan. Visitors are welcome by appointment. Project staff are available to attend out-of-state awareness meeting (costs to be negotiated). Training is provided at project site (adopter pays only its own costs). Training is also conducted at adopter site. Follow-up technical assistance is available to adopters.

### **contact**

Kathy Haug, Resource Center Coordinator; Sibley School; Montevideo, MN 56265. (612) 269-6471.

**PROJECT** FLIT: Functional Literacy

A functional reading literacy education program.

**target audience** Approved by JDRP as a reading program for adults with reading equivalency of sixth grade or lower. This program has been used in other settings for regular and remedial classes (grades 5-12), vocational education, adult education, and adult basic education, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** FLIT is an educational program of task-related/functional literacy training developed originally by HumRRO (Human Resources Research Organization) for U.S. Army recruits with low reading ability. Since that time, the program has been revised into an educational program specifically for a wide range of students -- both children and adults -- who need to increase their functional reading skills. The program is designed for persons with a fifth-grade reading ability who have difficulty in using their reading skills effectively.

The program has five learning modules: How to Use a Table of Contents, Extracting Information from Textual Material, How to Read Graphs, How to Read Tables, and How to Use Indexes. A Teacher's Manual and answer key provide a complete description of the materials, the sequence of instruction, and the teacher's role in the program. The Student Practice Text provides opportunities to rehearse and generalize newly acquired skills. Placement and Module Skill Tests measure entry-level skills as well as those acquired as a result of the teaching program. The material can be used by a teacher in a classroom of 20-30 students, in smaller groups, or as individualized, self-paced instruction. The program is performance-oriented and has application over a wide range of job or task-related topic areas.

**evidence of effectiveness** Two types of assessment instruments were developed: module proficiency tests administered before and after each learning module and job-reading-task tests to provide overall measure of ability to perform job-reading tasks. Average reading skills increased from reading grade level 5.2 before training to 7.3 after training. Data available on request.

**implementation requirements** The FLIT program is self-contained; there are no special implementation requirements beyond a classroom. Students using the program should have a decoding reading ability at about the fifth-grade level for maximum effectiveness. Program can be implemented for a single student, a classroom, or a school system, depending upon the scope of needs.

**financial requirements** The financial requirement varies depending upon the amount of material ordered per student. Each module can be purchased separately. Average initial student costs for the full program vary between \$22-\$32, depending on quantity ordered. Materials consist of teacher manual, student text, six evaluation pads, and five learning modules.

**services available** Awareness materials are available at no cost. HumRRO has staff members available to discuss the program with groups of teachers and administrators. Also, for large-scale implementation efforts, HumRRO has inservice training workshops available with follow-up. Contact HumRRO for specific details.

**contact** Devah Galloway; Human Resources Research Organization; 300 N. Washington St.; Alexandria, VA 22314. (703) 549-3611.

## **PROJECT**

JEFFERSON COUNTY ADULT READING PROGRAM (JCARP)

A program to deliver literacy instruction and life coping skills instruction.

### **target audience**

Approved by JDRP for adults 16 years and older who are out of school and have a reading level below 6.0 grade as measured by a standardized test.

### **description**

Two years of JCARP operation showed that materials, methods, and teachers were not singularly significant in program success, but that those students who attended more often showed greater gains. The necessity was, therefore, to develop a strategy to increase student retention. To that end, counseling was inculcated into each of the four components of JCARP that aimed to address the personal and social needs of this population as well as their academic deficiencies. The four components or intervention strategies are: **Recruitment:** Traditional means of recruitment such as print, electronic, and business/industry links were employed but in addition phone conversations with potential students were made to allay anxieties this population feel about pursuing their education. Former students also went door-to-door and addressed audiences to stress their personal experiences and provide a successful role model to help potential students overcome fears. These former students also met new students at the classroom and remained as tutors. This effort was designed to create a secure and unthreatening environment, thus lessening the likelihood of attrition. **Staff training** occurs three times during the first month of the program. First, in order to sensitize the staff to the atmosphere which needs to prevail for successful program operation, teachers are oriented to the characteristics of the undereducated adult through use of films, slide/tapes, and a panel of successful students. They learn to use the commonality of the students' apprehensions and deficiencies to promote group cohesion and mutual support. Secondly, teachers learn to conduct individual conferences so that students can formulate priorities and goals through the counseling process. Third, the teaching staff is instructed how to use the test instruments and basal materials and how to prepare an individual plan which considers the reading skill deficiencies, life skill needs, and priorities of each student. **Instruction:** The teacher selects one of three basal series and places each student according to performance on a standardized assessment test and placement inventories. According to the student plan developed in the enrollment process, additional materials are selected from a list compiled by the JCARP staff. Classes are scheduled to accommodate needs of students. Each three-hour class is divided in half: one half devoted to the individual's plan for skill building; and the other half to group dynamics where intellectual and social improvement through the support system are the goals. **Evaluation:** Weekly assessment sessions are designed to encourage students' progress. Overall goal achievement is addressed at mid-year by means of student-teacher conferences. These conferences concentrate on retention of student.

### **evidence of effectiveness**

JCARP participants experienced an attrition rate of 22%, whereas participants' rates in comparable programs were from 52-80%. JCARP participants made significant gains in reading ability, from grade level of 3.62 to 5.15 during 82 hours of instruction. This was a .70 greater gain than for comparable programs. These effects have been consistent over the three years of program operation.

### **implementation requirements**

The program is effective under diverse instructional circumstances. The program can be successfully implemented with part-time teachers, paraprofessionals, and/or volunteer staff. Training includes model to enable coordinators of volunteer literacy programs to become trainers and managers of volunteer tutors. Pre-implementation training conducted by JCARP staff is required.

### **financial requirements**

Classes can be housed in community centers, libraries, churches, and school buildings with no cost to the project. The only equipment purchased for use in the program was tape recorders which reflects a non-recurring cost. Installation costs per student are \$25.97 (for 290 students); subsequent year per pupil costs of \$14 are for nonconsumable and consumable materials and additional staff training. A wide variety of commercially available materials typically used in adult basic education programs is used. Reassignment of existing personnel can suffice.

### **services available**

Awareness materials are available at no cost. Visitors are welcome at any time by appointment at project site. Training is conducted at project site at scheduled intervals (adopter pays costs).

### **contact**

Ms. Sharon Darling, Project Director; Jefferson County Board of Education; Adult and Continuing Education; Dawson Annex; 3442 Preston Highway; Louisville, KY 40213. (502) 361-1364.

**PROJECT** NEW YORK STATE EXTERNAL HIGH SCHOOL DIPLOMA PROGRAM (EDP)

A competency-based alternative high school credentialing program for adults.

**target audience** Approved by JDRP for English-speaking adult students over the age of 18.

**description** This is an alternative high school credentialing program for adults who have acquired skills through their life experience and who can demonstrate those skills in applied performance tests. The project's objective is to provide adults with an assessment and credentialing process that is an alternative to traditional diploma programs such as General Educational Development (GED). The program provides no instruction: it is an assessment system through which adults can earn a regular high school diploma. The program has two phases. In the first phase, diagnosis, the adult is tested on six diagnostic instruments that help him/her identify learning deficiencies in the basic skill areas. If a deficiency is identified, the adult is given a learning prescription and is sent to the community to utilize the learning resources available. After the deficiencies have been corrected, the adult enters the second phase, final assessment. In this phase, the adult must demonstrate 64 generalized competencies in the basic and life skill areas of communication, computation, self-awareness, social awareness, scientific awareness, occupational preparedness, and consumer awareness. The adult must also demonstrate an individualized competency in one of three skill areas: occupational, special, or advanced academic. The assessment system is an open testing system characterized by flexibility in time and location of testing. It offers adults the opportunity to demonstrate process skills through a variety of documentation forms. There is an explicit understanding and discussion of all required competencies. Graduates of the program are surveyed 10 months after they receive their diplomas to determine the impact that graduation has had on their lives. To date, graduates report an increased interest in continued learning; job promotions and raises; and increased self-esteem and self-confidence.

**evidence of effectiveness** The age distribution of External Diploma participants reflects a significantly older population than the population served by the GED, indicating the EDP is highly successful in serving older adults. In determining the consistency of competency evaluations among staff assessors, an average agreement of 89.6% was established among the assessors. The program retention rate is 73.4%.

**implementation requirements** The New York State External High School Diploma Program can be adopted by a unit as small as three persons -- one advisor, one assessor, and one assessment assistant. A four-day training workshop for staff prior to program implementation is required, as is one inservice evaluation during the first year of operation.

**financial requirements** Materials: seven program manuals and one set of training materials must be purchased (contact project for cost). Equipment required is ordinarily found in an educational setting. Staffing: reassignment of existing personnel is possible.

**services available** Awareness materials are available at no cost. Visitors are welcome at project site and five additional home state sites by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is also conducted at adopter site (costs to be negotiated). On-site technical assistance is provided to adopters (expenses are covered).

**contact** Lynne Van Dyke, Director; External Diploma Program; Syracuse Research Corp., Merrill Lane; Syracuse, NY 13210. (315) 425-5263.

SECTION B-2: ALTERNATIVE SCHOOLS/PROGRAMS\*

ALTERNATE LEARNING PROJECT (ALP) -- Rhode Island . . . . . B-2.3

CITY AS SCHOOL (CAS) -- New York . . . . . B-2.4

A COMMUNITY APPROACH TO YEAR-ROUND EDUCATION (Project C.A.Y.R.E.) -- Colorado. . . . . B-2.5

DIVERSIFIED EDUCATIONAL EXPERIENCES PROGRAM (DEEP) -- Kansas . . . . . B-2.6

EDUCATIONAL SERVICES FOR SCHOOLAGE PARENTS (ESSP) -- New Jersey. . . . . B-2.7

EXPERIENCE-BASED CAREER EDUCATION (EBCE) [Northwest Regional Educational  
Laboratory] -- Oregon. . . . . B-2.8

FOCUS DISSEMINATION PROJECT -- Minnesota . . . . . B-2.9

INTERCEPT: A POSITIVE ALTERNATIVE TO PUPIL SUSPENSIONS, TRUANCY, AND DROPOUT  
-- New York. . . . . .B-2.10

PUBLIC SCHOOLS OF CHOICE: High School in the Community (HSC) -- Connecticut. . . . .B-2.11

SENIOR ELECTIVE PROGRAM -- New Jersey. . . . . .B-2.12

ST. PAUL OPEN SCHOOL -- Minnesota. . . . . .B-2.13

SUPPLEMENTAL INSTRUCTION: Student Learning Center (SI) -- Missouri . . . . . .B-2.14

\*See Sectional Cross-Reference Index, p. D-9, for related programs.

**PROJECT** ALTERNATE LEARNING PROJECT (ALP)

A community-based alternative to traditional school, emphasizing basic skills, career education, performance-based graduation, and parent and student participation, that offers both a complete high school program and Special Focus Programs to supplement existing curricula.

**target audience** Approved by JDRP for students of all abilities, grades 9-12. This program also has been used in other settings (middle school and adult level), but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** ALP, a comprehensive public secondary school, provides students with an individualized basic skills program, a college preparatory course, community-wide career exploration activities, and a broad arts program. The emphasis throughout is on continuous personal counseling and student responsibility. Students enroll in ALP by choice. Participants are selected by lottery, using such factors as race, family income, sex, and grade level to achieve a population that reflects the city and school system profile. ALP has five major objectives: to improve student performance in basic academic skills; to improve student career decision-making skills; to provide needed counseling for planning, evaluation, and support of student activity; to involve students and parents in school governance and decision-making; and to maximize learning opportunities in the community. Graduation requirements at ALP involve: the ALP Life Skills Competency Assessment (an evaluation of individual student competencies in practical, real-life situations where applied performance is required) and the ALP Core Diploma requirements (according to which students must pass proficiency exams in English, math, and science, earn credit in U.S. history, and complete a minimum number of courses and educational activities). The ALP model consists of two major components -- adoption and Special Focus Programs. The five essential elements of an ALP adoption are: project administration and design, curriculum development, counseling and student evaluation, community resource development, and governance and decision-making. The Special Focus Programs designed to supplement existing curricula are: Family Life Peer Counseling Service, College Local Educational Agency Relationship (CLEAR) Program, ALP Child Care Center, Competency-Based Education and Basic Skills, and Transitional Program for Special Needs Students.

**evidence of effectiveness** External evaluations of ALP show that the project has greatly reduced absenteeism and dropout rates. Sixty-five percent of ALP students go on to four-year colleges; many of these students normally would not have pursued further education. Other measures have shown improved attitudes toward self and schooling. (Some test instruments used: California Achievement Tests, Comprehensive Test of Basic Skills, and Adult Performance Level Survey.)

**implementation requirements** The scope of the ALP program provides for a variety of adoption and technical assistance options. Adoption of the total program requires staffing at school district teacher/pupil ratio, a minimum of three days start-up training at adopter site, and a separate facility or a separate location within the school building for the alternate program. Special Focus Program adoption requirements depend on the program adopted and the needs of the district and adopting school.

**financial requirements** Staff may consist of reassigned personnel or new staff, full-time or part-time, consistent with district teacher/pupil ratio. Available school district equipment is sufficient. Training materials are provided at a minimal charge. Program materials include those already found in most classrooms as well as materials commercially available.

**services available** Awareness materials are available at minimal cost which covers printing and mailing. Training is available on a consultant basis only.

**contact** Paul R. Gounaris; Principal/Supervisor; Alternate Learning Project; Providence School Department; 321 Eddy St.; Providence, RI 02903. (401) 456-9194 or -9195.

**PROJECT** CITY AS SCHOOL (CAS)

An alternative high school that combines learning with the world of work.

**target audience** Approved by JDRP for high school students.

**description** City-As-School is an independent, diploma-granting high school whose curriculum objective is to link students with hundreds of learning experiences throughout the community. The underlying concept is that the world of experience can be joined with the world of learning, thereby making school more relevant for those students who find the traditional school setting uninteresting, threatening, or unrelated to their present and future plans, or those with a moderate to great degree of success in the traditional setting who begin to look for new horizons for their education.

The participating community organizations are of a business, civic, cultural, political, or social nature, ranging from museums to newspapers. A few examples are American Dance Theater, American Museum of Natural History, Bank Street College, office of Congressman, and Western Electric.

Instead of attending classes in one building, students move from learning experience to learning experience based on a program they choose by consulting the CAS catalog. Students spend 27-32 hours per week at one or more learning experiences conducted by community resources. CAS students receive academic credit for each learning experience successfully completed. Students receive either credit or no credit rather than letter or numerical grades.

Teachers are divided into two major groups: Teacher Advisors and Resource Coordinators. Each Teacher Advisor has direct contact with 80-85 students. These teachers hold weekly orientations, seminars, and class meetings. Advisors are also responsible for individual meetings with students and/or parents, gathering report card and permanent record data, and writing college evaluations for students. Resource Coordinators are responsible for developing new Resources or Community Site Placements, developing curriculum for each learning experience, monitoring students' progress, responding to students' problems at resources, and registering students. Visits to resources are required, as well as phone contact with resources and students.

**evidence of effectiveness** Based on the norm-referenced Career Maturity Inventory data, there were improvements in test scores both in 1976-77 and in 1980-81. These improvements raised students from the 48th to 71st national percentile in the first year, and from the 16th to 33rd percentile in the second year. CAS participants increased their proportion of course units passed by 57% while the control group was 34% worse. Relative to controls, CAS participants increased their school attendance by 1.04 SD units and .64 SD units for the two treatment years. None of the CAS participants dropped out of school whereas 28% of the control group did in 1980-81.

**implementation requirements** Components may be fully adopted or adapted by local school districts. While many variations, alterations, and modifications may be made as a result of the replication process, there are several "core" components that must be included by the replicating school: personnel roles of Resource Coordinator, Student Advisor, Community Resource people, and support services. Adopters may select from the CAS model those curriculum components which match their needs. A training workshop is required.

**financial requirements** Costs required for a minimal adoption of the CAS model are those for training, reproduction of materials, and staffing. Training costs include travel for one project trainer for a three-day implementation training session and for one, two-day follow-up monitoring visit. Materials include the Demonstration Manual, consisting of procedures and forms used by the CAS model (\$50); Surveys (Community Resource, Student Interest, Alumni Follow-up, Teacher Attitude); and catalog of Community Resource descriptions. Staff costs include released time for teachers to develop and monitor community sites, curricula, etc., and travel expenses to local sites for both teachers and students.

**services available** Initial and secondary awareness materials are available free. City-As-School welcomes visitations from any school district with one week's notice. Project staff is available at all times to attend initial awareness meetings on a shared-cost basis. Training is conducted both at CAS (one day) and at the adopter site (two days) (costs to be shared). A follow-up, monitoring visit is required (costs to be shared).

**contact** Joel Fischer; City-As-School; N.Y. City Board of Education; 16 Clarkson Street; New York, NY 10014. (212) 691-7801.

Developmental Funding: USOE ESEA Title IV-C and  
New York City Board of Education

JDRP No. 82-13 Approved: 6/10/82



**PROJECT** A COMMUNITY APPROACH TO YEAR-ROUND EDUCATION (Project C.A.Y.R.E.)

A program designed to meet student learning needs effectively through the use of an alternative calendar while accommodating a greater number of students within existing facilities.

**target audience** Approved by JDRP for grades K-8 in any school district experiencing concerns with growth in student population or any school/district desiring to investigate alternative calendars. This program has been used in other settings for grades 9-12, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** The 45-15 year-round calendar divides the student population into four groups. Each group attends school for 45 school days (nine weeks) and then has a vacation of 15 school days (three weeks). These patterns are staggered so that one track is always on vacation. This allows the building to accommodate 33% more students. In addition, the program can create a more consistent total learning program by eliminating large blocks of time (i.e., three summer months) between learning segments. Initially, the adoption of a year-round program is no more than a calendar change. As such, changes in staffing ratios, materials, facilities, operational costs, and curriculum are not necessarily integral parts of the program.

**evidence of effectiveness** Extensive evaluation by the developer district and the University of Colorado indicated no significant differences in achievement between year-round and non-year-round students. Results available on request. Evaluation of student, teacher, and parent attitudes are also available.

**implementation requirements** The 45-15 plan can be implemented in a number of school organizational patterns. Typically, a high degree of teacher and community commitment is needed. The plan can be adapted to meet local needs. Due to flexibility of adaptations, other specific requirements are not mandated.

**financial requirements** Operationally, there is no increase in per-pupil costs. Recent findings indicate that a well-run program can even decrease per-pupil cost. (Figures available on request.) Depending on local climate, buildings may require air-conditioning, which entails capital expenditure. Some money is needed for inservice training of teachers and administrators.

**services available** Awareness materials are available at no charge; replication manual is available for \$2; other program materials for training and inservice are available at cost. Awareness presentations and workshops are available at the demonstration site or adopter sites (cost to be arranged). The demonstration site may be visited by appointment at any time. Training and implementation services are provided at project and adopter site (cost to be arranged).

**contact** Thomas Balakas, Project Director; Year-Round Project Dissemination Center; 3855 S. Alicia Pkwy.; Aurora, CO 80013. (303) 693-0611.

## **PROJECT** DIVERSIFIED EDUCATIONAL EXPERIENCES PROGRAM (DEEP)

A new method of organizing and managing an academic classroom.

**target audience** Approved by JDRP for the apathetic learner, the "discipline problem," the poor attender, and the potential dropout in grades 9-12. It has been used in other settings in grades 6-8 and with the gifted, the talented, and the creative learner, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** The major goal of Project DEEP is to develop an instructional process for secondary school classrooms that allows instructors to create an academic environment emphasizing success for every learner while decreasing learner hostility to educational institutions.

DEEP offers students and instructors a method of organizing and managing an academic classroom that differs from the usual classroom model. Students in the DEEP classroom identify needs, formulate objectives, develop tasks based upon these objectives, present group and individual projects based upon fulfillment of objectives, receive teacher debriefing following presentation of the projects, and participate in their own evaluations. DEEP offers learners in academic subjects alternative ways to create, gather, develop, and display information. Extensive use is made of electronic and nonelectronic media. The role of the teacher is that of advisor, consultant, and learning-systems manager. The classroom environment is casual, open, trusting, and task-oriented. A workshop atmosphere exists. Community resources are utilized.

The DEEP classroom is highly structured, but the structure is not the same as in the typical academic classroom. Teachers who demonstrate the ability and desire to change their methods of instruction are trained in the use of these new management techniques. They must be willing to teach one or more DEEP classes along with their regular classes. The teachers are trained as learning facilitators, and the conflict-management process is based on human relations and peer group interaction as well as on teacher-student interaction. Once the training has been accomplished, students can be enrolled in the program as part of the normal scheduling procedure. The project provides management charts and materials along with evaluation procedures.

**evidence of effectiveness** DEEP students had a 30% lower incidence of absenteeism than non-DEEP students, and the dropout rate was decreased 37% compared with non-DEEP classes. DEEP students showed statistically significant gains in attitudes of affection, respect, and the value of knowledge as measured by the Risk-Taking-Attitudes-Values Inventory. Ninety-eight percent of students completing DEEP classes later graduated. Eighty-five percent of students enrolled in DEEP classes completed at least six academically sound projects per DEEP class.

**implementation requirements** The DEEP classroom management model is adaptable to a variety of school structures. It can serve as an alternative within the traditional high school, junior high school, or middle school or in a separate alternative school. The management model can be utilized in many academic subject areas, primarily language arts, social studies, and science. The model is adaptable to regular, modular, and other types of flexible scheduling.

**financial requirements** DEEP training manuals with student activities cost \$5 per inservice workshop participant. DEEP teachers are usually volunteers from existing staff. Adopting districts pay costs relating to release time for teacher training. If the adopter has audiovisual equipment, the cost of adoption should not exceed the normal per-pupil allotment.

**services available** Awareness materials are available at no cost. Visitors are welcome any time by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (costs to be negotiated). Training is also available at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** Jane Connett, Director; Project DEEP; Wichita Public Schools; 640 N. Emporia; Wichita, KS 67214. (316) 268-7801.

**PROJECT** EDUCATIONAL SERVICES FOR SCHOOLAGE PARENTS (ESSP)

A special education program providing educational, nutritional, social, and health services to expectant school-age students.

**target audience**

Approved by JDRP for any pregnant student in the public school system. In practice, these students range in age from 11-19 and are primarily from grades 8-12.

**description**

With its program at the Family Learning Center (FLC), the New Brunswick Board of Education is addressing some well-known teenage pregnancy problems. These include poor academic motivation and achievement and a significantly higher infant mortality rate and lower birth weight than are found in the babies of any other age group. The FLC provides small classes with highly motivated teachers and emphasizes satisfactory academic achievement, maternal and child health, and nutrition. While a pregnant student may remain in the regular school setting, she is encouraged to transfer to the FLC to continue her regular subjects there. In addition, she takes Family Life Education, which includes nutrition, planning and preparation of lunch, sewing and consumer education, and health. Areas covered in the health course include pre- and postnatal care of herself and her baby, the study of human reproduction, the labor and birth process, and birth-control options. She is assisted in reaching appropriate social agencies, and informal rap sessions with the head teacher and the guidance counselor are encouraged. When the student enters the program, the nurse contacts her obstetrician, checks to see that her records are complete, follows her progress, and sees that regular appointments are kept. There are periodic tours of local hospital maternity facilities. A head teacher coordinates the program under the direction of the Director of Pupil Personnel. Two full-time and four part-time teachers plus a part-time nurse and a part-time guidance counselor complete the FLC staff. After delivery and a two-week maternity leave, a student may continue her classes at the FLC for six weeks. This period of adjustment facilitates her introduction to the double role of mother/student and encourages her to complete her education.

**evidence of effectiveness**

Initiated in 1969 and validated in 1973 by ESEA Title III, the program (now supported by the Board of Education) has greatly decreased dropout rates of pregnant students and improved birth weight of their babies. From 1969-73, only 19 of 177 pregnant girls dropped out of school, compared to a 100% dropout rate prior to the program.

**implementation requirements**

It is necessary to find a site not being used by non-pregnant students. Teachers may be drawn from the regular staff, but the program is best served by teachers who devote their working time exclusively to it. Cooking facilities are necessary. Books and teaching supplies are issued from the regular school classes. Food is purchased from Government Commodities through the Public School Food Services, with Board of Education funds for additional purchases. Baby furniture is also required on the premises for the postnatal phase of the program.

**financial requirements**

The program site may be a home economics room or even a church in the area. Primary costs are staff salaries and the breakfast and lunch program. Since the girls, while pregnant, are classified under state law as "chronically ill," there is partial salary reimbursement to Special Services, which would otherwise provide Home Instructon. State and national school meal programs provide further funds.

**services available**

Awareness materials are available at cost of mailing. Visitors are welcome by appointment.

**contact**

Dr. W. Davis, Director; Public Personnel Services; Lincoln School; 66 Bartlett St.; New Brunswick, NJ 08901. (201) 745-5166, -5167, or -5169. Dorothy Aronowitz, Head Teacher; Family Learning Center; 225 Comstock St.; New Brunswick, NJ 08901. (201) 745-5168.

**PROJECT** EXPERIENCE-BASED CAREER EDUCATION (EBCE) [Northwest Regional Educational Laboratory]

A partnership program between school and community, integrating basic skills, life skills, and career development.

**target audience** Approved by JDRP for grades 9-12. This program has also been used with grades 7-8, with adults, and with disadvantaged, migrant/bilingual, gifted, talented, and handicapped populations, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** EBCE can be a full-time alternative program distinct from the traditional school (even located off-campus), or it can be operated as an in-school option to supplement traditional instruction. Teachers become coordinators of student learning and help students select and use community sites (business, industrial, labor, cultural, professional, governmental, and environmental) as primary resources to meet curriculum objectives. Preliminary exploration is followed by intensive visits. Utilizing the experience of these visits, as well as a wide variety of traditional and nontraditional resources, students complete individualized projects that are written to specific academic, life skill, and career development objectives. Students are assisted in developing skills in time management and short- and long-range planning. They are held accountable for their own time, learning, and behavior, with expectations of increasing maturity and responsibility. Before completing EBCE, students must demonstrate proficiency in a variety of competencies to the satisfaction of community experts. The program usually relies on an advisory committee composed of parents, students, and representatives of education, business, and labor. Students earn both required and elective credit and receive a regular high school diploma.

(One of four EBCE model programs that received JDRP approval simultaneously.)

**evidence of effectiveness** Comprehensive formative and summative evaluation using pre- and posttest measures on control and comparison groups revealed student growth in basic skills, self-awareness, career awareness, and career development skills; in life skills; and in motivation to learn. Parents of EBCE students and community resource persons assessed the program positively. Summaries of evaluation findings available on request.

**implementation requirements** Communities adopting EBCE report greater success when staff has participated in at least three days of program design and planning plus five days of training in the new procedures this innovation requires. It is desirable for the new staff to visit an operating EBCE program. In addition, one week of inservice consultation after the program has been operating for a while has been found useful. Some programs use separate facilities as the EBCE learning center; others remodel or use existing building space. Student transportation options must be examined, as well as time and resources for community site recruitment and utilization.

**financial requirements** EBCE programs operate at approximately the average secondary per-pupil costs in most districts.

**services available** Descriptive material available at no cost. Set of five user handbooks (\$150/set), filmstrip, and related aids available at cost. Classroom materials for teachers interested in use of community resources with or without EBCE emphasis and a list of operating NWREL EBCE programs and states with EBCE demonstration and training services of their own are also available. Staff can attend out-of-state awareness conferences (costs to be arranged). Planning, training, and follow-up inservice available in Portland or at adopter site (costs to be arranged).

**contact** Larry McClure, Program Director; Education and Work Program: Northwest Regional Educational Laboratory; 300 S.W. Sixth Ave.; Portland, OR 97204. (503) 248-6800, ext. 430.

## **PROJECT** FOCUS DISSEMINATION PROJECT

A successful secondary program for training teachers to deal with disaffected youth.

**target audience** Approved by JDRP for disaffected secondary students of all ability levels, and all secondary educators, school board members, and community members who have an interest in developing local programs to meet the needs of the disaffected students in their settings.

**description** Focus provides an alternative education plan for students who have been identified as disaffected, showing a lack of motivation, lack of confidence, and low self-esteem. The program effects responsible institutional change and positive student attitude and performance by helping students learn responsibility to self, school, and society. Through a group counseling experience, the peer group is guided to deal with the problems causing disaffection.

Focus is a "school within a school" for secondary students who are not achieving or functioning in a way beneficial to themselves and/or those around them. The Focus program seeks to reduce student disaffection with school and learning, to improve each student's grasp of basic skills, to build a classroom culture that demonstrates the caring principle, to enhance each student's ability to relate effectively with peers and adults, and to give each student a reason to be optimistic about the future.

Focus is a highly structured program offering courses in English, social studies, math, and work experience. Instruction in Focus classes is based on ability and need. Curriculum materials are modified to meet the student's level of skill development and are presented in relation to survival beyond graduation. Students are actively involved in the selection, modification, and evaluation of these materials. Focus students take such classes as science, physical education, health, and electives in the regular school program.

All Focus students are involved in a group counseling experience called Family. Each Family consists of eight to 10 students and one teacher who meet together one hour daily throughout the year. Family attempts to help the student develop feelings of caring, self-worth, and concern for others. It includes examination of one's own behavior in relation to the reactions of others within an atmosphere of positive support from the group.

**evidence of effectiveness** A three-year evaluation (done at the original site) demonstrated that Focus improved student attitudes toward school, enhanced self-concept, increased academic achievement, and decreased disciplinary referrals, school suspensions, and absenteeism. Evaluation available on request.

**implementation requirements** Many replication plans are possible, ranging from staff training in skills and strategies to enhance an existing program to a full-scale replication of the original site model. Size of program is determined by the number of target students identified by the adopter. Maximum advised for any one program is 75 students. Successful replications have been made in urban, suburban, and rural settings. The humanistic, caring emphasis of the program makes it effective regardless of the ethnic or economic factors present at the replication site.

**financial requirements** Focus staff-training manual and curriculum manual are provided at cost to schools attending inservice training. A wide variety of commercially available materials already found in most classrooms is also used. Focus staff are generally selected from existing employees, but need release time to attend inservice training and prepare materials.

**services available** Awareness materials are available at no cost. Visitors are welcome anytime by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (costs to be negotiated). Training is also available at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** Don May; Focus Dissemination Project; Human Resource Associates, Inc.; 755 Hiway 55 W.; P.O. Box 303; Hastings, MN 55033. (612) 437-3976.

## **PROJECT**

INTERCEPT: A POSITIVE ALTERNATIVE TO PUPIL SUSPENSIONS, TRUANCY, AND DROPOUT

A teacher-training program that addresses problems of student discipline, truancy, and chronic academic failure.

### **target audience**

Approved by JDRP for students in grades 9-12 who have high rates of failure and truancy along with a history of disruptive behavior.

### **description**

Project Intercept provides preservice/in-service training to deal with adolescents who have shown chronic disruptive, failing, and truant behavior, and to address such problems before these difficulties fully develop. A preservice/in-service training program offers teachers training in four areas.

All staff in the program are taught effective discipline procedures, classroom management techniques, and instructional skills. A peer consulting team is developed for group critique and support.

Management skills for establishing an alternative academic program for potential dropouts are also taught. Three programs developed by Project Intercept are COPE, Learning Center, and the Learning Cluster. In the first two programs, targeted students are placed in self-contained classes for two thirds of the day, and may take electives or attend vocational training programs during the remainder of the day. The Learning Cluster offers a preventive treatment program to ninth-grade students where one quarter of the day is spent in English and social studies.

Teachers also receive training in group counseling; students who participate in this component learn to demonstrate more appropriate interpersonal skills and improve self-concept. Family intervention and parent-training skills are taught to staff who are responsible for parent contact. This component reinforces changes taking place at school and helps parents deal more effectively with all of their children.

### **evidence of effectiveness**

Statistically, the project has demonstrated that of the identified high-risk dropout-prone students, more will remain in school and improve their attendance and grades when in the alternative programs than those not in the program. In addition, the overall suspension rate at the high school has dropped significantly.

### **implementation requirements**

The adopting district will need to set up an alternative academic program within the school to treat those students identified as high-risk dropout-prone. A minimum teacher-student ratio of 1:15 will be needed, but other units can be added. Once a teacher has been trained, the project has a highly effective method of peer critiquing, which can be used to easily train other teachers in most subject areas in the program's discipline, classroom management, and instructional procedures.

### **financial requirements**

A minimum of three days of training must be provided to a teacher designated as the key person to adopt the project. Each adopter should have a copy of the Teacher, Counseling, Management, and Family Intervention Manual (\$100). Districts do not need to provide additional staff, equipment, or supplies. Training sessions can accommodate up to 30 teachers at a reduced rate for the manuals.

### **services available**

Awareness materials are available at no cost. Visitors are welcome at project site anytime by appointment. Project staff are available to attend awareness meetings, training, implementation, and follow-up services (costs to be negotiated).

### **contact**

Richard Maurer; Roosevelt School; 190 Croton Avenue; Ossining, NY 10562. (914) 941-7700.

**PROJECT** PUBLIC SCHOOLS OF CHOICE: High School in the Community (HSC)

An alternative secondary school of choice within the public school system.

**target audience** Approved by JDRP for students of all abilities, grades 9-12.

**description** High School in the Community (HSC) is a small, innovative alternative to the traditional high school. It is designed to provide students and their parents with a choice of learning environments within the public school system. HSC is a highly personalized, humanistic program that seeks to improve students' attitudes toward learning and to give them a sense of shared responsibility in the process of their education. Students plan their own programs with staff advisors. Family Groups (in which a staff member meets with his/her guidance students for an hour each day) allow for open discussion about school and life. The Policy Council (governing body of HSC, composed of students, teachers, and parents) provides the opportunity for students to participate in decisions about their education. The Career Orientation Program places students with volunteer teachers in various community institutions and exposes them to work situations before they leave high school. HSC does not give letter grades. Students receive descriptive evaluations of work accomplished and suggestions for improvement. No single teaching approach is required. A general atmosphere of high student involvement, innovation, teacher support, and student-to-student affiliation, together with low teacher control and student competition, has emerged. HSC has consistently compared favorably with other high schools in both cognitive and affective areas. The greatest gains have been made in students' reading skills and attitudes toward school.

**evidence of effectiveness** Five years' evaluation by Educational Research Service (Yale University, 1970-74) and Systems Evaluation Research Associates (Fordham University, 1975) showed that in all areas measured, HSC consistently compared favorably with other high schools. Greatest gains were made in students' reading skills and attitudes toward school.

**implementation requirements** Project staff train adopters who can demonstrate clear intent to implement the program. A workshop at project site involving as many members of adopter staff as possible is the most desirable training format, but other formats are possible. Three general levels of training are available: major adoption of the full HSC program, adaptations of one or more elements of the HSC model, and technical assistance to similar programs already in operation. The specific manner in which an LEA chooses to adapt Public Schools of Choice is flexible, and determines staffing and facilities required.

**financial requirements** Adoption of HSC in fact means starting a school. Specific cost depends on size of unit (from 50-300 students) and on other local factors (e.g., availability of volunteers from a nearby college). General operating costs reflect per capita expenditures of adopting school system. Adaptation of HSC components in an already existing program is virtually cost-free, except for training expenses.

**services available** Awareness materials are available at no cost. Visitors are welcome by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is provided at project site (adopter pays only its own costs). Training is also conducted at adopter site (costs to be negotiated). Follow-up technical assistance is available to adopters.

**contact** Geoff Smith; Public Schools of Choice; 45 Nash St.; New Haven, CT 06511. (203) 787-8635.

## **PROJECT**

### SENIOR ELECTIVE PROGRAM

A program exclusively for seniors designed to update curriculum in order to complement an open-space building.

## **target audience**

Approved by JDRP for students in grade 12.

## **description**

The Senior Elective Program was designed by students and faculty during the summer of 1971 to update curriculum in order to complement an open-space building exclusively for seniors. The program involved revamping the school calendar into five marking periods, called facets, each concluding with a vacation period. Students were encouraged to telescope their traditional academic courses into the first three years of high school, to provide time during the senior year for 80 elective mini-courses developed for the program. Each senior was required to complete an independent study project or a community involvement activity or to participate in a work experience activity. All seniors were randomly assigned to small discussion groups, called precepts, led by faculty members who provided program support and helped students adjust. All seniors were allowed open campus privileges.

No one teaching approach was required. However, teachers were encouraged to develop methods conducive to teaching in open-space areas. Careful guidance was needed to ensure that students who planned to enter college earned sufficient college entrance units during their four years of high school.

In its present form, the Senior Elective Program divides the school year into four marking periods and the independent study project is elective rather than required.

## **evidence of effectiveness**

Evaluated in 1973 by tests measuring each objective (Watson-Glaser Test of Critical Thinking, Sequential Test of Educational Progress for social studies, and tests designed to measure students' feelings about self, school, and community). Program students achieved as well as or better than students in traditional schools in areas of critical thinking, tolerance of ambiguity, feelings of self, and involvement in community affairs, with no loss in traditional achievement.

## **implementation requirements**

A commitment to adopt the essential elements of the program: seminar discussion groups to implement and direct the independent study, community service, and/or work experience; mini-courses as alternatives to traditional programs; open campus and modular scheduling (optional). Adopting schools have permission to use any or all of the 80 mini-courses. A compendium of these mini-courses is available at cost. A filmstrip presentation outlining development, implementation, and evaluation of the program is available for purchase. Full courses of study in social studies, industrial arts, business, English, and science are available. The entire set of curricular materials, including filmstrip, is available for \$25.

## **financial requirements**

Replication costs vary with adopters' staff and curriculum requirements. Provision must be made for cooperative planning among students and staff. Costs can be met to some extent through reallocation of current expenditures.

## **services available**

Awareness materials are available. Project staff can attend out-of-state conferences at specified times in November, February, and April to conduct awareness and training sessions (expenses must be paid).

## **contact**

Newton Beron, Project Director; Rumson-Fair Haven Regional High School; Ridge Rd.; Rumson, NJ 07760. (201) 842-1597.



**PROJECT** ST. PAUL OPEN SCHOOL

An alternative school program using the concept of the open school to enrich the K-12 educational experience.

**target audience** Approved by JDRP for students of all abilities, grades K-12.

**description** These basic elements distinguish the St. Paul Open School:

**Advisor-Advisee System:** Students select their own advisors, each of whom are responsible for 10-23 students. Before school begins, conferences are held among students, parents, and advisors to establish individual goals for each student. These goals are reviewed biweekly in advisor-advisee meetings and quarterly with parents.  
**Use of Volunteers:** Parents, senior citizens, college students, and other community members are brought into the building. Volunteers are carefully screened, trained, and followed as they work with students. **Shared Decision Making:** Parents, staff, students, and community members help make decisions in a number of areas, including budget, curriculum, hiring, and student evaluation. **Use of the World Beyond Building:** Our building is viewed only as a headquarters. As part of their studies, students take hundreds of local field trips, work as interns or apprentices in local businesses, take classes at other area high schools and college courses, and go on cross-country trips. **Evaluation:** Extensive evaluation of students, staff, and the total program continues throughout the year. Written evaluations replace grades. **Competence-Based Graduation:** No credits are given at the St. Paul Open School. Students develop a graduation packet through validations in six major areas: career education, consumer awareness and current issues, cultural awareness, community involvement, information finding, and personal/interpersonal skills.

**evidence of effectiveness** Extensive standardized testing showed Open School students performed as well as or better than peers in St. Paul. Extensive use of questionnaires for parents, students, and graduates showed strong preference for Open School; students on waiting list to attend. St Paul Open School is accredited by North Central Association.

**implementation requirements** Districts may adopt/adapt any of the above elements but must meet the following criteria: high-level district commitment to the program as an alternative; voluntary participation of all teachers, administrators, students, and parents; equal-opportunity participation (not limited to achievement level, behavior pattern, sex, race, or economic group); opportunity for parents, students, and staff to help make decisions regarding policy; and curriculum reflecting a variety of opinions regarding such matters as political and economic systems and sex roles. Adoption/adaptation may be by a school within a school, a single classroom, or an entire school.

**financial requirements** St. Paul Open School operated on average per-pupil expenditures for St. Paul, Minnesota. Exclusive of training, no additional funds are required (training costs cover Open School staff travel to local district or local district staff travel to St. Paul). Open School has produced a variety of materials that are available at a nominal cost.

**services available** Awareness materials are available. Visitors are welcome by appointment. Training in each of the program elements described is provided at the project site or at adopter/adapter site. Districts outside Minnesota must pay trainer's expenses.

**contact** Director; St. Paul Open School; 1023 Osceola Ave.; St. Paul, MN 55105. (612) 297-8531.

**PROJECT** SUPPLEMENTAL INSTRUCTION: STUDENT LEARNING CENTER (SI)

A program to improve academic performance and retention rate.

**target audience** Approved by JDRP for freshman and sophomore students in high-risk entry level college courses.

**description** The SI program is aimed at students who have not yet developed the learning and thinking skills required for successful college work. The improvement of course grades and resultant reduction of attrition rates are the goals of the SI program. High-risk courses -- those traditionally difficult, entry-level courses in which unsuccessful enrollments are in excess of 30% -- are identified for inclusion in SI services. All students enrolled in the identified courses are encouraged to participate.

Skills instruction -- note taking, test taking, reading styles and procedures, and study skills -- is directly integrated into the course content by a learning skills specialist during review sessions. The Learning Center selects and trains the learning skills specialist whose content competency has been approved by the course instructor. Fifty-minute review sessions are scheduled three or four times a week in which the specialist demonstrates proficiency in the course subject while providing instruction in the reading, writing, and thinking skills necessary for content mastery. In contrast to more conventional approaches where learning skills are taught in isolation from academic course work, the SI program provides immediate application of acquired skills to course content and combines this with constant reinforcement of model student behavior.

Two-year community colleges, four-year liberal arts schools, and state universities have successfully adopted this program in chemistry, economics, foreign language, history, philosophy, and physics courses, as well as courses taught in schools of education, administration, and medicine.

**evidence of effectiveness** Students who participate in SI earn a higher mean course grade and semester GPA than students in a motivational control group or other non-SI students. Differences in performance patterns between SI and non-SI groups are evident regardless of past academic performance. Rates of unsuccessful enrollment (percent of D and F grades and withdrawals) in courses for which SI has been added are lower than they were prior to the addition of SI. The rates of unsuccessful enrollment for SI participants is lower than for non-participants.

**implementation requirements** This model can be implemented at community colleges, at small, four-year colleges, or at universities. The model is adaptable to existing academic support programs such as special services, learning centers, academic assistance centers, and Title III programs. No special equipment or other resources are required for implementation. A minimum of one full-time, professional staff member is needed to train and supervise supplemental instruction leaders (skills specialists). Additional staff may be required for larger programs.

**financial requirements** Costs will vary depending upon the availability of existing staff who can be reassigned to this program. If no staff is available, costs will include salary for professional staff. Students hired as supplemental instruction leaders can be compensated through part-time wages (approximately \$600 per SI each semester), through internships (cost varies from campus to campus), or through work-study arrangements. The program does not require special equipment or materials, except for course textbooks and office supplies.

**services available** Potential adopters are welcome to inquire directly with the contact person listed below. Awareness materials are available at a cost of \$1 (to help cover printing and mailing costs). Conferences and workshops are regularly scheduled at the developer/demonstrator site. A fee is charged for participation. Developers/demonstrators are available for consultation (cost to be negotiated).

**contact** Dr. Larry DeBuhr; University of Missouri-Kansas City; Student Learning Center SASS 212; 5100 Rockhill Rd.; Kansas City, MO 64110-2499. (816) 276-1174.

SECTION B-3: BILINGUAL/MIGRANT EDUCATION\*

PROJECT CHILD: Comprehensive Help for Individual Learning Differences -- New York. . B-3.3  
CONFLUENCE OF CULTURES FOR AN AFFLUENT TOMORROW -- Texas . . . . . B-3.4  
CORPUS CHRISTI FOLLOW THROUGH BILINGUAL PROJECT -- Texas . . . . . B-3.5  
EARLY PREVENTION OF SCHOOL FAILURE MIGRANT PROGRAM (For Spanish- and English-  
Speaking Children) -- Illinois . . . . . B-3.6  
HOUSTON INDEPENDENT SCHOOL DISTRICT BILINGUAL PROGRAMS -- Texas. . . . . B-3.7  
NOMAD: Needs and Objectives for Migrant Advancement and Development -- Michigan. . . B-3.8  
SECONDARY CREDIT EXCHANGE PROGRAM -- Washington. . . . . B-3.9

\*See Sectional Cross-Reference Index, p. D-9, for related programs.

**PROJECT** PROJECT CHILD: Comprehensive Help for Individual Learning Differences

A comprehensive program utilizing all possible community and other resources to meet physical, emotional, educational, and social needs of migrant farmworkers and rural families, infants through adults, days, evenings, and weekends.

**target audience** Approved by JDRP for infants through adults of all abilities, English-, French-, or Spanish-speaking.

**description** A child's education cannot take place in a vacuum -- isolated from family and community or ignoring personal and family needs that may be handicaps to learning. CHILD incorporates individuals, agencies, and community resources, daytime, evenings, and weekends. The project serves Black, Algonquin Indian, Mexican-American, Puerto Rican, and white rural/migrant families. A 12-hour day-program (Children's Demonstration School, Child Development Center) is complemented by: the In-Camp Learning Program, an evening educational component in homes and camps for parents and older siblings; a Weekend Recreational Program for entire families; dental and health services; an Aide Training Program, which trains and employs parents and older siblings as classroom aides; and pre- and inservice education for teachers and staff. Students' needs are assessed, objectives are behaviorally stated, related resources and high-interest learning experiences (rather than textbooks) are identified, and evaluative devices are determined. Academic instruction emphasizes reading skills for all age levels. Career education is an integral part of all programs. Staff development prior to and during the program improves teaching skills and sensitivity.

**evidence of effectiveness** Evaluation is specified for each objective. Teacher recycles learner to other learning experiences if objective is not met. Wide Range Achievement Test posttests indicate students gain three months in reading and math skills over five-week period.

**implementation requirements** Project CHILD program components are replicable at individual local, district, or regional levels, depending on adopter/adapter site needs. Staffing, training, and facilities depend on components selected by adopter/adapter.

**financial requirements** Several handbooks and inservice training manuals, costing between \$2-\$6, are available. Most instructional materials used are teacher- and student-made and of minimal cost. When commercial materials are used, they are generally adapted. Staffing for each component of Project CHILD includes a program coordinator, teachers and/or tutors, and trained target-group paraprofessionals and volunteers. Cost per student depends on component selected.

**services available** Awareness materials are available at no cost. Visitors are welcome at project site anytime by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (costs to be negotiated). Training is also available at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** Gloria Mattera, Director; BOCES Geneseo Migrant Center; Holcomb Building 210; Geneseo, NY 14454. (716) 245-5681.

**PROJECT** CONFLUENCE OF CULTURES FOR AN AFFLUENT TOMORROW

A program designed to attack the problem of deficiencies in English performance for the Spanish-speaking child.

**target audience** Approved by JDRP for bilingual students of all abilities in grades 4-6.

**description** The project incorporates both Spanish and English to help students achieve their educational goals. It stresses the need for proficiency in both languages, while acknowledging English as the first language. Curriculum structure consists of performance objectives (for math, reading, language arts, culture, and heritage), evaluation tests, and mastery charts of each child's objectives. No single approach is used. Teachers enroll voluntarily and receive training through Texas Education Agency Institutes.

**evidence of effectiveness** Students are evaluated through pre- and posttesting with the Inter-American Test Series (in Spanish and English) and the Science Research Associates tests (English, mastery of objectives in all grades involved). Control groups are used. Final statistical results per year are available at cost of reproduction.

**implementation requirements** State-adopted bilingual materials information (4-6) given upon request. Locally developed teacher-made tests for mastery of program objectives in reading, math, language arts, and culture and heritage, grades 4-6. Tests available at cost of reproduction. Adopting teacher should be either certified in bilingual education or in the process of being certified.

**financial requirements** Cost per pupil, Title VII: \$217. 1979-80 budget: \$72,052, for a population of 608, grades 4-6. The state and local share of funds available is approximately \$1,000, which covers housing, utilities, furniture, teachers, equipment, etc.

**services available** Visitors welcome at project site on Wednesdays. All materials available upon request at reproduction cost. Project staff may be able to provide out-of-state training (expenses must be paid). Contact Dewey G. Smith at (512) 664-0981, ext. 30.

**contact** Socorro A. Garza; Alice Independent School District; 200 N. Reynolds St.; Alice, TX 78332. (512) 664-0981, ext. 41.

**PROJECT** CORPUS CHRISTI FOLLOW THROUGH BILINGUAL PROJECT

An early childhood education program providing bilingual instruction, ancillary services, parent involvement, and staff development.

**target audience** Approved by JDRP for Hispanic students of limited English-speaking ability, grades K-3, from low-income families.

**description** The Corpus Christi Independent School District Follow Through program is a research and development program designed to extend the benefits of Head Start into the primary grades. The program serves approximately 800 students in two elementary schools.

The primary objective of the instructional program is to provide for the unique needs of Hispanic students of limited English-speaking ability. Instruction is designed to accommodate the individual student's English and Spanish oral language proficiency and learning style.

The Follow Through Project incorporates the Southwest Educational Development Laboratory (SEDL) model into the local district's regular instructional program. The SEDL model is based on the premise that children from low-income families need a developmental program. At the kindergarten level, the model stresses visual, auditory, language, motor, and pre-writing skills. In the first, second, and third grades, the language development and reading components of the model stress the development of the student's communication skills. Initially, instruction is given in the child's dominant language, so that skills acquired in the first language may be transferred to the second. The Social Education program utilizes a multimedia approach to develop social concepts and promote cultural awareness.

**evidence of effectiveness** The gains made by students in grades 1-3 in reading and mathematics were significant at a .01 level, using Science Research Associates Achievement Tests. On the Inter-American Test in Spanish, significant gains were made at .01 level by first-graders and at .05 level for second- and third-graders (compared with controls). At the kindergarten level, significant gains were made at the .01 level on the Test of Basic Experience and the Inter-American Test in Spanish (compared to controls).

**implementation requirements** Commitment by adopters. Bilingual personnel. Five-day training by Corpus Christi staff prior to implementation. One day of consultant service during implementation. Contact person responsible for program implementation to serve as liaison between D/D and adopter.

**financial requirements** Approximate cost of bilingual materials: \$25 per student.

**services available** A Follow Through Resource Center.

Awareness materials are available. Visitors are welcome by appointment. Project staff can attend out-of-state conferences. Orientation, observations, and training seminars are available at project site and out of state.

**contact** Resource Center Specialist; Follow Through Resource Center; Zavala Elementary School; 3102 Highland; Corpus Christi, TX 78405. (512) 884-0611.

**PROJECT** EARLY PREVENTION OF SCHOOL FAILURE MIGRANT PROGRAM (For Spanish And English-Speaking Children)

A program designed to prevent school failure -- adapted for migrant children -- through early identification and remediation of developmental learning deficiencies that could affect later school performance.

**target audience** Approved by JDRP as a screening and curriculum planning program appropriate for migrant children ages 4-6 in regular or short-term programs. Teacher and parent training program included.

**description** The Early Prevention of School Failure Migrant Program provides the necessary screening assessment to determine the migrant child's strengths and needs in developmental skill competencies. The project provides a follow-up program for teachers and parents that helps children with developmental lags prepare for formal reading and writing. The program was adopted during the summer of 1974 by 10 migrant sites in Illinois, Ohio, and Michigan and 18 in Minnesota. Since JDRP approval, the program has been adopted in 10 other states for summer and/or regular programs.

The directors of the summer migrant program selected Early Prevention of School Failure during spring 1974 to assess the developmental level of children age 4 and 5 entering the summer migrant program. The highly demanding work of learning to read and write requires the development of many prior skills before a child can undertake the complex neurological task of understanding written and oral language. Migrant children at age 6 often are introduced to many formal aspects of reading and writing considerably out of harmony with their developmental timetable. The Early Prevention of School Failure Migrant Program provides instructional activities in gross and fine motor, visual and auditory perception, and receptive and expressive language. Training in these areas is valuable for subsequent reading and writing experiences.

Literacy for America's Spanish-Speaking Children, by Dr. Eleanor Thonis, and The Young Child Who Speaks Spanish, by Dr. Doris Ching, cite studies that support Early Prevention of School Failure Migrant Program goals. The sequence of developing the pre-academic skills before undertaking formal reading holds true for all children in all cultures.

Early Prevention of School Failure program is being used with children whose first language is English, Spanish, Cambodian, Laotian and Vietnamese. Screening tests and parent materials have been translated into all these languages.

**evidence of effectiveness** The achievement gains (for Spanish-dominant, English-dominant, and bilingual students ages 4-6) as measured by three standardized instruments were statistically significant at or beyond the .05 level using a one-tailed test of significance. Teacher and parent attitudes concerning the program were extremely positive.

**implementation requirements** Training and follow-up services include an initial two-day training workshop and a one-day follow-up consultant service. Local adopter district commitment requires a team composed of a principal, a classroom teacher, an aide and/or volunteer, and a special service staff member. No special facilities are required.

**financial requirements** Cost of a two-day leadership training session at project site and/or local school site for school district team (minimum of four persons). Training guides for teams, one set of curriculum guides and screening materials. Total cost \$160 for a team of four involved in leadership training. Cost of substitutes for a one-day follow-up inservice training for adopter team.

**services available** Awareness materials are available at no cost. Visitors are welcome any time by appointment at project site and additional demonstration sites throughout the United States. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (adopter pays only its own costs). Training is also available at adopter site (costs to be negotiated). Follow-up services are available to adopters (travel and per diem must be paid).

**contact** Luceille Werner, Project Director; Peotone School District 207-U; 114 N. Second St.; Peotone, IL 60468. (312) 258-3478.

**PROJECT** HOUSTON INDEPENDENT SCHOOL DISTRICT BILINGUAL PROGRAMS

A bilingual/bicultural program that provides initial instruction in the children's native language and cultural environment.

**target audience** Approved by JDRP for students grades K-12.

**description** This program is designed to serve Spanish-speaking students by developing culturally and linguistically appropriate curricula, providing relevant training for teachers and aides, developing parent and community involvement in the educational process, and generally effecting a change in attitudes toward bilingual education. The intent of this program is threefold: to help students become fluent and literate in English, to increase students' achievement in all content areas in English or Spanish, and to facilitate students' cultural growth. Initial instruction in all content areas is given in the students' native language, while a strong English language development program is provided. As students attain proficiency in English they are phased into instruction in English, but may continue instruction in Spanish language development and Spanish reading in schools where the program is provided through the sixth grade.

State-adopted materials are now provided for grades K-3. Other materials are provided through state and local funds for grades 4-6. In addition, curriculum guides, performance objectives, and other materials for all grade levels have been written locally.

At the secondary level, the program includes English as a second language for monolingual Spanish students, and bilingual courses for students who have already attained some degree of bilingualism.

**evidence of effectiveness** Language proficiency was measured using Language Assessment Scale. Achievement was measured using objective-referenced tests in each language, Inter-American Reading Series tests, and Iowa Test of Basic Skills for grades 1-6 (urban Hispanic students). Gains equal those of peers with no English limitation. Teacher training evaluated by structured classroom observations. Data were collected periodically. Reports are available.

**implementation requirements** Teachers must complete a 12-hour university endorsement program, pass a Spanish proficiency test, and teach one year in a bilingual program classroom. LEP students are identified and placed in classes according to grade levels. Schedules meeting needs of individual campuses are prepared under supervisory personnel in accordance with the Houston plan for bilingual education and the state-wide Design of Bilingual Education.

**financial requirements** Per-pupil cost is approximately \$500, including textbooks, supplemental materials, and staff development.

**services available** An awareness brochure is available at no cost. Visitors are welcome by appointment. Locally developed curriculum bulletins are available from project at cost.

**contact** Augustina Reyes, Executive Director; Bilingual Department; Houston Independent School District; 3830 Richmond Ave.; Houston, TX 77027. (713) 623-5126.



**PROJECT** NOMAD: Needs and Objectives for Migrant Advancement and Development

A school year tutorial program, a summer education program, and a family unit program designed to meet the special needs of migrant students through individualized instruction.

**target audience** School year program approved by JDRP for students of all abilities, grades K-12; summer program approved for students ages 2.5-17 and young adults to age 21, if they have not received a high school diploma; family unit program approved for total family, all abilities, all ages.

**description** The school year tutorial program operates in conjunction with the county's school districts. Certified teachers provide daily intensive instruction in reading, math, and language usage to each student at his or her development level. Enrichment activities in appreciation of culture and the arts and self-concept development are integral parts of the curriculum. The teacher counsels students in social behavior, adjustment to new school situations and teachers, attendance, completion of school, and the advantages of education.

The summer program provides six to eight weeks of experiences planned to compensate for the migrant child's interrupted education. Curriculum includes nutrition and health care, cultural enrichment, career awareness, prevocational opportunities, reading, math, language arts, science, and social studies. Students 10 years of age and older participate in three of the following prevocational programs on a half-day basis: secretarial/clerical, power mechanics, building trades, and commercial art. Students are pretested; identified needs dictate behavioral objectives for each child. The curriculum includes a preschool program designed to prepare migrant children for school. Children are assessed individually and assigned development skills. Social, motor, and oral language development are emphasized. Classrooms are staffed with a teacher and an aide, one of whom is bilingual. Preschool and kindergarten classes have additional aides. A mobile unit provides support services to migrant families at the camps. Activities include basic education, recreation, and human resource assistance. Parental involvement is encouraged through recruiters, evening open houses, and a Sunday fiesta celebration.

The family unit component is an evening program designed to encourage total family involvement. The curriculum includes instruction in basic skills, home economics, and training parents in preschool education. Instruction takes place in a van located at the migrant camps.

**evidence of effectiveness** All migrant students are pre- and posttested individually with Gates-MacGinitie Reading Test and Stanford Diagnostic Mathematics Test. Latest test data (1981-82, following JDRP approval) show that students gained an average of 2.4 months per month of instruction in reading and 2.5 months per month of instruction in math.

**implementation requirements** Elementary and secondary teachers who are genuinely concerned with educating a disadvantaged and culturally different group are needed. Recruiters representative of the group to be served; aides, administrators, and curriculum and evaluation personnel who will accept the challenge are also needed. Sensitivity training on the needs of migrant students and training in diagnosing needs and prescribing activities are required. Space is needed for individual or small-group instruction.

**financial requirements** A wide variety of commercially available materials and equipment already found in most classrooms is used. The cost of staffing depends on local school district salary schedules. The number of staff needed depends on the number of eligible students.

**services available** Awareness materials are available. Visitors are welcome at project site by appointment. Project staff are available to attend out-of-state awareness meetings (expenses must be paid). Training is provided at project site (adopter must assume all expenses). Training is also conducted at adopter site (expenses must be paid).

**contact** John H. Dominguez, Jr., Director; Van Buren Intermediate School District; 701 S. Paw Paw St.; Lawrence, MI 49064. (616) 674-8091, ext. 214.

**PROJECT** SECONDARY CREDIT EXCHANGE PROGRAM

A continuation school for secondary-grade migrant students who have been attending school in another district or state and are not able to continue school because of the need to work.

**target audience** Approved by JDRP for migrant high school students who must transfer credits from one district to another.

**description** The students transfer into the credit exchange alternative schools and are enrolled in the same schedule of classes they followed at their home-base school. They are given individualized and small-group instruction and complete their course of study in the receiving school. Upon completion of the term, their credits are transferred to the home school on an official high school transcript.

Classes meet at a time when the students can attend, usually in late afternoon or early evening. Certificated staff are employed and the content of the work at the credit exchange school is identical to the work at the home school. Students can attend a combination of their home school and the credit exchange schools for all four years of high school and graduate on target with their classmates who do not migrate.

Provisions are also made for non-English-speaking students and students who have dropped out but wish to return to school or pursue a GED.

**evidence of effectiveness** Significant gains in enrollment are evident in numerical comparisons before and after implementation of a Secondary Credit Exchange Program. Gains can also be seen in terms of credits needed compared with credits earned, as well as in cumulative number of graduates.

**implementation requirements** Adopter must have sufficient staff to provide a teacher-student ratio no greater than 1:10. Identification and recruitment staff and some kind of classroom facility are also required. The program can begin with as few as three students in a tutoring situation, but the most practical size is 30-40 students. Project site visitation is recommended.

**financial requirements** Per-pupil cost varies from \$100-\$150, depending on the district. Costs are primarily for staff salaries. A wide variety of materials found in most classrooms is used.

**services available** Awareness materials are available. Visitors are welcome. Project staff are available to attend out-of-state awareness meetings and to participate in inservice training at adopter site (expenses must be shared).

Alternate contact: Tino Duron, Developer/Demonstrator; Region I Education Service Center; 1900 W. Schunior; Edinburg, TX 78539. (512) 383-5611.

**contact** David W. Randall, State Coordinator; Secondary Credit Exchange Program; P.O. Box 719; Sunnyside, WA 98944. (509) 837-4344.

SECTION B-4: CAREER/VOCATIONAL EDUCATION\*

CAREER EDUCATION RESOURCE CENTER PROGRAM (CERCP) -- District of Columbia . . . . . B-4.3  
CAREER EDUCATION RESPONSIVE TO EVERY STUDENT (CERES) -- California . . . . . B-4.4  
CAREER INTERN PROGRAM -- Pennsylvania. . . . . B-4.5  
PROJECT CDCC: Career Development Centered Curriculum -- Michigan . . . . . B-4.6  
EXPERIENCE-BASED CAREER EDUCATION (EBCE) - FOND DU LAC, WISCONSIN, Wisconsin . . . . B-4.7  
EXPERIENCE-BASED CAREER EDUCATION (EBCE) [Research for Better Schools, Inc. (RBS)]  
-- Pennsylvania. . . . . B-4.8  
FREESTYLE -- California. . . . . B-4.9  
HEAR: Human Educational Awareness Resource -- New Jersey . . . . . B-4.10  
MATCHING ATTITUDES AND TALENTS TO CAREER HORIZONS (MATCH) -- California. . . . . B-4.11  
OCCUPATIONAL AND CAREER DEVELOPMENT -- Georgia . . . . . B-4.12  
OCCUPATIONAL VERSATILITY (O.V.) -- Washington. . . . . B-4.13  
OPENING THE DOORS -- New Jersey. . . . . B-4.14  
PIMA COUNTY CAREER GUIDANCE PROJECT -- Arizona . . . . . B-4.15  
UCLA ALLIED HEALTH PROFESSIONS PUBLICATIONS -- California. . . . . B-4.16

\*See Sectional Cross-Reference Index, p. D-9, for related programs.

**PROJECT** CAREER EDUCATION RESOURCE CENTER PROGRAM (CERCP)

A program to increase self-appraisal, occupational information, goal selection, and planning and problem solving.

**target audience** Approved by JDRP for students in grade 10.

**description** Although this program was developed for large, urban, principally minority-student school systems, project staff assert that it can be used by any system whose graduates face potential unemployment owing to inadequate training in work values and insufficient knowledge of career possibilities.

Coordinated activities take place in the Career Education Resource Center, the classroom, and the community. The project employs the infusion approach to weave career education content into instruction in academics, counseling, and supplementary student activities. In the academic disciplines, competency-based lesson plans and instructional materials are used to integrate career education into subject area content. Each semester includes a minimum of 40 instructional sessions lasting between 45 and 70 minutes.

Program activities include student assessments, teacher training, individual and group guidance, field experiences, minicourse instruction in test taking, life skills, and career decision making, career research and exploration, a career-focused newspaper, parent seminars, and community involvement activities.

**evidence of effectiveness** Data collected from testing of matched treatment and control groups with the Career Maturity Index Competence Test and the Comprehensive Test of Basic Skills revealed significant gains for program participants in self-appraisal, occupational information, goal selection, planning, and problem solving. Treatment males exceeded control males by 13.8 points. Treatment females exceeded control females by 6.4 points. Scores for both males and females are significant at or beyond .002.

**implementation requirements** Adopters must provide a room to serve as resource center; a variety of books, kits, games, films, audiovisual equipment, and software for the resource center; one supervisor (any staff professional) for every 100 students; and one part-time clerical person for the entire program. Administrative support for staff training and organization of classroom infusion activities and resource center is required. Preservice training, averaging two and one-half days, is tailored to adopter's needs. Follow-up training is supplied as necessary.

**financial requirements** Materials and equipment for resource center cost approximately \$10,000 in the first year (\$1,000 if only upgrading of existing equipment and materials is required), \$1,000 in subsequent years. Adopters purchase a Project Manager Kit (\$50), containing a Lesson Guide with 27 lessons in 10 disciplines, sample Learning Activity Packages (LAPs) for materials used in the resource center, a model for teacher-developed LAPs, three minicourse guides, a career awareness comic book kit, and miscellaneous transparencies. Adopters pay trainer's travel and per diem.

**services available** An awareness brochure is available at no cost. Visitors are welcome by appointment. Project staff are available to attend out-of-state awareness meetings (expenses must be paid). Training is conducted at adopter site (expenses must be paid). Follow-up training and technical assistance are available to adopters.

**contact** Essie Page, State Coordinator of Career Education; District of Columbia Public Schools System; 415 12th St. N.W.; Washington, DC 20004. (202) 724-4015, -4016, -4017.

**PROJECT** CAREER EDUCATION RESPONSIVE TO EVERY STUDENT (CERES)

A career education program in which students practice their basic skills as they develop attitudes and decision-making skills in a world-of-work mode.

**target audience** Approved by JDRP for primary school children grades K-3. This program has been used in other settings with grades 4-12, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** Project CERES has developed instructional procedures to facilitate the infusion of career education concepts into the regular curriculum. Project staff have developed a career education matrix that identifies goals and objectives in seven areas, numerous infusion units, a variety of career education learning centers, a simulation program, a career education test for measuring student gains, a Program and Management Evaluation System (PAMES) that establishes staff responsibilities, and a Career Education Inservice Model (CEIM) that guides career education activities. The project strongly stresses staff development.

**evidence of effectiveness** When compared with a control group, project students showed significant growth in their career development as reflected by their achievement of objectives representing seven areas of career education. Student growth was measured with a project-developed career education test.

**implementation requirements** The project's activities are easily transportable since they can be implemented without disrupting existing programs. The program can be adopted by individual teachers and/or schools. Two days of staff training are advisable.

**financial requirements** Program instructional, management, and evaluation materials are available at cost. Release time is required for training.

**services available** Awareness materials are available at no cost. Visitors are welcome on scheduled days. Limited staff for out-of-state awareness, training, and follow-up sessions. All costs to be reimbursed.

**contact** Virginia H. Lish, Curriculum Specialist; Ceres School District; P.O. Box 307; Ceres, CA 95307. (209) 538-0148.

**PROJECT** CAREER INTERN PROGRAM

A program aimed at dropout prevention at the secondary school level.

**target audience**

Approved by JDRP for students grades 10-12 who have been designated by school officials as having dropped out of school or as having the potential to drop out.

**description**

Applicants are dropout and potential dropout students from Philadelphia high schools. The selection criteria are: lack of consistent school attendance; inability to adjust to public schools; no major disciplinary problems; family adjustment problems; negative shifts in academic achievement levels.

After prospective interns (students) are recruited, they are exposed to the intake interview. They are also tested to determine if they have attained the minimum fifth-grade reading level requirements for admission. They are then scheduled for orientation and admitted to the program.

Interns participate in the following courses during the first phase of the program: math, English, history, science, reading, career counseling seminar, cultural arts, typing, graphics, consumer math, humanities, and foreign language. In addition, career-oriented activities are employed, such as field trips, seminars, mini-fairs, and resource speakers. The curricula consist of career-oriented subject matter integrated into academic subject matter. At least one counseling session is conducted every two weeks.

During the second phase, interns are involved in individualized instruction and independent study. Advanced courses in the aforementioned disciplines ensue. On-site exploration of careers in which interns have expressed interest is conducted. Career-oriented activities and counseling support continue.

The third phase commences when the interns are prepared to graduate. College preparatory activities are implemented for college-bound interns. Arrangements are made to place interns into OJT, advanced skills training, and employment slots.

**evidence of effectiveness**

Formative and summative research design utilizing several cohorts of experimental, control, and comparison groups. The rigorous research was conducted for approximately two years by an independent research firm.

**implementation requirements**

Staffing requirements include eight full-time instructors, a director, an administrative secretary, a receptionist/clerk typist, a school coordinator, an instructional supervisor, a career counseling supervisor, three counselors, two career developers, two associate professionals (an instructional aide and a counseling aide), a curriculum liaison/resource center specialist, four secretaries, and two custodians. Space requirements include eight classrooms, a counseling area, office space, and a lunchroom area. Although a school district is the usual unit of adoption, the program can be implemented in a single school.

**financial requirements**

Annual cost per pupil: \$2,384.

**services available**

Awareness materials are available at no cost. Visitors are welcome by appointment. Training is conducted at the project site (adopting site must cover all trainer costs as well as covering own costs). Training may be conducted out of state (exemplary project staff costs must be paid). Project staff may be able to attend out-of-state conferences (expenses must be paid).

**contact**

Robert Jackson, Program Manager; Division of Special Programs; OICs of America, Inc.; 100 W. Coulter St.; Philadelphia, PA 19144. (215) 438-9800.

## **PROJECT**

PROJECT CDCC: Career Development Centered Curriculum

A sequentially coordinated career development program with teacher-developed classroom units that focus on career awareness, self-awareness, and introduction to decision making.

## **target audience**

Approved by JDRP for students of all ability levels in grades K-6.

## **description**

A career is the combination of a person's continually changing occupational, family, civic, and leisure life roles. This program intends to help children move through the career development process as smoothly as possible and to help them understand that basic skills such as math, reading, and writing are used daily in the "outside world." The three major outcomes of the program are: increased awareness of life roles, development of and practice with decision-making skills, and enhanced self-concept formulation.

The program consists of 27 curriculum units focused on a variety of career awareness and self-awareness topics. Each unit contains goals, objectives, specific instructional strategies, suggested resources, and evaluation instrumentation. The units are interdisciplinary in that they include learning and practice in math, communication arts, science, and social studies while contributing to the career development aspects of each individual's growth. The units employ a variety of teaching strategies, such as role playing, discussions, work sheets, field trips, use of role models, and use of audiovisual materials. They include evaluation strategies based on unit performance objectives. Time of implementation for each unit is approximately two instruction hours per day for a period of one to three weeks. One unit is taught during each nine-week grading period at each grade level. The project's inservice component assists teachers in planning for and implementing unit activities in their classrooms. Many of the unit topics and activities are familiar to many teachers. However, what this program has to offer is a set of well-developed teaching materials that are sequenced, coordinated between grade levels, easily adapted, and designed to be incorporated into existing social studies and science curricula, with built-in evaluation components and high-interest activities for children.

## **evidence of effectiveness**

In an evaluation conducted in 1974, student performance on criterion-referenced objectives at both the developmental site and the experimental site showed a marked difference from performance of students at the control site.

## **implementation requirements**

Adopters must provide awareness information to all staff who might be involved and arrange for them to examine the units at leisure; identify volunteer teachers who will commit themselves to inservice and agree to pilot the units for one year (pilot group may consist of 7-28 teachers, with a minimum of one per grade level, K-6); provide two consecutive days of inservice for volunteer teachers and their principals; obtain necessary training materials and instruction units; provide two field trips per classroom; identify local person to facilitate adoption (usually a principal); collect evaluation data; and consider expansion to other staff.

## **financial requirements**

Two days of release time for teachers during inservice training. A set of four units for each teacher (\$3.50 per unit). A set of training materials for each participant in the inservice workshop (\$3 each). Duplication of evaluation and activity sheets in student quantities (approximately 70¢ per student). Fee and travel expenses for inservice trainer.

## **services available**

Awareness materials are available. A thorough examination of the instructional units by teachers has proven to be more beneficial than a team visitation to the project. If personal contact is desired, an awareness session can be arranged, with slides, transparencies, and handout materials for the entire staff. A pre-implementation training workshop (two full days) for teachers and principals is conducted at the adopter site.

## **contact**

Lee Downey, Project Director; Coloma Community Schools; Administration Building; P.O. Box 218; Boyer Rd.; Coloma, MI 49038. (616) 468-6785, ext. 46.

**PROJECT** EXPERIENCE-BASED CAREER EDUCATION (EBCE) -- FOND DU LAC, WISCONSIN

A career exploration program which integrates community experiences, academic experiences, and basic life skills.

**target audience** Approved by JDRP for students of all abilities, grades 11 and 12, who wish to explore careers while earning high school credit.

**description** The goal of the Fond du Lac Experience-Based Career Education program is to help students look at themselves and at various career options in a realistic and mature manner through use of community resources with the guidance of a professional staff. Students experience responsibility and develop the decision-making skills necessary to form a career plan.

The Fond du Lac program allows high school juniors and seniors to earn academic credit while exploring careers in the community. Academic work is related to career exploration experiences, which helps students realize the relevance of subject matter to the real world of work. Heavy emphasis is placed on problem-solving and decision-making skills. Students are required to complete activity sheets on such basic life skills as banking, insurance, personal loans, and budgeting.

Instruction is on a one-to-one basis, and academic work is geared to each student's interests, abilities, and needs. A Career Guide helps the student to relate each career experience to his/her own values and needs.

**evidence of effectiveness** Results of standardized tests (Student Attitude Survey, Comprehensive Test of Basic Skills, Career Maturity Inventory, and JOBS [sex-role stereotyping test]) administered pre/post to EBCE and control group students in 1976-79 favor EBCE students in cognitive and affective areas. Parents and employers comment favorably. Graduates support program and testify to its positive impact.

**implementation requirements** Potential adopters should visit the Fond du Lac site if possible. Project staff are available for awareness presentations. Technical assistance is available in writing proposals to secure funding. Training sessions for learning coordinators and an experienced site analyst are provided by the project. Adopters need between three and four months of lead time for community site development and student recruitment.

**financial requirements** Each staff member requires one set of project-produced materials at \$75 per set. Other start-up costs include staff training, technical assistance, and travel for project staff. The Career Information System (McKnight Publishing Co.) is an integral part of the EBCE program. Per-pupil cost for maintenance is slightly lower than cost for students enrolled in the regular high school program.

**services available** Awareness materials are available at no cost. Visitors are welcome by appointment at project site and additional demonstration sites in home state. Project staff are available to attend out-of-state awareness conferences (costs to be negotiated). Training is conducted at project site (adopter pays only its own costs) or at adopter site (costs to be negotiated).

**contact** Ronald R. Nelson, Director; Franklin School -- Goodrich Annex; 401 S. Military Rd.; Fond du Lac, WI 54935. (414) 929-2747 or -2750.



**PROJECT** EXPERIENCE-BASED CAREER EDUCATION (EBCE) [Research for Better Schools, Inc. (RBS)]

A program of inquiry and planning that integrates school and community experiences to help students develop life goals, career choices, and postsecondary plans.

**target audience** Approved by JDRP for students of all abilities, grades 9-12; teachers who develop community-based learning activities for students; and school/community cooperation groups. This program has also been used in eighth grade, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** This program focuses on five basic goals for students: preparation for career opportunities; growth in communications skills and mathematics; increased accuracy and breadth in student perceptions of their environment; enhanced motivation to learn; and increased ability to plan, solve problems, make decisions, and take action. Three interrelated components form the RBS EBCE Program: Career Development, Career Guidance, and the Academic Resource Center. The most visible component, and the one that distinguishes this EBCE program from others, is Career Development. Career Development directs students into the community for career explorations and contact with working adults. Career Guidance helps students to integrate their job-site activities with personal and academic interests, needs, and skills through structured group and individual guidance sessions. The Academic Resource Center provides individualized instruction in mathematics and communication skills. The existing school program, of which RBS EBCE is designed to be part, provides the remainder of students' academic needs. Once a week students leave school and spend the day in the community at a business, government office, or service agency participating in specific preplanned activities. Students spend two periods a week in group guidance sessions. Guidance sessions serve both as an instructional setting in which to learn and apply problem-solving skills and as a forum in which students can share information about community learning experiences. The group works with a process skills curriculum, The Career Clarification Program: A Problem-Solving Approach, designed primarily for students in their first year of the program. RBS EBCE was not developed for use in a rigid, predetermined manner. It was meant to be stretched and molded to fit the circumstances of the particular community and school district.

**evidence of effectiveness** An experimental evaluation design was conducted at the demonstration site from 1974 through 1976. Experimental and control groups were tested with eight standard instruments to measure career maturity, attitude toward learning environment, self-concept, and basic skills. Results support program effectiveness in all areas. The program also appears to reduce school dropout rates.

**implementation requirements** Existing staff are utilized to develop and implement the program. However, traditional roles need to be redefined and redefined roles must be extended into the community. The learning activities that take place in the community are structured by school people in cooperation with community participants. The guidance curriculum presents a new type of situation for some school staff, and the individualized instruction in basic skills represents a new challenge for others.

**financial requirements** Planning, training, and implementation materials: approximately \$100 per set. Student materials for the guidance curriculum cost \$6 per student. Materials to implement an individualized learning center involve substantial costs. Staff time is required for initial community recruitment and for development of community-based learning activities.

**services available** Consultation, training, and follow-up are available at project site and adopter sites (expenses must be paid).

**contact** Louis Maguire, Development Division Director; Research for Better Schools, Inc.; 444 N. Third St.; Philadelphia, PA 19123. (215) 574-9300.

## **PROJECT** FREESTYLE

A series of television programs aimed at reducing sex-role stereotypes and expanding career awareness for children ages 9-12 and their parents.

**target audience** Approved by JDRP for children ages 9-12 and their parents.

**description** Freestyle seeks to develop more positive attitudes toward both males and females engaging in activities and occupations that traditionally have been seen as appropriate for only one sex, to promote the belief that males and females have more abilities and engage in more varied activities and occupations than the prevailing stereotypes suggest, and to increase each child's interest in childhood activities and adult occupations that traditionally have been the domain of the opposite sex.

Freestyle television programs are centered around three content areas: child pre-occupational activities (activities that may lead to specific career interests); childhood behavioral skills (skills that children can begin to develop that may be useful in educational progress and in careers); and adult work and family roles.

The series consists of 13 half-hour dramas divided into 26 fifteen-minute segments for classroom use. It is also available as undivided half-hour programs for home viewing. The programs portray a multiethnic group of young teenagers and their families. As the teenagers engage in nonstereotypical interests and activities, they model behavior strategies needed for successful achievement in school and in work. Viewers learn about the changing roles of men and women through the settings and plots of the dramas.

Freestyle can form the basis for a new emphasis in career education programs or may be integrated into the regular language arts and social science programs in the middle grades and in junior high schools. The publication, Curriculum for the Television Career Awareness Project FREESTYLE, contains materials that can be copied for classroom use and information to support curriculum development, staff training, and parent education in career awareness and sex equity programs. The publication, FREESTYLE Guide, suggests classroom activities to extend each of the Freestyle television programs along with ways to infuse the program into other subject areas in the regular classroom curriculum.

**evidence of effectiveness** Project-developed pre- and posttests of 7,000 children in seven different cities showed a significant reduction in stereotypic beliefs and attitudes among children exposed to the Freestyle programs and discussions as compared to children in control groups.

**implementation requirements** Designed for use in intermediate grades, the curriculum can be implemented by a single teacher, a school, or a district. It can be integrated into the regular curriculum using the suggestions in the FREESTYLE Guide, or it can be used as the basis of a new course of study.

**financial requirements** Adopter needs one set of 13 Freestyle videocassettes (\$455) and a teacher's manual for each teacher (\$1, materials may be reproduced locally). Other instructional materials: Freestyle curriculum (\$3.50), teacher resource packet (\$2.50), self-instructional mini-modules for adopting teachers (\$3.50). Inservice requires one-half day released time for participating teachers plus trainer's travel and per diem. For districts conducting their own inservice, project-developed Staff Development Inservice Leader's Handbook (\$50) and "Teaching With Freestyle," a 30-minute color video-cassette demonstrating use of Freestyle in classrooms (\$62.50), are available.

**services available** Awareness materials are available. Visitors are welcome at project site by appointment. Project staff are available to attend out-of-state awareness meetings (expenses must be paid). Training is provided at project site (adopter must assume all expenses). Training is also conducted at adopter site (expenses must be paid). All materials available upon request at reproduction and shipping costs.

**contact** Pat Seeley, Consultant; Freestyle; Division of Educational Media; Los Angeles County Education Center; 9300 E. Imperial Highway; Downey, CA 90242. (213) 922-6223.

**PROJECT** HEAR: Human Educational Awareness Resource

A curriculum infusion model with built-in staff development to increase work options and reduce effects of stereotyping.

**target audience** Approved by JDRP for students of all abilities, grades 4-9. It has been used in other settings with grades 1-3 and 10-12, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** Project HEAR consists of Primary, Intermediate, and Secondary Learning Units, each integrated into a student's regular curriculum over a 45-day time span. Learning Units are sequentially organized, and designed for use in any existing classroom structure with any discipline; they may be adapted to multiple learning needs. The Learning Units are designed for infusion into basic skills efforts. Project HEAR's materials combine reading, writing, verbal, audiovisual, and simulation gaming experiences. Activities are varied and afford students opportunities to work individually and in large and small groups.

Project HEAR aims to make students aware of their needs, skills, strengths, aptitudes, and motivations. The program relates a variety of occupational information to the student's self-concept. Emphasis is placed on choosing and examining alternatives in order to make decisions. At the elementary school level, the primary goal of the program is to change students' views about the world of work and to break down occupational stereotypes. At the upper levels, the program aims to increase students' knowledge of the world of work and to align their occupational choices with their occupational interests, aptitudes, and abilities.

Project HEAR's curriculum is designed to help students gain insight without judgment of success or failure, to lead students to a successively widening exploration of the world outside themselves, and to teach them decision-making skills and provide skill-building activities. Self-awareness, career awareness, and decision making are the threads that weave the project's components together and the respective foci of the Primary, Intermediate, and Secondary Learning Units.

**evidence of effectiveness** The program is effective in reducing the impact of gender-role limitations. Data collected from locally developed instruments in 1976 were analyzed by a pre/post contrast of experimental and control groups. Two years later, a second experimental design confirmed Project HEAR's effectiveness.

**implementation requirements** No special equipment is needed for successful implementation. Curriculum units are packaged in classroom sets with supplies for 30 students. Staff training is required for adoption. Each training session is uniquely developed for adopters and averages two days. No special facilities are required to implement HEAR. The program can be adopted at any level (grades 4-6, 7-9) and is capable of being used in tandem with Opening The Doors (K-3). Each participating teacher should have a classroom set of materials.

**financial requirements** Cost of materials: \$395 for a classroom unit. The only consumables are the unit workbooks, which can be replaced for \$2.50 each (Primary and Intermediate) and \$4 (Secondary). Training is provided at no cost other than travel and per diem expenses when 10 classroom sets are purchased. With orders for fewer than 10 classrooms there is an additional cost of \$800 for training. A 10% charge is added to all orders to cover storage, handling, and shipping.

**services available** Awareness materials are available at no cost. Visitors are welcome at project site by appointment. Project staff are available to attend out-of-state awareness meetings (travel and per diem negotiable). Training is conducted only at adopter site. Implementation and follow-up services are available to adopters (costs to be negotiated). Evaluation of student impact is available at a cost of \$7 per pupil for posttest only with contrast to national sample provided in final report.

**contact** Joel Geller, Director; Project HEAR; Cogent Associates; 306 Alexander St.; Princeton, NJ 08540. (609) 921-1484.

**PROJECT** MATCHING ATTITUDES AND TALENTS TO CAREER HORIZONS (MATCH)

A program designed to infuse career education into the regular K-8 curriculum, with a component for staff development and self-evaluation.

**target audience** Approved by JDRP for students of all abilities, K-8, and their teachers.

**description** Project MATCH is designed to infuse a career education component into the regular curriculum of a K-8 school district program. The program emphasizes career education in three ways: by an infusion process built around the various content areas, by experiential activities within the classroom for real-world understanding, and by wide-ranging study and research opportunities that are centered in career education yet keyed to the content areas. The project has developed behavioral objectives in 10 areas of career education, a grade-by-grade guide to achieving these objectives, a series of curriculum infusion units that integrate career education concepts into most curriculum areas, special individualized programs, a simulation program in civics, and career education evaluation instruments (both formative and summative). Training sessions for program implementation have also been developed. During the two-day inservice session, teachers are introduced to the project and to ways they can assist in planning for implementation and evaluation. Optional inservice for professional development is also available.

The 10 goal areas of MATCH are career awareness, self-awareness, attitude development, education awareness, economic awareness, consumer competencies, career orientation, career exploration, career planning and decision-making skill development, and civic responsibility. Of the program's 67 objectives, a third are introduced at the kindergarten level and all are included in the materials for grade level 7-8. Project materials include teacher guides, consumables for students, game designs, bulletin board idea sketches, evaluation instruments, administrative guides, and a filmstrip for general program description.

**evidence of effectiveness** When compared with a comparable control group, project students showed far greater growth in career development as evidenced by their achievement of objectives in 10 areas of career education. Student growth was assessed by project-developed evaluation instruments with a high degree of validity and reliability.

**implementation requirements** The project's activities are easily transportable; they can be implemented by teachers without disrupting existing programs and without adding special periods, special counseling, or staff. The program can be adopted by individual teachers or schools. Project materials and evaluation instruments are needed for implementation. A staff training program of one to three days should be planned, based on needs of the adopter and the adoption plan. Implementation should cover an 18-24 week time span.

**financial requirements** One set of project materials (K-8), \$400. Consumables, \$100. Costs are less if grade span of adopting school is less than K-8. Guides for implementation are included in the project materials.

**services available** Awareness materials are available at no cost. Visitors are welcome at project site any time by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (adopter pays only its own costs). Training is also available at adopter site (trainer travel and per diem must be paid). Implementation and follow-up services are available to adopters (travel and per diem must be paid).

**contact** Darvel Allred, Project Specialist; Ontario-Montclair School District; 950 West "D" St.; P.O. Box 313; Ontario, CA 91761. (714) 983-7412 or -9501, ext. 235.

**PROJECT** OCCUPATIONAL AND CAREER DEVELOPMENT

A sequential career education program focusing on student awareness, exploration, and preparation.

**target audience** Approved by JDRP for students of all ability levels, grades K-12.

**description** The program emphasizes awareness and orientation at the elementary level, exploration and orientation at the middle-school level, and preparation and information at the secondary level. The program is built around a career education theme that has as its process goals: student evaluation of self-characteristics, exploration of broad occupational areas, introduction to the economic and social values of work, introduction to the psychological and sociological values of work, consideration of educational and training alternatives, and development of student decision-making skills related to the other goals. Analysis of the process goals has led to the development of six elements that have been incorporated into career education activities at all grade levels. These elements are: hands-on activities, role playing, field trips into the community, resource people in the classroom, subject-matter tie-ins, and introduction to occupations in the community relevant to students' interests and abilities.

The unit approach was chosen as the original structural framework for implementing career education because Cobb County teachers felt more comfortable with units. The concurrent and overlapping nature of the elements stimulated individual creativity and permitted flexibility within any given unit. Teachers were encouraged to plan unit activities related to the curriculum and focused on students' interests and abilities. Through use of the six elements and the unit approach, teachers were given a basic framework with which to develop activities to meet their students' needs.

**evidence of effectiveness** Project evaluation was conducted by North Carolina State University over a three-year period through tests of 500+ students (treatment and control). Process evaluation by Georgia Department of Education and USOE. Goals and objectives stated at project outset were achieved to a significant degree. Validated by USOE for replication.

**implementation requirements** Project may be implemented by a single teacher, but effectiveness is increased if small groups of teachers are involved in staff-development workshops where concepts, materials, and suggested activities are introduced and experienced. Such workshops should be conducted with teachers grouped according to year/grade levels or subject areas.

**financial requirements** Forty-six Elementary Curriculum Units, \$80; 51 Elementary-Middle School Curriculum Units, \$90; 30 Middle School-Senior High Units, \$60; complete set of 64 units, \$110. Usually, existing allotments for staff development can be used. Additional per-pupil cost is negligible, depending on available resources. Program costs can be managed through alternative use of existing materials and utilization of other resources.

**services available** Curriculum-centered units and other materials are available at cost to serve as planning guides. Limited visitation is available by appointment. No training is conducted on-site. Training can be conducted off-site on a limited basis (staff costs must be paid).

**contact** Judy Comer, Career Education Supervisor; Cobb County Public Schools; P.O. Box 1088; Marietta, GA 30061. (404) 422-9171.

**PROJECT** OCCUPATIONAL VERSATILITY (O.V.)

An exploratory prevocational experience for all students in a general multiple-activity industrial arts shop.

**target audience** Approved by JDRP for grades 6-9 in industrial arts. This program has been used in other industrial arts settings with grades K-5 and 10-12, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** Occupational Versatility is a method whereby students learn in an exploratory industrial arts program. Throughout the learning procedure, the educator both creates the scene in which the learner functions and provides counsel. The learner is responsible for selecting, directing, managing, and evaluating his/her performance. The degree of learner responsibility increases as he/she progresses through the program.

Facilities provide opportunities for work in areas that include, but are not limited to: woods, plastics, power, electricity/electronics, sheet metal, wrought iron, forge and foundry, welding, graphics, drawing, career information, and general industries.

Classes are heterogeneous, composed of boys and girls from different grade levels. Two or three instructors form a teaching team to supervise student activities. Students have access to a variety of information resources, to instructors, and to more-experienced peers. O.V. has been applied in one-teacher shops.

The O.V. method has been expanded into four phases: the Awareness Phase, for the elementary school; the Exploratory and Emphasis Phases, for the junior high school; and the Preparatory Phase, for the high school. Efforts are under way to merge the O.V. method with the American Industry Project, a study of the free-enterprise system. Adaptations of the O.V. method have also been applied to the home economics and art areas.

**evidence of effectiveness** In 1970-71, on the Childhood Attitude Inventory for Problem Solving, O.V. students ( $n=118$ ) scored 111.72 compared to non-O.V. students ( $n=137$ ), who scored 107.46 (significantly higher at .01 level). In 1977, O.V. students ( $n=40$ ) on the same test scored 111.32 (significant at .01 level).

**implementation requirements** O.V. is more commonly adapted than adopted; specific requirements are not listed here due to the flexibility of adaptations. A workshop and/or visitation to demonstration sites will assist the adapter in determining the extent of implementation desired. A model adoption proposal for Title IV-C funding is available through NDN Facilitators.

**financial requirements** Installation costs vary greatly, depending on what materials are available and what degree of implementation a district desires.

**services available** Visitors are welcome anytime by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (adopter pays only its own costs). Training is also available at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** John Lavender, Director; Occupational Versatility; Highline School District; 15675 Ambaum Blvd., S.W.; Seattle, WA 98166. (202) 433-2453.

**PROJECT** OPENING THE DOORS

A career education curriculum infusing reading readiness and writing with built-in staff development to reduce effect of stereotyping.

**target audience** Approved by JDRP for students of all abilities in grades K-3.

**description** Almost 90% of all American women will work for part of their lives -- two out of three because of economic need. Nevertheless, girls still aspire to a narrower range of careers than boys, and boys still view girls within a narrow occupational scope.

The developers of this interdisciplinary, multimedia career education curriculum assume that if children in the early years can be taught to allow flexibility in role identification, their future occupational choices can be based not on sex-role stereotyping or societal expectations but on individual potential. On the premise that children learn by doing and that learning is fun, learning activities combine reading readiness, writing, oral, verbal, visual, simulation, and learning experiences. Students work individually or in small or large groups.

In the K-1 curriculum, four dramatic play units give children opportunities to construct a work environment and experience occupations. Learning centers allow children to select their own activities, thus enabling them to become more independent, responsible, and socially cooperative. Language arts activities improve verbal skills and build positive self-image. Learning activities for grades 2-3 follow a logical sequence and help students to look at themselves, the world of work, and decision making. An activities resource guide describes 150 activities; the rationale, goals, and objectives for each; suggestions for implementation; and alternative strategies.

Opening The Doors may be used in tandem with project HEAR (grades 4-6, 7-9, and 10-12).

**evidence of effectiveness** Using the Early Occupational Preference Inventory to elicit preference for selected occupations, a highly significant treatment effect was noted in mean gain scores from pre to post -- a mean gain of 17% in gender-free occupations. The effect of this program is to reduce sex-biased stereotypes by retarding the process of gender-appropriate preference, i.e., to maintain the preference for sex-asynchronous occupations.

**implementation requirements** No special facilities or equipment are needed for successful implementation. Curriculum units are packaged in classroom sets with supplies for 30 students. Packaging is separate for the K-1 program (60 lessons) and the 2-3 program (90 lessons). Program adoption is possible with either the 2-1 program or the 2-3 program or both. Two-day staff development in-service is required for adoption. Each participating teacher should have a classroom set of materials.

**financial requirements** The K-1 program costs \$475 per classroom set. The 2-3 program costs \$350 per classroom set. There are no consumables and the resource manual has been designed so that teachers can duplicate copies for classroom distribution. A 10% charge is added to all orders to cover storage, handling, and shipping. There is no cost for training services except for travel and per diem expenses when 10 classroom sets are ordered. With orders for fewer than 10 classrooms, a charge of \$800 is made for training services.

**services available** Awareness materials are available at no cost. Visitors are welcome at project site any time by appointment. Project staff are available to attend out-of-state awareness conferences (travel and expenses negotiable). Training is conducted at adopter site. Follow-up services are available to adopters, including evaluation (costs to be negotiated).

**contact** Joel Geller; Cogent Associates; 306 Alexander St.; Princeton, NJ 08540. (609) 921-1484.

**PROJECT** PIMA COUNTY CAREER GUIDANCE PROJECT

A K-12 infusion model designed to help students develop knowledge and skills in self-awareness, decision making, career awareness, and career exploration.

**target audience** Approved by JDRP for students of all abilities grades 4-12, teachers, administrators, counselors, and community members. This program has been used in grades K-3, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** The Pima County Career Guidance Project is an interdistrict organization that coordinates and delivers a variety of career education services to all county schools. The project has several major components: direct services to students; services to school staffs who need help in planning or implementing career education activities; selection and maintenance of up-to-date career education media and materials for use by all county school staffs; coordination of community resources, such as volunteer aides, speakers, and work experience/exposure sites; conduct of parent discussion groups; and a variety of other services, such as career education implementation unit development and services to special education teachers.

The approach to career education in Pima County is often referred to as "infusion," that is, the continued demonstration of the relationships between academic subjects and particular occupations or the world of work as a whole. Infusion redirects the focus and intent of school subjects without changing subject content. For example, addition may be taught by totaling prices on restaurant checks in a simulated coffee shop instead of by adding numbers on blank paper.

Elementary level activities focus on self-awareness and an introduction to career areas. Activities in grades 7-9 focus on a wider study of careers and use of decision-making skills. Activities at the high school level are aimed at giving students career exploration and uses of academic skills in various careers.

**evidence of effectiveness** As a result of high levels of exposure to this career education program, a sample of county students in grades 4-12 performed better in all categories tested, as measured by a locally developed Careers Test, than a comparable sample of students with low exposure to the program. The program has been externally evaluated since 1972.

**implementation requirements** The model is a counselor/consultant design that may be adapted to any educational setting, according to available personnel, facilities, and other resources within the adopting district. Requirements for adopting districts include qualified counselors or student-services personnel, commitment to the model, appropriate media and materials, and teacher-training time. Between two and two and one-half days of preservice training and additional follow-up inservice training are required.

**financial requirements** Costs of preservice and inservice training for adopting staff and evaluation (testing, scoring, reporting) are borne by adopters. A minimum suggestion for initial training and purchase of materials needed by teachers and counselors is \$3,000.

**services available** Awareness materials are available at no cost. Visitors are welcome at project site anytime by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at adoption site (all expenses must be paid, including trainer's fee, cost of training materials, trainer's travel and per diem). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** Don Lawhead, Program Manager; Pima County Career Guidance Project; 545 N. Camino Seco; Tucson, AZ 85710. (602) 296-5451 or -2397.



**PROJECT** UCLA ALLIED HEALTH PROFESSIONS PUBLICATIONS

A three-year student-oriented program designed to introduce secondary school students to allied health occupations.

**target audience** Approved by JDRP for secondary students.

**description** The purposes of the program are to acquaint students with the allied health field and provide them with training in it; to offer students positive educational experiences to encourage and motivate them to continue their education; to give students skills and information with which they can compete and move upward in the world of work; to give students a better understanding of the health field to make them better consumers of its services; and to guide them into positions, occupations, and training programs for further education. The sequenced series of student objectives is based on inventories of tasks requisite to specific health careers, ranging from biomedical photography to ward management.

**evidence of effectiveness** This project -- as it was applied in a number of Los Angeles area high schools -- was evaluated by Clarence Fielstra. The results of his evaluation are available upon request, for a nominal fee.

**implementation requirements** For one classroom, a minimum of one person is needed to serve as both instructor and coordinator. For more than one class, one instructor per class, in addition to the coordinator, will be needed. Clinical instructors are needed at health care facilities. Also necessary for implementation are the teacher manual, the student manual, and a program guide for the coordinator. Normal classroom facilities provide sufficient space.

**financial requirements** Teacher's manual, \$20; Comparative Medical Practices (set of 80 colored slides for use with teacher's manual), \$50; student manual (one per student), \$5; student training record booklets (nursing, clinical lab assistant), 35¢ each; coordinator's program guide, \$5.

**services available** Awareness materials are available. Two experienced seminar leaders can assist groups interested in adoption. Contact Marilyn Morgan; Beverly Hills High School; 241 S. Moreno Dr.; Beverly Hills, CA 90212; (213) 277-5900; or Jerome Epstein; 13948 Milbank St.; Sherman Oaks, CA 92413; (213) 981-2634 or 825-2608 (expenses must be paid).

**contact** Miles H. Anderson; University of California Extension; Allied Health Professions; Sakin Bldg.; 10962 LeConte Ave.; Los Angeles, CA 90024. (213) 825-2608.

SECTION B-5: EARLY CHILDHOOD/PARENT EDUCATION\*

ADDED DIMENSIONS TO PARENT AND PRESCHOOL EDUCATION -- Colorado . . . . .	B-5.3
AKRON FOLLOW THROUGH: Project SELF (Selected Educational Learning Fundamentals)	
-- Ohio. . . . .	B-5.4
BAPTIST HILL KINDERGARTEN -- Alabama . . . . .	B-5.5
CENTRAL INSTITUTE FOR THE DEAF EARLY EDUCATION PROJECT -- Missouri . . . . .	B-5.6
CHAPTER I, ECIA PRESCHOOL (formerly Title I ESEA Preschool) -- Alabama . . . . .	B-5.7
the CHILD DEVELOPMENT CENTER -- California . . . . .	B-5.8
CHILD-PARENT CENTERS ACTIVITY (CPC) -- Illinois. . . . .	B-5.9
CLINCH-POWELL EDUCATIONAL COOPERATIVE: Home-Based Early Childhood Education Program -- Tennessee . . . . .	B-5.10
COGNITIVELY ORIENTED PRESCHOOL CURRICULUM -- Michigan. . . . .	B-5.11
COMMUNICATION PROGRAMS -- Washington . . . . .	B-5.12
COMMUNITY SCHOOL 77 BRONX BEHAVIOR ANALYSIS FOLLOW THROUGH RESOURCE CENTER -- New York. . . . .	B-5.13
a COMPREHENSIVE PROGRAM FOR HANDICAPPED PRESCHOOL CHILDREN AND THEIR FAMILIES IN RURAL AND NON-URBAN AREAS -- North Dakota. . . . .	B-5.14
COMPREHENSIVE TRAINING PROGRAM FOR INFANT AND YOUNG CEREBRAL PALSIED CHILDREN (C.P. Project) -- Wisconsin. . . . .	B-5.15
DEVELOPMENTAL PLAY (DP): A Validated Pupil Personnel Services Demonstration Project -- Florida . . . . .	B-5.16
EAST ST. LOUIS DIRECT INSTRUCTION FOLLOW THROUGH -- Illinois . . . . .	B-5.17
FAMILY ORIENTED STRUCTURED PRESCHOOL ACTIVITY (Seton Hall Program) -- Minnesota. . .	B-5.18
FOLLOW THROUGH NONGRADED LEARNING MODEL: New York City/Hampton Institute -- New York. . . . .	B-5.19
FOLLOW THROUGH -- PORTAGEVILLE UNIT -- Missouri. . . . .	B-5.20
project HOME BASE -- Washington. . . . .	B-5.21
INDIANAPOLIS FOLLOW THROUGH PROJECT -- Indiana . . . . .	B-5.22
KANSAS CITY FOLLOW THROUGH PROJECT: Resource Center -- Missouri. . . . .	B-5.23
MCHP/VIP: Mother-Child Home Program of the Verbal Interaction Project -- New York. .	B-5.24
MECCA: Make Every Child Capable of Achieving -- Connecticut. . . . .	B-5.25
NORTHERN CHEYENNE FOLLOW THROUGH PROJECT -- Montana. . . . .	B-5.26
OAKLAND UNIFIED SCHOOL DISTRICT FOLLOW THROUGH PROGRAM: Learning Through Literature -- California . . . . .	B-5.27
PARENT-CHILD EARLY EDUCATION PROGRAM (Saturday School) -- Missouri . . . . .	B-5.28
PREVENTION OF LEARNING DISABILITIES: An Interdisciplinary Model -- New York. . . .	B-5.29
PROGRAMS FOR CHILDREN WITH DOWN'S SYNDROME -- Washington . . . . .	B-5.30
project REAL -- New Hampshire. . . . .	B-5.31

\*See Sectional Cross-Reference Index, p. D-9, for related programs.

RICHMOND (VIRGINIA) FOLLOW THROUGH RESOURCE CENTER -- Virginia . . . . .	.B-5.32
project STAY: School to Aid Youth -- Oklahoma. . . . .	.B-5.33
TRENTON FOLLOW THROUGH: Behavior Analysis Approach -- New Jersey . . . . .	.B-5.34
TULARE FOLLOW THROUGH -- California. . . . .	.B-5.35
WATERLOO FOLLOW THROUGH: Adaptive Learning Environments Model -- Iowa. . . . .	.B-5.36
WAUKEGAN FOLLOW THROUGH DEMONSTRATION RESOURCE CENTER -- Illinois. . . . .	.B-5.37
the WEEKSVILLE SCHOOL/BANK STREET COLLEGE FOLLOW THROUGH PROGRAM -- New York . . . . .	.B-5.38

**PROJECT** ADDED DIMENSIONS TO PARENT AND PRESCHOOL EDUCATION

An early childhood education program built on the belief that parents are their child's first and most effective teachers.

**target audience** Approved by JDRP for preschool children of all abilities, age 3-4, and their parents.

**description** Added Dimensions offers a comprehensive program with four interrelated components: Preschool, Parent Involvement, Developmental Screening, and Home Visits. For districts with no preschool and parent programs, the Added Dimensions program offers a comprehensive plan for beginning them. For districts with programs in these areas, it offers the opportunity to add components that will enhance them.

The Preschool Program offers twice-weekly sessions of two and one-half hours each for all three- and four-year-olds in the district. The curriculum includes objectives in the areas of personal-social development, motor development, aesthetic development, language development, and cognitive development. It stresses a hands-on approach with individual attention to children with special needs.

The emphasis of the Parent Involvement Program is on reinforcing the concept that parents are the most influential educators of their children and on providing support to parents in their role as educators. Parent activities include two to six preschool sessions with their child, regular work assignments at the preschool, small-group discussions led by trained teachers, and large-group meetings.

The Developmental Screening component utilizes the Denver Developmental Screening Test (DDST), a widely used screening tool that can be administered by trained paraprofessionals. Parents are involved in the screening procedure and discuss results with the teacher assistant. This helps parents to see their child realistically and to begin their association with the school on a note of shared concern.

Through the Home Visiting Program, every family receives an initial visit during which the DDST is given. Families that would benefit from follow-up calls are visited on a biweekly basis.

**evidence of effectiveness** In 1974, the year the project was validated, evaluation indicated that kindergarten children enrolled in the program scored significantly higher ( $p < .01$ ) on the Comprehensive Test of Basic Skills than those not enrolled. Attendance of parents at educational meetings increased by more than 60% during the time that Title III funds were available.

**implementation requirements** Program can be implemented in one school or district-wide. District should provide as many support services as possible, so that tuition or grant money can be spent on direct educational services to children and families. Certified head teacher with training in early childhood education and group-discussion methods and teacher assistants with six quarter-hours of college credit in early childhood education deliver program. If space in schools is not available, churches and other buildings can be used.

**financial requirements** Total estimated cost-per child: \$260 per year. Project materials, including curriculum guide and teacher handbook: \$33. Start-up costs vary, depending on the equipment that needs to be purchased. Program can be supported by tuition payments, Chapter I funds, or local school district funds.

**services available** Awareness materials are available at no cost. Visitors are welcome by appointment. Training is available at project site or adopter site (expenses must be paid).

**contact** Marge Melle, Project Director; Early Childhood Education; Jefferson County Public Schools; 1209 Quail St.; Lakewood, CO 80215. (303) 231-2346.

## **PROJECT**

AKRON FOLLOW THROUGH: Project SELF (Selected Educational Learning Fundamentals)

An individualized, structured, sequential instructional curriculum in readiness, reading, and mathematics leading to proficiency in the basic skills.

## **target audience**

Approved by JDRP for grades K-3. It has also been used with preschool and special education students and with intermediate grades, but no evidence of effectiveness has been submitted to or approved by the Panel.

## **description**

SELF is a combination of the Primary Education Project (PEP) and Individually Prescribed Instruction (IPI) developed by the University of Pittsburgh Learning Research and Development Center. PEP is the kindergarten or readiness component, while IPI focuses on developing specific skills in reading and mathematics.

The Akron SELF Program provides a continuous individualized educational experience for primary grade children. The major goal of the program is to enable each child to make steady progress toward mastery of academic skills. Achievement of this goal is facilitated by a structured curriculum in which each content area is comprised of behavioral objectives arranged by unit and level; an assessment system comprised of criterion-referenced tests that are part of the procedures for placement of students in the curriculum and for monitoring and guiding the students' learning progress; a management system that enables the teacher to provide individualized educational experiences for students; individualized instructional materials available from commercial sources; a monitoring and record-keeping system that depicts the location of each student in each curriculum area and facilitates diagnostic teaching. Test results are used to prescribe learning tasks for students. Although students progress through the curriculum at various rates, a management system has been developed to gather children for group experiences.

PEP presents 400 hierarchical prereading and math objectives to kindergarten children in six learning areas: quantification, classification, visual motor, general motor, auditory motor, and letters and numerals. The New Primary Grades Reading System (NRS) is an individualized and adoptive reading system that is used to teach reading skills. Students learn to read by associating sounds with letters, blending sounds into words, and combining words into sentences. Supplemental math maintenance uses review sheets for additional math drill.

(The program was originally developed at the University of Pittsburgh's Learning Research and Development Center, but now operates as a Developer/Demonstrator at Akron, Ohio.)

## **evidence of effectiveness**

Evaluation data indicate that students in the Akron SELF program achieved at a higher level in mathematics and reading than previously tested control groups. However, the claim is stronger for reading. Tests used: Wide Range Achievement Test, annually, random sampling, each grade; and Stanford Achievement Tests, first grade, spring 1977. Participants were low-income urban students.

## **implementation requirements**

The curriculum can be adopted by an individual teacher, by one teacher at each grade level, or by a school. The program operates more efficiently with the assistance of a paraprofessional or volunteer. Selected curriculum components may be adopted, such as PEP, IPI math, or IPI reading. Personnel involved in implementation should participate in training.

## **financial requirements**

Start-up cost for PEP is approximately \$16 per learner; for IPI reading or math, \$13 per learner. These figures include instructional supplies, equipment, and staff training. No maintenance cost for PEP; for IPI reading or math, \$13 per learner. Per-learner costs are based on 25 students per class.

## **services available**

A Follow Through Resource Center.

Awareness materials are available at no charge. Visitors are welcome by appointment. Project staff are available to attend out-of-state awareness conferences (costs to be arranged). A one-week training session will be provided for persons interested in replication. Initial training will occur at the Akron site (travel expenses to be paid by the adopter). Cost of field visitations will be negotiated.

## **contact**

Jeanette Brown; Crosby School; 235 Smith St.; Akron, OH 44303. (216) 253-3287.

**PROJECT** BAPTIST HILL KINDERGARTEN

A school readiness project for five-year-old children who are educationally disadvantaged.

**target audience** Approved by JDRP for kindergarten students.

**description** Experiences are provided to help children increase their vocabulary, learn to speak in sentences, communicate more effectively, grow in independence and initiative, understand and deal with the world around them, and develop problem-solving skills. Learning centers are set up in each classroom. Daily programs emphasize the development of psychomotor skills. Children experience success daily, interact with peers and adults, and learn to respect the rights of others. Student needs are assessed and continuous evaluations are made to ensure program effectiveness. Each teacher has a trained aide. The program is monitored by a parent-involvement component.

One way this kindergarten differs from others is that it is housed in a separate building. In addition to the 10 kindergarten classes, there is a large indoor play area, a room for musical or rhythmic activities, and a cafeteria. The interior is unusually attractive with appropriate colorful furnishings, open shelving, and displays of students' art.

It also differs from many other kindergartens in the multiplicity of materials and equipment available. The abundance and variety of this material enable teachers to vary their approaches to meet the individual learning styles and needs of these five-year-olds.

**evidence of effectiveness**

stanine was six.

The Test of Basic Experiences (TOBE) was employed to measure student achievement. The mean pretest stanine was three; the mean posttest

**implementation requirements**

materials and begin a class similar to this one or more times.

Any system with a teacher certified in early childhood education and an aide trained through inservice may purchase the necessary project. Most systems that have adapted this program have visited

**financial requirements**

begin one unit like this project. Successful the program will be.

In addition to a teacher and aide who have had inservice training together, and appropriate furniture for five-year-olds, \$3,500 would be adequate to purchase. However, the more materials and equipment that can be purchased, the more

**services available**

Limited awareness materials are available. Visitors are welcome at the project site September through May, five days a week, between 8:00 a.m. and noon.

**contact**

Georgia Gaither Lucas; Butler County Board of Education; P.O. Box 160; Greenville, AL 36037. (205) 382-2665.

## **PROJECT**

### CENTRAL INSTITUTE FOR THE DEAF EARLY EDUCATION PROJECT

A program designed to help parents assume their natural role as the child's primary language teacher through parent-child interaction.

## **target audience**

Approved by JDRP for children under four years of age who have educationally significant hearing impairments, and their families.

## **description**

The core of the program consists of weekly individual sessions in a Home Demonstration Center. The sessions are parent-oriented so that families may realize their primary responsibility in the language development of their children. Sessions are individualized so that the program developed is the most appropriate for each family and child. They are held in a home-like setting and focus on typical daily household activities. This setting and focus aid parents in learning strategies and techniques suitable for use in their own homes. Emphasis is placed on helping parents provide a learning environment that takes into account the child's impaired auditory ability. Regular audiometric evaluations are conducted by staff audiologists. Since all hearing-impaired children have some residual hearing, early amplification combined with auditory training can significantly affect the child's acquisition of speech and language. Therefore, amplification is provided in order to maximize the child's use of his/her residual hearing. The Early Education Project or Clinic may lend the child an aid and follow up with observation and retesting before recommending a specific aid for purchase. Parent group meetings are an integral part of the program. They include group discussion meetings, which allow parents to explore their feelings and share their problems and solutions with other parents, as well as more didactic meetings, which respond to the parents' need for current, accurate, scientific information. Children over two are enrolled in short nursery class sessions taught by a teacher of the deaf trained in early childhood education. Parent participation is an important part of these classes. The development of social and behavioral skills in preparation for preschool is emphasized. Activities are designed to provide children with opportunities for social-communicative interaction paving the way for verbal interaction.

## **evidence of effectiveness**

The mean ratings of language ability of children from the Early Education Project differ reliably from those of children not in the program, and the scores increase consistently and reliably throughout all age ranges from two to six years. The steady increase in communication skill was measured using the Scales of Early Communication Skills.

## **implementation requirements**

A Home Demonstration Center, a small apartment, or rooms in an existing facility that can be converted into an apartment is needed. In some cases the families' homes can be used. A trained teacher of the deaf with additional specialization in early childhood education is required, as well as access to support services, including audiologic, psychometric, and follow-up educational services.

## **financial requirements**

The original nonrecurring installation costs total \$4,335 per pupil. The per-pupil cost in subsequent years is estimated at \$2,180 on the basis of figures from 1979-80. Costs include staff, training, equipment, consumables, salaries, and indirect costs.

## **services available**

This is a nonprofit agency. Some support comes from United Way. Materials describing the program, including videotapes, slide/cassettes, and printed material, are available at cost. Training is conducted at the project site. Project staff can attend out-of-state conferences. Visitors are welcome by appointment.

## **contact**

Audrey Simmons-Martin, Director; Early Education; Central Institute for the Deaf; 818 S. Euclid; St. Louis, MO 63110. (314) 652-3200.

**PROJECT** CHAPTER I, ECIA PRESCHOOL (formerly TITLE I ESEA PRESCHOOL)

An early childhood diagnostic/prescriptive program providing individualized instruction for each child.

**target audience** Approved by JDRP for kindergarten students.

**description** This program provides an open classroom design for kindergarten activities. Measuring and weighing activities, number concept activities, nature observation, book viewing, musical activities, home life simulation, water activities, and flannel board sharing occur in learning centers in each classroom. Intellectual development is stressed. Instruction is divided into the following units: home and school, health and safety, community helpers, the farm, the city, pets, woodland animals, holidays, seasons, the five senses, foods, and our bodies. In addition, children are taught over 100 specific concepts in language, math, and science.

**evidence of effectiveness** The California Achievement Test, Form C, was administered pre/post in 1977, following JDRP approval. Teacher-made checklists and continuous teacher evaluation are also used. Financial and evaluation data were collected in 1974-75.

**implementation requirements** No special facilities or equipment are required. Each class of 20 children requires one teacher and at least one aide. Instructional units are independent; some or all may be implemented.

**financial requirements** Teacher-made materials and the curriculum guide were developed over a period of 10 years. Parent participation manual and curriculum guide are out of print; there are no current plans to reprint.

**services available** No awareness materials are available. Visitors are welcome by appointment. No training is conducted at the project site. No training is conducted out of state. Project staff can attend out-of-state conferences (expenses must be paid).

**contact** Bonnie Nicholson; Bessemer City Schools; 412 N. 17th St.; P.O. Box 868; Bessemer, AL 35021. (205) 424-9570.



## **PROJECT** THE CHILD DEVELOPMENT CENTER

A model community center designed to identify children's special developmental needs and provide appropriate interventions before school begins, through joint cooperation of parents, kindergarten teachers, and special educators.

### **target audience**

Approved by JDRP for three- to five-year-olds of all abilities, their parents, kindergarten teachers, and special educators.

### **description**

The Child Development Center is based on the conviction that the sooner educators identify young children's developmental needs and work together with parents to achieve effective interventions, the stronger the chance of children's early success in school. This program offers an ongoing format of child/parent services starting the September before the child is age-eligible for kindergarten. This format includes a diagnostic center, where preschoolers receive evaluations from a school nurse, speech/language specialist, and psychologist; a parent resource center, where parents meet with educators to discuss early-childhood topics and concerns; a child-study center, where preschoolers meet periodically with peers for group interaction while being observed by parents and center staff; and a referral center, which provides children having special developmental needs with interventions before school begins, and which transmits information on all program children to parents and kindergarten teachers.

The program supplies a motivational slide-tape presentation for parents and educators, a parent handbook containing child-development articles and materials, a teacher's manual containing instructions and materials for implementing the program, and an end-of-year program booklet for recording and relaying developmental information about the child to parents, kindergarten teachers, and special educators.

### **evidence of effectiveness**

In 1976, experimental children achieved significantly higher posttest scores than control-group counterparts on the McCarthy Scales of Children's Abilities (Verbal, Perceptual, General Cognitive, Memory, and Motor subtest) and the Goldman-Fristoe Tests of Articulation.

### **implementation requirements**

Support of educators, parents, community, and school board or other appropriate agency for a school-based preschool diagnostic program is essential. The project may be adopted by a school district, a local school, a preschool, a Head Start project, or an adult education program. A special site for the Center is useful but not essential. Ongoing communication and cooperation between parents, kindergarten teachers, and program staff (school nurse, psychologist or child-development specialist, and speech/language specialist) are essential to program effectiveness.

### **financial requirements**

Based on 200 preschoolers and their parents, start-up costs average \$53 per child using only within-district staff and \$60 per child using supplemental testing staff. Both figures include assessment, personnel inservice, program test materials, and clerical assistance. Child Development Center Dissemination Kits (including Parent Handbook, Teacher Manual, Child Development Articles book, and Master Sheet Portfolio) cost \$100.

### **services available**

Awareness materials are available at no cost. Visitors are welcome at project site and at additional demonstration sites in the home state by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is provided at project site (costs to be negotiated). Training is also conducted at adopter site (costs to be negotiated).

### **contact**

Helen Reichman, Project Director; The Child Development Center; 8325 Laurelwood Dr.; Huntington Beach, CA 92646. (714) 964-3229 or 847-2551.

**PROJECT** CHILD-PARENT CENTERS ACTIVITY (CPC)

An early intervention program stressing language development and reading readiness for three-, four-, and five-year-old children.

**target audience** Approved by JDRP for educationally deprived pupils, preschool to grade 3, from low-income families. This program now operates only for preschool and kindergarten.

**description** The Child-Parent Centers provide an individualized, locally designed, highly structured half-day instruction program for preschool and kindergarten children. Supplementary and support services are provided by school nurses, social workers, speech therapists, and curriculum specialists.

CPC activity heavily emphasizes parent involvement, recognizing that the parent is the child's first teacher and that home environment and parental attitude toward school influence a child's academic success. A parent-resource teacher is provided to work solely with parents. Parents are trained to instruct their children at home and are also involved in the school program. Potential adopting school districts may be interested in adopting the parent component in conjunction with their existing early childhood programs. The program can be easily adapted for any audience.

**evidence of effectiveness** Data obtained from the Metropolitan Reading Readiness Test administered at the end of kindergarten indicated that 82% of the children were ready to read as compared with 69% of the average population. Currently, data are collected from the Comprehensive Test of Basic Skills, Level A.

**implementation requirements** Smallest adopting unit is a preschool-kindergarten classroom enrolling 35 to 40 children. A parent room is required and should include stove or hotplate, refrigerator, sewing machine, work area, and study area. Staffing: two teachers. The parent-resource teacher may be part-time if only one classroom is involved. The parent program may be adapted/adopted in conjunction with the adopting district's existing programs.

**financial requirements** Instructional materials, \$100 per child. Materials for parent component, approximately \$2,500.

**services available** Services available through state facilitators on request. Awareness materials are available. Visitors are welcome by appointment. Training is available at project site. Project staff may be able to attend out-of-state conferences (expenses must be paid).

**contact** Velma Thomas, Director, or Dorothy Kellberg, Administrator; Child-Parent Centers; Chicago Board of Education; Room 1150; 228 N. LaSalle St.; Chicago, IL 60601. (312) 641-4585 or -4590.

## **PROJECT**

CLINCH-POWELL EDUCATIONAL COOPERATIVE: Home-Based Early Childhood Education Program

A home-based early childhood education program using parents as the primary teachers of their own children.

### **target audience**

Approved by JDRP for three- and four-year-old children and their parents. It has also been used with children from birth to age three, but no evidence of effectiveness has been submitted to or approved by the Panel.

### **description**

This program consists of an integrated three-phase approach to early learning. The curriculum component has three elements. The first is designed for use by parents in the home. A weekly publication, the four-page Parent Guide, contains a descriptive text on some topic of interest -- child development, health and nutrition, parenting, the role of social services -- and suggested activities for every day of the week to be performed by parent and child. The second element is a summary of Parent Guide contents, which goes to the teacher, while the third is addressed to the home visitor and coordinates activities prescribed by the Parent Guide with the weekly visitation. The home visitation component entails a visit to the home of each child enrolled in the program once a week. Tailored to the needs of each individual child, these visits last approximately one hour. The home visitor delivers the Parent Guide and helps prepare the parent to teach the child by explaining the curriculum materials and, when needed, by demonstrating each suggested daily educational activity. The home visitor also lends toys, books, and other child-centered materials to parents. The classroom component, under the direction of a teacher certificated in early childhood education, makes use of a paraprofessional aide and parent volunteers. The teacher and aide travel to selected locations and spend one half-day per week teaching 10-15 local children. Sessions last between two and three hours and offer the children an opportunity to socialize and learn in a group situation. In areas where facilities are available, the classroom sessions are conducted at stationary facilities.

An intensive three-week preservice program for the entire staff was initiated prior to beginning the program. Thereafter, a full day each week was devoted to inservice training for project staff to exchange ideas and review cooperatively the next week's activities. At the sites where the project was first implemented, the four systems are currently operating programs at a level greater than when the project began. Their efforts have been extended to home-based preschool handicapped programs.

### **evidence of effectiveness**

Tests used: Peabody Picture Vocabulary Test, Metropolitan Readiness Test. Children who participated in the program had superior scores in pretest/posttest comparisons. Follow up showed gains made by program children still evident in elementary school. Parents' attitudes were also positively affected by the program.

### **implementation requirements**

Salaries for staff (project director, teacher(s), and five home visitors per teacher). Classroom space for group sessions with children and parents. Curriculum materials. Travel for home visitors. One week on-site training attended by adopting site staff. Two days of follow-up training at adopting site. Smallest unit that could use program is one classroom teacher.

### **financial requirements**

Program costs averaged \$500 per child for an operational year. Curriculum materials produced by the staff are available at cost (write for price list). Most curriculum materials can be made by parents and volunteers.

### **services available**

Awareness materials are available at no cost. Visitors are welcome by appointment. Project staff are available to attend out-of-state awareness meetings (expenses must be paid). Training is conducted in Knoxville, Tennessee (adopter pays only its own costs). Follow-up technical assistance is available by telephone and mail. On-site follow-up is available to adopters if all expenses are paid.

### **contact**

William W. Locke, Executive Director; Clinch-Powell Educational Cooperative; P.O. Box 279; Tazewell, TN 37879. (615) 626-4677.

**PROJECT** COGNITIVELY ORIENTED PRESCHOOL CURRICULUM

A preschool program with the designated purpose of mainstreaming mildly and moderately handicapped children with nonhandicapped children.

**target audience** Approved by JDRP for preschool children of all abilities.

**description** The Cognitively Oriented Preschool Curriculum is an open-framework model derived from Piagetian theory. The curriculum originated from one of the first early childhood intervention programs of the 1960s, the Ypsilanti-Perry Preschool Project, and was further developed with funding as a demonstration project in the First Chance Network for preschool handicapped. Through designated key experiences for children, teaching and parenting strategies, and child-observation materials, the curriculum provides a decision-making framework. Within this framework, teachers design a classroom program that reflects the expressed needs and interests of the children being served. This approach emphasizes the identification of the child's status on a developmental continuum by examining his/her strengths and accomplishments. The project views discrepancies in behavior between handicapped and nonhandicapped age peers as developmental delays, not as deficiencies. Basing their tasks on this orientation, teachers initiate developmentally appropriate experiences in the classroom that reflect the basic long-range goals of the program. These goals are: to develop children's ability to use a variety of skills in the arts and physical movement; to develop their knowledge of objects as a base of educational concepts; to develop their ability to speak, dramatize, and graphically represent their experiences and communicate these experiences to other children and adults; to develop their ability to work with others, make decisions about what to do and how to do it, and plan their use of time and energy; and to develop their ability to apply their newly acquired reasoning capacity in a wide range of naturally occurring situations and with a variety of materials.

The plan-do-review sequence encourages children to achieve these goals by involving them in decision-making and problem-solving situations throughout the day. The teacher's role is to support the children's decisions and encourage them to extend learning beyond the original plan. Similarly, teachers rely on a basic room arrangement and daily routine designed to stimulate and support active learning.

**evidence of effectiveness** Program children demonstrated significant gains on the McCarthy Scales in the areas of verbal, quantitative, general cognitive, memory, and perceptual development, as well as in problem-solving skills and social skills (as measured by classroom observation).

**implementation requirements** The model can be used in an individual classroom. Inservice training for the classroom teaching team is required.

**financial requirements** The approximate cost per child for the initial year of implementation is \$171 for personnel training, \$55 for materials, and \$23 for trainer travel. Total cost for the second and subsequent years is \$48 per child. Cost calculations assume that the curriculum is being adopted by an existing program; personnel and facility costs for the classroom are not taken into account.

**services available** Awareness materials are available at no cost. Visitors are welcome at project site by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is provided at project site (expenses must be paid). Training is also conducted at adopter sites (expenses must be paid).

**contact** Clay Shouse, Acting Director; Preschool Education Department; High/Scope Educational Research Foundation; 600 N. River St.; Ypsilanti, MI 48197. (313) 485-2000.

**PROJECT** COMMUNICATION PROGRAMS

A program to help young children who have a variety of communication and language handicaps.

**target audience** Approved by JDRP for children ages birth to 6 in early childhood programs with identified or suspected communication deficits (not related to current hearing loss).

**description** The Communication Programs serve classes of young children whose delays and disorders result from a variety of known and unknown etiologies frequently accompanied by other developmental lags or associated handicaps. The program offers training for classroom teachers and Communication Disorders Specialists (CDSs) in classroom management of communication behaviors. It also provides experience in team decision making. Teachers and/or parents are asked to identify their concerns about a child's communication ability or language skill. Assessment tools are used to support the concern and document the severity of the problem. Data taken during classroom activities provide supplementary information. Team members plan individualized programs for each child, arrange for implementation of these programs, and see that data are gathered. Individualized instruction essential to management of target behaviors is achieved by furthering communication skills in every activity of the school day. All language programs are related to the child's communication needs in the environment. Mutual decision making and implementation of programs immediately useful to the child are critical elements of the procedures. Personnel trained in this program have identified the following competencies as uniquely acquired at the training site: ability to identify language problems through classroom observation; ability to plan management strategies that can be implemented in the classroom; ability to arrive at decisions with members of a different discipline. The classrooms are staffed by teachers and Communication Disorders Specialists who work together. The CDS assists the teacher in developing strategies to promote communication, and plans and implements finely sequenced programs in a variety of language areas. Parents are an integral part of the team and are involved in the entire process from the time the first goals are established. They are invited to observe regularly and are involved in the home programs when appropriate.

(Communication Programs and Programs for Children with Down Syndrome were both developed by the Model Preschool Center for Handicapped Children, University of Washington, Seattle).

**evidence of effectiveness** Range of monthly gains in months for project students, 1973-74 -- Peabody Picture Vocabulary Test: 1.18-1.50; Sequenced Inventory of Communication and Language Development/Receptive Section: 1.30-1.86; SICLD/Expressive Section: 1.67-2.05.

**implementation requirements** The essential components needed to implement the Communications Model are a teacher and a CDS speech-language clinician. Ordinary school materials and room arrangements are used. Developmentally ordered assessment tools are needed to document child progress. Training can be provided at the project site or at the Experimental Education Unit.

**financial requirements** Local costs include salaries for qualified teacher and CDS, equipment, supplies, building maintenance, and transportation typical of any quality program.

**services available** Awareness materials are available. Visitors are welcome. Inservice sessions can be arranged on request (costs to be arranged). Training is conducted at the project site (adopter site must partially subsidize trainer costs as well as cover its own costs). Training is conducted out of state (expenses must be paid). Project staff can attend out-of-state conferences (expenses are covered).

**contact** Rebecca R. Fewell, Director; Model Preschool Center for Handicapped Children; Experimental Education Unit WJ-10; Child Development and Mental Retardation Center; University of Washington; Seattle, WA 98195. (206) 543-4011.

**PROJECT** COMMUNITY SCHOOL 77 BRONX BEHAVIOR ANALYSIS FOLLOW THROUGH RESOURCE CENTER

A public school K-3 program.

**target audience** Approved by JDRP for children grades K-3 and their families. This program has been used in private and public school settings for children with learning and/or emotional handicaps, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** The primary programmatic goals of Community School 77 Bronx Behavior Analysis Follow Through, developed in cooperation with the University of Kansas Behavior Analysis staff, are grade-level performance in reading, mathematics, handwriting, and spelling. The instructional program, which provides structured early childhood basic skills development, emphasizes three key components: instructional procedures and curricula that allow for close and systematic monitoring of children's academic progress to ensure grade-level achievement by the end of the school year; positive reinforcement and motivational techniques that facilitate the maintenance of a warm, approving classroom environment; and a rotating 40-day cycle training parents to teach to ensure their influence on classroom aims and practices. Policy formation on the parent level takes place in a Parent Policy Advisory Council which, in conjunction with the efforts of school personnel, creates an environment suited to reversing the history of academic failure among low-income children. Other critical factors contributing to academic progress are frequent classroom planning sessions and intensive staff training activities. Provision is made for supporting health, nutrition, and social services through the assignment of staff, ensuring a comprehensive approach to the total development of each child.

**evidence of effectiveness** Results of testing with the Wide Range Achievement Test showed that the average achievement gain for all pupils during the C.S. 77 Bronx Behavior Analysis Follow Through experience was approximately one year per year of instruction.

**implementation requirements** Appropriate staffing (professional and/or paraprofessional, parent volunteer) is needed for small-group instruction (three adults optimum, two manageable, working with three or four groups of children). Provision can be made for team planning and staff-development personnel (assistant to principal, teacher trainer, etc.). Comprehensive health and social services can be provided through utilization of school/community resources.

**financial requirements** Costs include staff training time and classroom management manuals. Additional classroom personnel can include one paraprofessional aide, one parent aide, or both. Costs for staff training and parent participation may be met by redirection of current resources.

**services available** A Follow Through Resource Center.

Awareness materials are available at no cost. Interested parents, teachers, and administrators are welcome to visit C.S. 77 Bronx BAFTRC. Project staff are available to attend out-of-state awareness meetings. Training is provided at project site. Training is also available at adopter site. Individualized curricula targeted for end-of-year grade-level achievement are commercially available. Staff training, classroom management, and monitoring procedures are described in manuals that are free to adopters.

**contact** Ruth Khelseau, Coordinator, or Louise Cooper Sneed, Resource Center Manager; Community School 77 Bronx Follow Through Resource Center; 1250 Ward Ave.; Bronx, NY 10472. (212) 893-8991 or -9855.

**PROJECT**

A COMPREHENSIVE PROGRAM FOR HANDICAPPED PRESCHOOL CHILDREN AND THEIR FAMILIES IN RURAL AND NON-URBAN AREAS

A comprehensive program providing for maximal growth and development of handicapped preschool children and their families in rural areas.

**target audience**

Approved by JDRP for multicategorically handicapped preschool children, birth to age 6, and their families.

**description**

The program consists of four components on a continuum from prevention to intervention. On the prevention end of the continuum is The Magic Kingdom: A Preschool Screening Program, which identifies children ages 3-1/2 through 6 who require more intensive follow-up evaluation, and which maintains cost effectiveness through extensive parent involvement. Next on the continuum is Parents and Children Together (PACT), a parent education program that provides prevention and early intervention activities. In PACT, parent facilitators are recruited and parent groups are formed. These groups meet in members' homes to discuss prepared written packets concerning behavior management and social-emotional, speech and language, motor, and cognitive development. Stimulating to Potential (STP) begins the intervention end of the continuum, providing in-home education services to handicapped preschool children. Children enrolled in STP are seen weekly by a home teacher, who develops individual education plans (IEPs) for the children and trains the parents to implement these plans. Guidance and instruction from the home teacher are provided to parents while they implement the IEPs with their own children. The Therapeutic Evaluation and Treatment Center (TETC) provides the most intensive intervention of the four components. In this classroom program, IEPs are developed for each child and implemented by a multidisciplinary staff, with parents observing and participating. In both TETC and STP, observational data collection procedures are used to monitor implementation and to make program updates and revisions as needed.

**evidence of effectiveness**

Effectiveness of The Magic Kingdom was demonstrated through correlation of results with results from Metropolitan Readiness Test; of PACT, through pre/posttesting of cognitive gains by parents, parent effectiveness, attendance, and projects; of STP, through pre/posttesting of children in developmental areas with Alpern-Boll Developmental Profile, which showed average gains of .98 to 1.41 months per month of enrollment; of TETC, through pre/posttesting of children in developmental areas with project-developed instrument, which showed average gains of 1.2 to 1.7 months per month of enrollment.

**implementation requirements**

For implementation of The Magic Kingdom: two days of training for one paraprofessional; for PACT: two to three days of training for one professional (a paraprofessional can replicate PACT but generally requires four to five days of training); for STP: five days of training for two professionals; for TETC: five to 15 days of training, depending on experience and background, for three professionals.

**financial requirements**

Average costs: \$4 per child for Magic Kingdom; \$30 per family for PACT (including travel and equipment, excluding space); \$1,215 per family per year for STP; \$1,331 per child per year for TETC (including staff, materials, utilities, space, and travel).

**services available**

Awareness materials are available. Visitors are welcome by appointment. Workshops, speakers, and training in all four exemplary program components as well as follow-up services after training are available at project site and adopter site. Costs are negotiable.

**contact**

William F. Hoehle II, Director of Children's Services; Southeast Mental Health and Retardation Center; 108 S. Eighth St.; Fargo, ND 58103. (701) 237-4513, ext. 350.

**PROJECT** COMPREHENSIVE TRAINING PROGRAM FOR INFANT AND YOUNG CEREBRAL PALSIED CHILDREN (C.P. Project)

A program serving children three years of age and younger having a primary disability of moderate to severe neuromotor handicap with physical impairment severe enough to limit motor activity.

**target audience** Approved by JDRP for children three years of age or younger possessing a primary disability of moderate to severe neuromotor handicap with physical impairment of severe dimensions limiting motor activity, and the professionals who serve them.

**description** Children admitted to the Cerebral Palsy Project exhibit feeding, speech, and/or language problems. The children receive a panorama of services, including physical therapy, nutrition, psychological therapy, speech pathology, occupational therapy, special education, social service, and medical service. The primary focus of project activities is on two instructional programs, the Pre-Speech Program and the Language Stimulation Program. Parents take an active part in their children's therapy programs.

To date, 70 agencies in the following states are replicating components of the program: Alabama, Arizona, Arkansas, California, Colorado, Florida, Illinois, Iowa, Maryland, Michigan, Minnesota, Montana, New Hampshire, New York, Ohio, Oregon, Pennsylvania, Tennessee, Texas, Washington, and Wisconsin. Replicating agencies include school systems, rehabilitation centers, and hospitals serving children ages birth to three years. Three-member teams from each agency are trained in a six-day Fundamental Guidelines Course, and speech pathologists are trained in the use of the Pre-Speech Assessment Scale, which has been specially developed through this project.

**evidence of effectiveness** Pre- and posttest data were analyzed using the Bzoch-League Receptive-Expressive Emergent Language Scale, Mecham Verbal Language and Development Scale, Pre-School Language Scale, and Peabody Picture Vocabulary Test. The mean number of months gained on three of five instruments approaches that expected in normal growth (12 months' gain over 12 months). Data were collected for three years during demonstration project.

**implementation requirements** A full-time speech pathologist, a physical or occupational therapist, and one other professional are required to attend a six-day workshop. The speech pathologist returns for a course in the Pre-Speech Assessment Scale. The adopting agency must reproduce at least one aspect of the project (Pre-Speech Program, Language Stimulation Program, or Parent Participation Program) within the given structure of that agency's operation. Evaluative tools and treatment guidelines of the project must be implemented within each program aspect replicated. A minimum of three staff members is required on the replication team.

**financial requirements** The three full-time professionals on the team must be allowed paid time off to attend a six-day workshop; the speech therapist must attend an additional workshop. Adopting agencies must pay general tuition fee, travel expenses, and room and board for each professional attending. A materials list is available upon request.

**services available** Awareness materials are available. Visitors are welcome by appointment. Project staff can attend out-of-state conferences (expenses are covered). Training is conducted at the project site for confirmed adopters (project staff expenses must be partially subsidized). A follow-up technical assistance site visit is made to each adopter.

**contact** Rona Alexander; Demmer-Kiwanis Children's Center; Curative Rehabilitation Center; 9001 W. Watertown Plank Rd.; Wauwatosa, WI 53226. (414) 259-1414.



## **PROJECT**

DEVELOPMENTAL PLAY (DP): A Validated Pupil Personnel Services Demonstration Project

A training program for adults who wish to work with young children in a relationship-focused activity-based intervention program.

### **target audience**

Approved by JDRP for small groups of children ages 2-6 with learning and social behavior problems. This program may offer greater potential for larger groups of normal children ages 2-6, but no evidence of effectiveness has been submitted to or approved by the Panel.

### **description**

Developmental Play is both a relationship-focused activity-based intervention program for young children and a training model in child development and behavior for college students, pupil service workers, teachers, parents, and paraprofessionals. Although the focus is on play rather than school work, it is a structured program in which participants (first child-to-adult and then child-to-child) get to know each other by having a good time together. In addition to having fun, the children are encouraged to become aware of and express their feelings. When successfully implemented, the program creates the atmosphere of a large family whose members experience warmth, caring, and openness with each other.

Small groups of children meet together with the same number of adults. Each child is assigned to one adult who becomes that child's parent for that hour. The goal is to stimulate an attachment relationship between the adults and children just as "good" parents become attached to their children. The rationale is that through this attachment process the child learns the basics for being able to learn reading, writing, and arithmetic in a school setting.

Weekly sessions are divided into three parts: individual child-adult play, circle time for group activities, and juice time for closure. Supervision is provided for participating adults to help them analyze their experiences with the children.

### **evidence of effectiveness**

Children participating in the DP program one hour per week for a minimum of five months made gains in intellectual functioning as measured by the Wechsler Intelligence Scale for Children. Children in control groups did not make gains.

### **implementation requirements**

Internship training for people with backgrounds in psychology, social work, early childhood education. Follow-up visits to sites. Follow-up and advanced training for leaders. On one level, the DP approach can be utilized as an enrichment program for whole classes, grades K-3, by using the circle time activities. It is primarily a training program that requires intensive training for the adult leaders.

### **financial requirements**

When implementing DP as a remedial program for small groups of children with learning and social behavior problems, the per-learner start-up costs for a three-year program are less than \$20. There would be no additional per-learner monthly operational costs for a school with an elementary school counselor or psychologist who could devote a minimum of one half-day per week to the program.

### **services available**

Awareness materials are available at no cost. Visitors are welcome at project site any time by appointment. Project staff are available to attend out-of-state awareness meetings (all expenses must be paid). Training is conducted at project site (all expenses must be paid). Training is also available at adopter site (all expenses must be paid). Implementation and follow-up services are available to adopters (all expenses must be paid).

### **contact**

Ralph E. Bailey, Director; Pupil Personnel Services Demonstration Project; Euclid Center; 1015 Tenth Avenue North; St. Petersburg, FL 33705. (813) 822-0158 or 442-1171.

**PROJECT** EAST ST. LOUIS DIRECT INSTRUCTION FOLLOW THROUGH

A comprehensive early childhood program for students in grades K-3.

**target audience**

Approved by JDRP for grades K-3. The program was developed for educationally and economically disadvantaged students.

**description**

Components of the East St. Louis Follow Through program are instructional, staff development, health, and parental involvement. The primary emphasis is on the instructional components. The core of the instructional program is the Direct Instruction (Distar) curriculum materials in reading, mathematics, and language. Daily programmed learning tasks require immediate oral responses and must be mastered before advancement to higher levels of difficulty. Follow Through teaching strategies are applied to supplementary classroom materials.

Continuous monitoring of the system is provided by observation, videotaping of classroom performances, and a continuous testing program. Students are divided into groups, with a maximum of 10 pupils in low-performing groups.

The program is governed by a Parent Advisory Council which makes recommendations pertaining to all phases of the program. The three independent programs were developed in conjunction with Becker-Englemann from the University of Oregon. An adopter may implement the reading, mathematics, or language program in early childhood classes from K-3.

**evidence of effectiveness**

Students in the Follow Through Direct Instruction Program score significantly higher on achievement tests in the basic skills areas of reading, language, and mathematics than students from similar backgrounds not in the program. By the end of the third grade, pupils enrolled in the Distar model perform at or near national norms on standardized achievement tests (California Achievement Test, Metropolitan Readiness, Gates-MacGinitie Reading Test, and Wide Range Achievement Test).

**implementation requirements**

A potential adopter should involve administrators, teachers, and parents in the selection process. The three instructional programs are correlated but independent. Training requires three to five days for all three programs. Continuous communication and monitoring of the adopting site are required. Monitoring services required depend on the number of program components adopted.

**financial requirements**

Costs involved are materials, staff training, and monitoring. Start-up costs for a class of 30: approximately \$300 for one program, approximately \$1000 for all three. Maintenance cost of one program for a class of 30: approximately \$200 a year. Additional staff may be required if all three programs are adopted. Adopters must purchase the instructional programs. The commercial materials are readily available.

**services available**

A Follow Through Resource Center.

Awareness materials are available at no cost. Awareness sessions are provided on request at no cost to interested districts. Visitors are always welcome. Preservice training, inservice training, and monitoring of classroom progress are available at no cost to adopters.

**contact**

Geraldine H. Jenkins, Director, or Melvin Jackson, Program Disseminator; Project Follow Through; East St. Louis Board of Education; 551 N. 27th St.; East St. Louis, IL 62201. (618) 274-2838.

**PROJECT** FAMILY ORIENTED STRUCTURED PRESCHOOL ACTIVITY (Seton Hall Program)

A program that prepares the parent to be the child's first and most significant teacher.

**target audience** Approved by JDRP for parents and their children ages 4-5. This program has also been used with parents and their children age 3 through kindergarten, and with Title I and special education classes, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** A child's capacity to learn is not entirely inherited, but is developed. Most of a child's basic intelligence is formed by the time he/she reaches school age. Parents are very effective educators, but need information on teaching methods and materials. Home environment has a greater effect on academic achievement than does the quality of the school. A warm, intimate, continuous loving and sharing can grow from the parent's role as first teacher. Such relationships with parents give the child support, confidence, motivation, and feelings of self-worth basic to continuous success in education. This is the philosophy basic to District 742's venture into early childhood/family education.

Family Oriented Structured Preschool Activity is designed to involve all parents and their children in preschool and/or kindergarten activities that stimulate and reinforce interaction within the family. Parents accompany their child to the neighborhood elementary school once a week from September to May for a two-hour session. While at school, parents work and play with their children at learning stations set up in basic skill areas within an environment designed to meet the developing needs of the whole child. Parents observe formal model teaching and informal child-teacher interaction and participate in a discussion group facilitated by a parent educator. In this supportive, caring environment, they learn how to be with their child as they teach. Home-activity kits are designed to promote parent-child interaction and growth in basic skills, based on a validated assessment of the child's skills. Both parent and child become more confident in relating to the staff, principal, and kindergarten teacher, and this atmosphere of trust between home and school continues in grades K-6.

**evidence of effectiveness** Evidence of cognitive growth of the child is clear. The evaluation design measures the number of skills participants have when entering and leaving the program. Of 22 skills assessed, participants possessed over 25% more than comparison group. Parents indicated gains in personal development, parent-child relationships, their roles as parents and teachers, their ability to use the community as a learning resource, and their partnership with schools to their children's profit.

**implementation requirements** Adoption may be total or partial (to be negotiated). Staff: a parent educator and a teacher or teacher assistant. This staff can be part- or full-time, depending on number of families served. (Example: 30 families = three groups at two hours of contact time per week = six hours.) Facilities: a room for parent discussion group and an early childhood room. Many sites use a kindergarten room after school hours. Training: a two- or three-day workshop.

**financial requirements** Materials: a guide to establishing and directing the program, \$30; Parent Handbook, \$10; In-Center Learning Stations, \$15; Children's Room Curriculum, \$10; Parent Discussion-Group Curriculum, \$15; At-Home Activity Kits, \$45; Supplemental Home Activity Kits, \$35 (all available only to adopters). Equipment: for learning stations, \$300; one set of Activity Kits, \$260. Staffing: professional parent educator, part-time; professional or nonprofessional teacher assistant, part-time.

**services available** Awareness materials are available at no cost. Visitors are welcome Monday through Thursday, day or evening, October through April, by appointment. One-day in-depth awareness presentations are available for out-of-state meetings (costs to be negotiated). Two-day training workshops are available at project site six times yearly. Two-day training workshops can be conducted at adopter site (costs to be negotiated). Follow-up technical assistance can be provided by telephone or visit to adopter site.

**contact** Jeanne Chastang Hoodecheck, Program Director; Area Vocational Institute and #742 Community Schools; Seton Hall; 1204 7th Street South; St. Cloud, MN 56301. (612) 253-5828.

**PROJECT**

FOLLOW THROUGH NONGRADED LEARNING MODEL: New York City/Hampton Institute

A continuous-progress program in developmental skills for a multiaged nongraded classroom.

**target audience**

Approved by JDRP for grades K-3, especially for disadvantaged students.

**description**

To promote cognitive, affective, physical, and social development of disadvantaged children, two nonpublic schools in the Archdiocese of New York developed this comprehensive early childhood program in cooperation with the Hampton Institute and the Board of Education of New York City. The program features flexible grouping of children, individualized instruction, and a multifaceted approach to instruction. Nongraded classrooms group children of varying ability whose ages span two or three years. Multiaged grouping allows children of different ages to work together and to learn from one another. Every classroom has a cleared floor space for group meetings, tables for small-group activities, and learning centers for individual reinforcement and enrichment. A child moves from one developmental skill to the next as proficiency grows. To ensure constant progress, each child is monitored and evaluated continuously. The teacher, assisted by an aide, directs constant attention to the needs, interests, and past experience of the individual children. The language-experience, multicultural, and multitext approach enables the instructional team to draw on the child's experiences and abilities and to foster pride in self and ethnic background. The instructional team is trained in use of instruments developed for this purpose in the Nongraded Model. A full-time staff trainer called the implementor instructs teachers and aides in nongraded techniques, monitors use of these techniques, and assists in selecting and designing curriculum materials. To foster cooperation between school and home, a Policy Advisory Committee involves parents in decision making at every level, and parents participate in ongoing school activities.

**evidence of effectiveness**

Statistically, Nongraded Follow Through children have achieved national norms by the end of the first or second year in reading and math. The effects have been sustained at least one year beyond the program. The Stanford Achievement Test in reading and math is used as the measure.

**implementation requirements**

The adapting schools will have nongraded classes. Teachers and assistants must be trained in the Nongraded Learning Model. Teachers will use model methods such as learning centers, language experience, and the unit approach. Schools must be committed to individualized and group instruction. Adapting sites will be assessed as to the degree of model implementation once a year.

**financial requirements**

Adapting schools must provide released time for teacher training. The schools are encouraged to use teacher aides in the classes. Curriculum materials are available on the components of the model at a minimum cost.

**services available**

A Follow Through Resource Center.

Awareness materials are available at no cost. Visitors are welcome at school sites by appointment. Project staff are available to visit adapting sites (costs to be negotiated). Training can be at project sites, adapting site, and/or Hampton Institute. Training program will be determined by experience and needs of adapting schools (costs to be negotiated).

**contact**

Suzanne Dohm, Project Director; Guardian Angel School; 193 Tenth Ave.; New York, NY 10011. (212) 924-1420.

**PROJECT** FOLLOW THROUGH -- PORTAGEVILLE UNIT

A highly structured behavior modification approach to primary education.

**target audience** Approved by JDRP for grades K-3.

**description** This project has as its major goal the provision of a broadly enriched environment for poor children, both at school and in the home, including a full range of services in the areas that affect children's lives. Within the classroom, the Behavior Analysis Approach of the University of Kansas is implemented. The objectives of this approach are: to facilitate the child's mastery of basic skills, particularly in reading, arithmetic, and language, through the establishment of a "token economy" within classrooms; to train instructional staff to teach appropriate academic and social skills through the systematic use of positive reinforcement; to train instructional staff in the use of curriculum materials so that each child is enabled to work at his/her own level; and to train parents to work as paid staff in classrooms so they will have the opportunity to influence their children's education.

**evidence of effectiveness** This project was included in the national sample taken by Stanford Research Institute (SRI) to evaluate the Follow Through Research Program. Kindergarten children scored distinctly above the median on national norms. Second-grade students scored slightly below the national norm in Total Reading, which placed them among the four highest projects in the SRI national sample.

**implementation requirements** A model application of this program requires the presence of four adults in each classroom: a teacher, an assistant teacher, a permanent aide (parent), and a semester aide (parent). This can be modified to suit a budget. The program was originally implemented K-3, but would serve well for K-6 if financially feasible. A normal classroom is the only space requirement.

**financial requirements** Per-pupil cost was about \$722 in the 1978-79 school year.

**services available** Awareness materials are available. Visitors are welcome by appointment. No training is conducted at the project site. No training is conducted out of state. Project staff cannot attend out-of-state conferences.

**contact** Blaine Martin; Follow Through -- Portageville Unit; New Madrid County School District; P.O. Box 280; Portageville, MO 63873. (314) 379-3612.

**PROJECT** PROJECT HOME BASE

A program for "helping parents teach their own."

**target audience** Approved by JDRP for parents and their children ages eight months through four years. This program has also been used by parents and their children ages 5-8, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** Project Home Base was founded on the belief that parents are their child's first and best continuous teachers. It is aimed at supporting and enhancing the parents' teaching/parenting behavior, thereby influencing development of the child's growth/learning potential. The central feature of the project is a weekly home visit by a paraprofessional parent-educator who gives the parents information about child growth and development, health care, etc., and presents them with a task selected to meet the needs of the parent and child. The parents then work on that task with the child during the week. As a result of the weekly contacts, the parents are better able to identify and meet their child's developmental needs and to increase their use of 10 identified desirable teaching behaviors. As the child's developmental needs are identified and met, his/her growth/learning potential should be positively affected; consequently, the child will be better prepared to learn, becoming a more efficient and more effective learner.

Home Base Council consists of all project parents plus community agency representatives. Topics related to child development and parenting skills -- behavior patterns, discipline, self-concept, child health and nutrition -- are discussed at monthly Council meetings. Other parent concerns are shared at small-group home meetings.

Possible adaptations of Home Base include: using the home visit component with other programs such as handicapped, bilingual, Indian, or day-care; serving families with Head Start, kindergarten, and primary-school age target children; and using teachers, counselors, or social workers as parent-educators (home visitors).

**evidence of effectiveness** Principal project objectives were consistently met. On the Caldwell Pre-school Inventory (1972), Home Base Children fell in the 89th national percentile (mean score 48.2), while non-Home Base children fell in the 57th (mean score 40). Home Base children completed 92.5% of the tasks taught them by parents. Home Base parents increased their use of the 10 desirable teaching behaviors (as measured by a locally constructed, directed observation instrument).

**implementation requirements** As the core of this project, the home visit/parent teaching component must remain intact in any adoption. Adoption requires a three-day training program, preferably on-site. A three-day workshop in the home visit/task delivery system is required. Administrators are encouraged to participate in training.

**financial requirements** Yearly operational cost is about \$300 per learner (learners include parents and children), the largest percentage going for salaries. Overhead can be kept to a minimum if unused classrooms are used for staff offices and local auditoriums for large group meetings. Start-up costs depend on local conditions.

**services available** Awareness materials are available at no cost. Visitors are welcome from October to May by appointment. Training may be conducted at adopter site depending on staff availability (expenses must be paid).

**contact** Judy Popp, Director, or Darlene Montz, Diffusion Coordinator; Project Home Base; Yakima Public Schools; 104 N. Fourth Ave.; Yakima, WA 98902. (509) 575-3295.

**PROJECT** INDIANAPOLIS FOLLOW THROUGH PROJECT

A program using the behavior analysis approach to teach basic skills in reading, arithmetic, handwriting, and spelling.

**target audience** Approved by JDRP for low-income children, grades K-3, in racially mixed inner-city schools, parents of low-income children, and certified teachers working in low-income neighborhood schools. This program can be used in other socioeconomic settings to accommodate diversity of children's interests and abilities, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** The Indianapolis Follow Through (I-FT) program was developed in 1969 through a cooperative effort by the Indianapolis Public Schools, the staffs and parents at Public School #26, PS #27, and PS #56, and the Behavior Analysis sponsor at the University of Kansas. The main purpose of the Indianapolis Follow Through project is to teach basic skills in reading, arithmetic, handwriting, and spelling to children K-3. Teaching teams composed of a certified lead teacher, a teacher's aide, and one, two, or three parent aides conduct small-group instructional sessions during the school day. Kindergarten and first-grade classrooms are run as a "token economy," i.e., children earn tokens during instructional periods and later exchange them for whatever items they choose (and can afford) from a "menu" of teacher-prepared special activities. In grade 2 and 3 classrooms, children make daily work contracts with teachers in each subject area. By the terms of the contract, a child agrees to complete an individually prescribed assignment to earn a period of free time for a self-selected activity. Individualized curriculum materials are used in the classrooms. The teaching teams monitor each child's advancement toward a year-end book and page target in reading and arithmetic by keeping progress graphs.

Parents of I-FT children are encouraged to apply for classroom positions as teacher's or parent aides. Prospective members of teaching teams participate in one or more weeks of training in a demonstration classroom staffed by an experienced team. Before assignment to a teaching team, trainees must have demonstrated criterion levels of proficiency in behavior analysis instructional methods. Once given a classroom placement, trainees may be certified as "Behavior Analysis Teachers," provided they meet certain teaching performance standards over a period of weeks and provided their students show specified rates of academic progress for four consecutive weeks. A staff trainer visits each classroom at least once a week to conduct observations and offer guidance with particular classroom problems.

**evidence of effectiveness** Testing with standardized achievement tests (including WRAT, CAT, and MAT) since 1969 indicates at or above grade-level performance in reading, arithmetic, and spelling for all continuously enrolled I-FT children. I-FT children significantly outperformed inner-city comparison children. Replication has proven successful across eight years of implementation. Consumer satisfaction surveys for students, parents, and staff indicate "satisfied" or "very satisfied" clients.

**implementation requirements** Potential adopters interested in fully implementing the program must be prepared to offer small-group, individualized classroom instruction; have their teachers participate in a training program at the I-FT resource center and cooperate in follow-up implementation monitoring by consultants from the I-FT resource center; and submit periodic progress reports on the children's academic work to the I-FT resource center.

**financial requirements** Costs of replicating the program are basically those of staffing, staff training, and follow-up monitoring.

**services available** A Follow Through Resource Center.

Descriptive program materials are available. Program orientation workshops, including direct observation of I-FT classrooms in operation and consultation with resource center director about implementation options and costs, are available. Comprehensive in-classroom training at I-FT resource center is given. Posttraining technical assistance and ongoing evaluation for personnel at replication sites are provided.

**contact** Bessie Chumley-Jones, Project Director; Indianapolis Follow Through; 901 N. Carrollton Ave.; Indianapolis, IN 46202. (317) 266-4137.

**PROJECT** KANSAS CITY FOLLOW THROUGH PROJECT: Resource Center

An individualized K-3 basic skills program with built-in motivation and emphasis on small-group instruction.

**target audience** Approved by JDRP for low-income inner-city children in grades K-3 and their parents.

**description** The Kansas City Follow Through program introduces reading, mathematics, handwriting, and spelling at the kindergarten level and emphasizes the continuous mastery of these skills through third grade. Kindergarten and first grade are staffed with an aide, enabling children to receive small-group instruction.

A token reinforcement system is used to motivate kindergarten and first-grade students to work up to their maximum achievement levels. The school day is divided into "earn" and "spend" periods. During earns, or instructional periods, the children receive tokens for attention to and improvement of their work. Later in the day, the children spend the tokens by selecting one from a number of teacher-prepared activities.

Second- and third-grade students make daily work contracts with their teachers. By the terms of the contract, each child agrees to complete assignments in all subject areas in return for a period of free time in which to engage in self-selected activity.

Inservice training is provided for all teachers and aides. Training includes identifying, clarifying, and implementing instructional objectives as determined by program evaluation. Training extends to the implementation of a motivational system and the use of appropriate teaching techniques.

**evidence of effectiveness** Data from standardized tests (The Iowa Test of Basic Skills) indicate, on the average, Kansas City Follow Through children scored at or above the national norm. Follow Through children also exceed the achievement levels of the comparison groups.

**implementation requirements** Program may be adopted by any school regardless of location or population served. Adoption requires a joint decision by administrators and teachers. Training is required for all staff members involved in implementation at kindergarten level.

**financial requirements** Costs of instructional materials and training manuals are minimal. It is recommended that each classroom is staffed with a teacher and an aide. However, the program can be implemented with no additional staffing.

**services available** A Follow Through Resource Center.

Training and monitoring services by Kansas City Resource Center staff are available at no cost to the adoption site.

**contact** Mattie G. Story, Project Director; 1211 McGee, Room 814C; Kansas City, MO 64106.  
(816) 221-7565, ext. 333.



**PROJECT** MCHP/VIP: Mother-Child Home Program of the Verbal Interaction Project

A voluntary home-based program for preventing educational disadvantage in children two to four years old by enhancing parent-child interaction.

**target audience** Approved by JDRP for two-year-olds at risk for educational disadvantage.

**description** MCHP/VIP's theory is that cognitive and socioemotional growth is fostered by the preschooler and mother exchanging language (symbols for events and concepts) around interesting, conceptually rich materials. "Mother" may be any adult who has a primary, nurturing relationship with the child. Goals are to increase mother's positive interactive behavior, aid child's cognitive-socioemotional growth, and prevent school problems.

The program is based in the child's home, with twice-weekly, half-hour Home Sessions over two school years; the child's starting age is two. The number of sessions is geared to the mother's needs, with a maximum of 46 per year. Home visitors ("Toy Demonstrators") model techniques for the mother from a structured curriculum and involve the mother and child together in play. Materials consist of 12 books and 11 toys, given to the child each year in weekly installments. There is a Guide Sheet for each. The Guide Sheet is intended for the Toy Demonstrator, but it may also be used by the mother. All Guide Sheets list the same core concepts (e.g., colors, shapes) and related behaviors (e.g., matching, imagining), but examples of each from the related book or toy are given to encourage the adult to devise more examples of his/her own. The books and toys (chosen on 37 specific criteria, of high quality, and commercially available) and the Guide Sheets are progressively more complex. Toy Demonstrators are women, paid or volunteer. They need no work experience or education beyond high school. They learn their program skills from a college-degreed program coordinator in an initial eight-session training workshop, which is followed by weekly meetings and individual conferences.

Unique program features are the explicitly detailed two-year method; the structured yet flexible curriculum; the permanent gifts of quality curriculum materials; and specific techniques to guard against the program's possible intrusiveness (home visitors are trained not to teach or counsel).

**evidence of effectiveness** Rigorous research, 1965-78, with low-income minority families. 1978 postprogram group surpassed controls in maternal interactive behavior on VIP's "MIB" (267 to 157) and in child Binet I.Q. (107 to 101). Third grade: program group surpassed comparison on WRAT subtests (reading, 100 to 89; arithmetic, 102 to 91). Acceptance: 85-100%. Visits failed: 15%. Generalizability: 29 certified out-of-VIP replications, 1969-78, including two funded by Title I.

**implementation requirements** Staff consists of coordinator with college degree to supervise one paid or volunteer Toy Demonstrator per 15 mother-child dyads. Coordinator trained at D/D site. Adopter agrees to follow standards and methods of D/D, with minor variations for local adaptation, and to provide coordinator with office space for conferences and supplies, telephone, and part-time secretary. School districts, single schools, or other service organizations (family service agencies or mental health clinics), alone or in cooperation with a school system, may adopt.

**financial requirements** Based on 60 dyads (30 in start-up year), D/D per-unit cost for first two years is \$143 (staff training by D/D, 23%; overhead, 7%; books and toys, 70%); salaries not included. After first two years, per-unit cost is \$113 (staff training by D/D, 3%; overhead, 9%; books and toys, 88%). Additional costs: D/D's occasional long-distance telephone calls to adopter, and four visits to adopter site during the first two years.

**services available** Awareness materials are available at no cost. Visitors are welcome at project site any time by appointment. Project staff are available to attend out-of-state awareness meetings (travel and per diem must be paid). Training is conducted at project site (all expenses must be paid.) Training is also available at adopter site (all expenses must be paid). Implementation and follow-up services are available to adopters (all expenses must be paid).

**contact** Naomi Feldheim, Director, Demonstration Center, or Phyllis Levenstein, Executive Director; Verbal Interaction Project; SUNY at Stony Brook; 5 Broadway; Freeport, NY 11520. (516) 868-7770.

Developmental Funding: HEW: Children's Bur., (Ofc. of Human Devel.), Nat'l. Inst. of Mental Health, Nat'l. Ctr. for Ed. Comm. (USOE)

JDRP No. 78-165 Approved: 11/27/78

**PROJECT** MECCA: Make Every Child Capable of Achieving

An intervention program for vulnerable children (with a deficit in a skill area) in regular classes in their first years of schooling.

**target audience** Approved by JDRP for kindergarten and first grade.

**description** In the MECCA program, a learning disabilities teacher, with the help of the classroom teacher and a classroom aide, provides observation, profiling, and intervention within the regular kindergarten classroom for children with potential learning problems. The program utilizes a team made up of a special education teacher, a classroom teacher, and an aide, who together analyze the activities of the curriculum into the tasks that a child must accomplish in order to be successful in the activity. The purposes of this task analysis process are to think carefully about what is asked of the child and to observe where the child is successful and where he/she needs help. The intervention aspect of the MECCA program is based on the principle of beginning at the level where the child achieves success and proceeding sequentially through the difficult steps to new successes. After the initial training period, the classroom teacher and the special education teacher train each other to combine teaching strategies and curricula for individualized instruction.

**evidence of effectiveness** Extensive evaluation since 1973-74 by an outside evaluator demonstrates that children with potential learning problems receiving the MECCA program of early intervention show significant differences on standardized measures of readiness compared with children in alternative treatment and control groups. On standardized tests, 70% of the MECCA children evidence average or above-average performance in readiness skills at the end of kindergarten.

**implementation requirements** The program requires a minimum of one classroom teacher, one part-time aide, and 30 minutes per class session (per day or half-day) from a special education teacher. The program can be adopted by a single class or all K-1 classes in a district. Teachers must be willing to individualize teaching and share space and responsibilities with aide and special education teacher/consultant.

**financial requirements** Start-up and maintenance costs: approximately \$40 per pupil. Reduction in total cost occurs as fewer pupils in upper grades require special education services.

**services available** Awareness and curriculum materials are available. Visitors are welcome on school days.

**contact** Peter R. Chester, Supervisor; Meriden Public Schools; City Hall; Meriden, CT 06450.  
(203) 634-0003, ext. 317.

**PROJECT** NORTHERN CHEYENNE FOLLOW THROUGH PROJECT

An individualized early childhood approach to the teaching of basic skills utilizing parents as classroom teachers' aides.

**target audience** Approved by JDRP for grades K-3.

**description** The Northern Cheyenne Follow Through Project focuses on the basic skills of reading, math, and handwriting. It utilizes six concepts: token delivery or contract system for motivation; individualization; programmed curricula; progress monitoring; staff training and career development; and parent involvement.

The utilization of parents as classroom teachers' aides has provided an opportunity for active parent and community involvement. The parents also serve as advisors in making policy decisions concerning the project. With the use of programmed materials and effective progress monitoring, children are progressing at a rate that enables them to work at a level comparable to their respective grade levels.

**evidence of effectiveness** On WRAT Arithmetic Scale (1969), 62% of grade 1 Follow Through children scored at or above grade level. Comparison group: 24% (grade 2) at or above; 22% (grade 3) at or above.

**implementation requirements** Decision to adopt must be jointly considered by all school personnel in coordination with parents. Orientation and training for implementation should occur at all stages for all involved. Potential adopters should assign one monitor person to be responsible for communication and gathering of information and establish a parent or community advisory board for planning. Start-up requires training materials for staff development; these are not required for maintenance. Program implementation requires at least two years. The project begins in kindergarten and first grade and then advances to the second and third grades.

**financial requirements** The costs of replication are basically those for staff training and teachers' aides.

**services available** A Follow Through Resource Center.

Awareness materials and printed brochures are available for dissemination. On-site visits allow prospective clients to inspect project classrooms as well as to view slide presentations of all components of the project.

**contact** Moneda Cady, Director; Northern Cheyenne Follow Through Project; Lama Deer, MT 59043. (406) 477-6386 or -6387.

## **PROJECT**

OAKLAND UNIFIED SCHOOL DISTRICT FOLLOW THROUGH PROGRAM: Learning Through Literature

An interdisciplinary approach for students in grades K-2 utilizing a literature-centered curriculum.

### **target audience**

Approved by JDRP for grades K-2. This program is applicable to other grade levels, but no evidence of effectiveness has been submitted to or approved by the Panel.

### **description**

The Learning Through Literature model emphasizes the writing process and has as its overall goal children becoming authors. Reading comprehension and oral language skills provide entry into the writing process. Nutrition education is built into the curriculum through literature selections.

Units of work are organized under a central theme. All possible subject areas are integrated through the theme, with concentration on language-development activities.

The literature program supplements the existing basal reading program; it replaces the basal reader only in gifted and talented classrooms, where children have mastered decoding skills.

Learning Through Literature utilizes the library for literature selections. "Books" written by the children are used for additional reading material.

### **evidence of effectiveness**

Evaluation data show that Follow Through students, when compared to children not in the program, receive significantly higher scores in reading.

### **implementation requirements**

Adopter designates one person, preferably a reading resource teacher or librarian, to coordinate books, materials, and nutritional activities. Two-day training is required. Follow-up training six months after implementation is available if necessary or desired. Project supplies training and curriculum materials for use during first year of implementation at cost of postage only. Initial training and monthly inservice is based on this set of 10 publications. In following years, adopter staff develop curriculum materials of their own with assistance from the Resource Center.

### **financial requirements**

Trainer's expenses are shared. Adopter incurs cost of staff development. Optional costs include nutrition equipment and additional books for library or classroom.

### **services available**

A Follow Through Resource Center.

Awareness materials are available at no cost. A filmstrip-tape is available on loan to individual schools. Visitors are welcome from October to April by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at adopter site (costs to be negotiated). Follow-up technical assistance is available by telephone and mail.

### **contact**

Marilyn M. Jones, Resource Center Coordinator; Oakland Unified School District Follow Through Program; Resource Center; 1011 Union St.; Oakland, CA 94607. (415) 465-5073.

**PROJECT** PARENT-CHILD EARLY EDUCATION PROGRAM (Saturday School)

A program, available to all four-year-old children and to high-risk three-year-olds, structured to increase each child's chances for success in school.

**target audience** Approved by JDRP as a program for four-year-olds, including those with special problems. This program has been used in other settings with three-year-olds and their parents, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** The overall objective is to increase each child's chances for success in school, with a particular concern for locating, testing, and treating children with special problems. We test children beginning at age three, then provide the specialist staff for weekly home-teaching follow-up with child and parents on any problem that could interfere with later learning. When the children are four, we provide a comprehensive program -- called Saturday School -- that not only is still home-based and parent-child centered, but brings child and parent to school. Saturday School has four major components. The first unites assessment with diagnosis and follow-up. Every child is individually tested in language, motor, perception, general knowledge, hearing, and vision. Twelve to fifteen percent require through-the-year specialist help. An additional number receive short-term attention. The second component is a three-hour school "day" on Saturdays that mainstreams even the most severely handicapped. Four-year-olds rotate in small groups to four learning centers, led by a teacher or parent, for skill and concept development activities in language, math, motor, art, auditory, or visual discrimination. Seventy-eight percent of the parents teach once every six weeks. The third component involves weekly one-hour home visits which include two or three neighboring children and their parents. Home visits are provided to all children, with additional ones by a teacher-specialist for those with special problems. The fourth component consists of home teaching by parents, who receive a weekly home activity guide suggesting learning "games." Child Development Consultants provide consultative services: they work with teacher-specialists in diagnosis and individual programming, consult with parents and teachers, and provide teacher training during the year. Staff development is a continuous process.

**evidence of effectiveness** Average gains of all Saturday School students: 16 months in intellectual growth (Slosson Intelligence Test); 15 months in language development (Merrill Language Test); 12 months in visual-motor skills (Berry Test of Visual-Motor Integration). Follow-up studies show Saturday School children now in sixth grade scored higher on achievement tests than children with and without preschool experience. Children in Title I areas scored significantly higher on kindergarten achievement tests.

**implementation requirements** Program may be adopted totally or in part. Staff training is conducted in three-day institutes at developer site. Program may be adapted by an individual school or entire district in a rural or urban setting. It is easily adapted for Chapter I funding. Program requires a commitment to work with parents. Adapters should also develop means of evaluating school year gains of children (but may use different tests). Project materials may be used by adapting schools.

**financial requirements** Saturday School's average cost (1981-82): \$650 per child (enrollment, 700). Materials average an additional \$10 per child. Program uses otherwise vacant kindergarten classrooms on Saturdays and available materials found in classrooms. Program started with half-time teacher and specialist staff, 20 hours per week; staff now full-time. Some consultative staff are needed, but available school district personnel and community resources may be used.

**services available** Awareness brochure and materials list are available. Visitors are welcome by appointment.

**contact** Marion M. Wilson, Director; Early Education; Ferguson-Florissant School District; 655 January Ave.; Ferguson, MO 63135. (314) 595-2354 or -2355.

**PROJECT** PREVENTION OF LEARNING DISABILITIES: An Interdisciplinary Model

A program to prevent the cognitive and emotional effects of learning disability by early identification and educational intervention.

**target audience** Approved by JDRP for children in grades 1-2. This program has been used in other settings with children in kindergarten and clinically with older children who have neuropsychological deficits, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** The program provides a three-part approach to the prevention of learning disabilities: scanning, diagnosis, and intervention. Scanning locates vulnerable children through SEARCH, an individual 20-minute test administered by teachers and educational assistants to all children in kindergarten or early in first grade. SEARCH taps the neuropsychological precursors of learning problems in young children, yielding data required for setting intervention priorities, allocating diagnostic services, and building teaching plans to guide intervention. Raw test scores may be evaluated either by age or local norms. Age norms permit comparison of a child's score with a broad reference group: the standardization sample of 2,319 children from intact kindergarten classes in inner-city, suburban, small-town, and rural areas. Local norms permit comparison with the immediate peer group with whom children will be learning in their own schools. Diagnosis helps to clarify the reasons for the child's vulnerability. The Learning Disorders Unit offers training in diagnostic skills to school districts interested in developing or expanding these services. Intervention is based on TEACH, a prescriptive approach that helps to meet the educational needs defined by SEARCH. TEACH tasks are organized into five clusters relating to SEARCH components; tasks have been chosen for their experimentally demonstrated contribution to the job analysis of reading. The 55 tasks proceed through three stages of increasing complexity: recognition-discrimination, copying, and recall. Mastery criteria are provided to ensure automaticity in the application of these skills in reading and the language arts. TEACH provides a two-year sequence of activities with emphasis on accuracy of perception in the first year and on intermodal and prereading skills in the second.

**evidence of effectiveness** Project children retested at the end of grade 2 with SEARCH, Wide Range Achievement Test, Woodcock Reading Master Tests, and criterion-referenced comprehension tests showed accuracy of perception and reading achievement one-half year to one year greater than control group. Program participants maintained and increased achievement relative to controls in grade 3.

**implementation requirements** Can be adopted by an individual school or a district. Staffing: one teacher to intervene with 25-30 children; additional staff may be needed to assist in scanning during a two-week period if enrollment is high. Training: initial two-day workshop with an equivalent of two full days of inservice during the school year. JDRP approval was based on the resource room model, but other organization patterns are also in use including supplemental instruction within mainstreamed classrooms and individualized programming within special education classrooms.

**financial requirements** Materials for one resource room: SEARCH Kit, \$39.20; SEARCH Record Blanks, \$11.50 per package of 30; TEACH Manual and Task Cards, \$49.50; miscellaneous toys for use with TEACH, approximately \$25 (usually part of classroom supplies).

**services available** Awareness materials are available at cost of duplication. Visitors are welcome by appointment. Training workshops are conducted at the project site (adopter must cover all costs). Training is conducted out of state (Learning Disorder Unit must be reimbursed for project staff time). Statistical consultation, norms, follow-up visits, and telephone consultation services are available.

**contact** Rosa A. Hagin, or Archie A. Silver; Learning Disorders Unit; Department of Psychiatry; New York University Medical Center; 560 First Ave.; New York, NY 10016. (212) 340-6209 or 561-4078 or -4079.

**PROJECT** PROGRAMS FOR CHILDREN WITH DOWN'S SYNDROME

A program designed to accelerate and maintain developmental gains of children with Down's syndrome and other developmental delays, to give help and training to their parents, to develop a transportable model, and to provide an exemplary demonstration program.

**target audience** Approved by JDRP for Down's syndrome children, birth to age 6.

**description** Children and parents participate in three programs: Infant Learning; Early, Intermediate, and Advanced Preschools; and Kindergarten. The Infant Learning Class provides individualized instruction in early motor, social, and cognitive development for children from birth to 18 months of age. Parent and child come to the center for weekly one-hour sessions. Training is also continued by parents in the home. Early and Intermediate Preschool and Kindergarten parents participate weekly as teacher's aides and data takers to learn techniques for maintaining the child's progress at home. The Developmental Sequence Performance Inventory is used as an assessment tool and guide for setting curriculum objectives. The skills are developmentally sequenced and provide a record of the child's performance and progress.

**evidence of effectiveness** Data from testing with Developmental Sequence Performance Inventory, Denver Developmental Screening Test, Uniform Performance Assessment System, Gesell, Stanford-Binet, Peabody Picture Vocabulary Test, and classroom observation show that children served in the Down's Syndrome Programs have met and are maintaining developmental and cognitive objectives.

**implementation requirements** Program places emphasis on strategies and procedures. Standard preschool equipment and materials are used to facilitate development. Access to support services, technical assistance, and resources in the community is necessary. Parent involvement is required. Data exchange is required.

**financial requirements** Initial awareness sessions are provided free of charge. Adopter pays for staff training expenses, monitoring, and materials. Costs vary and are negotiable depending upon individual needs and resources.

**services available** Brochures, assessment materials, program planning guides, and specific staff and parent training programs are available at cost. Slides and videotapes are available for rental or purchase. Visitors are welcome by appointment. Project staff may be able to attend out-of-state awareness meetings (expenses are covered). Training is regularly available during summer. Other inservice training can be arranged (costs to be negotiated).

**contact** Rebecca R. Fewell, Director HCEEP Project; Experimental Education Unit, WJ-10; Child Development and Mental Retardation Center; University of Washington; Seattle, WA 98195. (206) 543-4011.

## **PROJECT** PROJECT REAL

A program providing comprehensive services for low-income children and their families.

**target audience** Approved by JDRP for elementary schools, especially grades K-3, teachers and teacher assistants, all school staff, and parents.

**description** Key elements of Project REAL are: a personalized educational program that emphasizes the basic areas of reading, writing, and mathematics/problem solving within an integrated learning process; provision for a variety of parent involvement activities aimed at helping parents become effective educational decision makers, informed educational advocates, direct participants in their children's education, and active learners; and a staff development system that provides for ongoing teacher consultation by district staff in areas of the helping process, decision making, the educational process, and program management.

Project REAL uses an instructional model based on the Responsive Education Program developed by Far West Laboratory for Educational Research and Development. Under this program, the Responsive Principles and the Responsive Process are guidelines for planning and implementing activities in the key elements of classroom instruction, parent involvement, and staff development. The four Responsive Principles form conditions essential to the learning environment. They are: Assets, which focuses on learners' strengths and interests; Decision Making, which helps learners become self-directed; Integrated Learning, which teaches basic skills in practical contexts; and Interaction, which promotes valuing individual differences and similarities. The Responsive Process provides a systematic set of procedures for planning and implementing learning activity. It helps to make learning objectives, activities, and assessments personally meaningful by stressing the need to gather information about the learner, determine the learner's experience as a basis for program planning, and integrate the activity and apply the knowledge and skills gained to new situations.

**evidence of effectiveness** Metropolitan Achievement Test means for 1974 grade 3 Lebanon Follow Through students (with national Follow Through/non-Follow Through means in parentheses): Reading, 57.4 (36.8/42.1); Math Problem Solving, 16.3 (12.7/13.9). Raven's Progressive Matrices, 1974 (Stanford Research Institute): 20.3 (17.7/18.6). Lebanon CTBS scores for 1977 (publisher's national norms in parentheses): Reading, 48.6 (35.2); Math Concepts, 22.7 (12.6); Math Application, 14.0 (9.9).

**implementation requirements** District goals, programs, curriculum, and philosophy must be compatible with program's goals and principles. Developer and adopter jointly decide on implementation plan that addresses local needs and interests. Training and follow-up consultation are related to implementation plan.

**financial requirements** Cost of implementation depends on adopter's current staffing patterns and the number of program elements adopted. Release time for staff training constitutes the largest share of the cost.

**services available** A Follow Through Resource Center.

Awareness materials are available at no cost. Visitors are welcome by appointment. Project staff are available to attend out-of-state awareness meetings. Training is provided at project site (adopter pays only its own costs). Training is also conducted at adopter site. Follow-up consultation and monitoring are available to adopters.

**contact** Joan Garipay, Project Director; Project REAL/Follow Through Resource Center; 85C Mechanic St.; Lebanon, NH 03766. (603) 448-3797.



**PROJECT** RICHMOND (VIRGINIA) FOLLOW THROUGH RESOURCE CENTER

A program teaching parents to establish a home environment that promotes active participation in their children's education, and to augment their children's self-esteem and learning abilities.

**target audience** Approved by JDRP for children in grades K-3 and their parents.

**description** The Richmond Follow Through program is based on the active involvement of parents in the education of their children. This concept is founded on the premise that patterns of and motives for academic achievement and personality development in primary-grade children (K-3) are largely the result of home-study influences. The Richmond program is designed to provide a systematic means of linking home and school for the ultimate purpose of improving the educational performance of the children involved. The key element in the Parent Education process is a group of paraprofessionals called Parent Educators. Two are assigned to each Follow Through class. Parent Educators spend approximately 50 percent of their time as classroom aides; the remaining time (two days per week) is spent visiting the homes of Follow Through children. The weekly home visit is an integral part of the Home Learning Cycle. In simplest terms, this weekly cycle involves an individualized Home Learning Activity (HLA) which is taught by the teacher to the Parent Educator, who teaches the HLA to the parent, who in turn teaches the HLA to the child, thus providing continuous reinforcement of the child's educational achievements. The guiding principle throughout the Home Learning Cycle is a set of 10 basic tenets (Desirable Teaching Behaviors). Teachers and parents are encouraged to use open-ended questions, positive reinforcements, and the discovery approach to stimulate and expand the intellectual processes of the learner. Materials for individualizing instruction are used at each grade level to supplement school district curricula. The project is continuously developing a library of Home Learning Activities consisting of tasks designed to reinforce students' cognitive skills and affective behavior.

**evidence of effectiveness** Mean scores (1976-77) of Follow Through and non-Follow Through students (latter in parentheses). Kindergarten (Metropolitan Readiness Test): pre, 49.41 (50.48); post, 61.74 (53.55). Grade 1 (Metropolitan Readiness Level 2): pre, 46.94 (44.24); post, 62.28 (55.88). Grade 3 (SRA Level 2) reading: pre, 183.88 (167.34); post, 252.67 (200.98); language arts: pre, 189.75 (167.65); post, 244.71 (189.54); math: pre, 177.29 (168.06); post, 247.78 (202.26).

**implementation requirements** Successful implementation requires at least two days of on-site training.

**financial requirements** The minimum cost of replicating the parent education program is \$100 per child. This includes services of paraprofessionals, training staff, and teaching materials.

**services available** A Follow Through Resource Center.

Awareness materials are available. Training process packages and curriculum materials are also available.

**contact** Virgie M. Binford, Project Coordinator; Follow Through Program; 301 N. Ninth St.; Richmond, VA 23219. (804) 780-5341.

**PROJECT**

PROJECT STAY: School to Aid Youth

A program providing early identification and treatment of social, emotional, and academic needs of pupils.

**target audience** Approved by JDRP for grades 1-3.

**description** Children enter on screening administered during kindergarten year. They remain in Project STAY for one half of the day and in the regular classroom for the other half. Activities are organized and teachers are acquainted with specific instructional patterns to enable pupils to function at levels consistent with their potential. The specific objectives are identification of achievement levels of high-risk pupils; provision for individual instruction in mathematics and reading to correct specific deficiencies; identification of social problems, poor self-concepts, and attitudes of potential dropouts; and provision for information and referral of parents and pupils to various community agencies for help. Counseling sessions offered to parents and teachers create awareness and understanding which help in meeting problems. No one teaching approach is required. All information available regarding the child (from teacher, counselors, test data, etc.) determines approach used. Program designed for each child is given to regular homeroom teacher. Project STAY has used the innovative teaching devices designed by the teachers, and it has found that they are highly successful.

Project STAY was federally funded for three years on July 7, 1971, and is now locally funded by the Moore Public Schools. Awareness packets related to STAY have been mailed to all states, Canada, the Virgin Islands, Australia, and Puerto Rico. Over 7,000 visitors have visited Project STAY.

**evidence of effectiveness** Project STAY conducts a yearly evaluation. All students are pre- and posttested on the Stanford Achievement Test and Wide Range Achievement Test. Other tests are administered if needed. Results are available upon request. Ten-year follow-up available; a twelve-year follow-up will be available at the end of the 1982-83 school year.

**implementation requirements** Adopter identifies high-risk kindergarten children to receive special services during first year of school. Inservice staff and first-grade teachers secure materials. Space required is determined by pupil enrollment. Program may be used in one classroom (30 children) or by an entire school district.

**financial requirements** Cost of program is approximately \$40,000 for a regular elementary school. Actual cost per pupil during three years of federal funding was \$612.33. The cost of the program will vary depending upon the components adopted.

**services available** Awareness materials (including Project STAY slides) are available. Visitors are welcome by appointment. Training is conducted at the project site and out of state. Project staff can attend some out-of-state conferences.

**contact**

Pat Ross, Project Director; Project STAY; Moore Public Schools; 2009 N. Janeway; Moore, OK 73160. (405) 794-8282.

## **PROJECT**

TRENTON FOLLOW THROUGH: Behavior Analysis Approach

A complete program in the basic skills of reading, arithmetic, handwriting, and spelling.

**target audience** Approved by JDRP for students of all abilities, grades K-3, and their parents, especially from low-income families. This program has been used in other settings with grades 4-6, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** The Follow Through program uses a wide array of systematic techniques involving the precise use of positive reinforcement to attain clearly stated instructional objectives. The program introduces reading, arithmetic, handwriting, and spelling at the kindergarten level and emphasizes the continued mastery of these skills through the third grade. Augmented classroom staff, including a certified lead teacher, a teacher's aide, and a parent educator, allow for small-group instruction.

Programmed instructional materials are used primarily, because they enable each child to progress at his or her own maximum rate. A high level of motivation is maintained with a token and contract system used by all members of the teaching team. The curriculum materials recommended for use in the Trenton program have been selected for their capacity to accommodate a continuous-progress monitoring system.

Parents become involved in the Trenton program in two ways: as classroom instructional personnel and as participants in the Policy Advisory Council. Parents are invited to become an integral part of their children's education. As parent educators, their primary instructional duties focus on the teaching of handwriting and spelling (for a five-month term). The rotation of parent educators provides ample opportunity for interested parents to become acquainted and involved with their children's educational experiences. Each parent educator participates in a five-day training sequence. The Policy Advisory Council assists with the planning and operation of program activities and actively participates in the decision-making concerning these activities.

School Nurse Practitioners provide a complete health history, physical assessment, hematology studies, and dental and vision screening, with follow-ups to each child enrolled in the program.

**evidence of effectiveness** The Trenton program improves academic performance of low-income urban students so that it is at (or near) grade level in reading, arithmetic, and spelling. Data collected annually over nine years indicate a .01 significance level (Wide Range Achievement Test). Annual Consumer Evaluation questionnaires administered to parents and students show a high satisfaction level regarding the program.

**implementation requirements** Adoption entails a joint decision by administrators, teachers, and parents. All those involved in implementation should participate in training. One adopter staff member is designated the liaison between the project and the adopter site. The project provides follow-up training and feedback at the adopter site. Adoption is possible for a single classroom, but entire schools are preferred. Other options are possible -- all kindergartens in a district, for example. A variety of commercially available materials already found in most classrooms is used.

**financial requirements** Teacher-student ratio of 1:25, paraprofessional teachers's aide, and one site trainer (adoption site liaison person) are required. Personnel demands can be met by reassignment of existing staff. A training and monitoring contract between the adopter and the project assures proper program implementation. Adopter must maintain a system for continuously monitoring student progress.

**services available** A Follow Through Resource Center

Awareness materials are available. Visitors are welcome by appointment. Orientation, observations, and training seminars are available at project site and out of state (if the latter, exemplary project staff costs must be paid). Project staff can attend out-of-state conferences (expenses must be shared).

## **contact**

Dorothy N. Barber, Project Coordinator; Follow Through Program; Trenton Board of Education; Administration Building; 108 N. Clinton Ave.; Trenton, NJ 08609. (609) 989-2876.

## **PROJECT**

TULARE FOLLOW THROUGH

Three separate components promoting children's chances for success in school, with parents as contributing partners in their children's education.

## **target audience**

Approved by JDRP for all students grades K-3 and their parents.

## **description**

The Oral Language Development component stresses a flexible, sequential system of instruction leading to improved reading and oral communication skills.

The Concepts and Language component focuses on concept development with kindergarten children and teaches motor, visual, and auditory skills.

The Parent Involvement component includes five activities designed to encourage parents to become involved in their children's education as partners with the school and to help them become more effective parents through participation in parent education sessions.

## **evidence of effectiveness**

Results of testing with the Comprehensive Test of Basic Skills for achievement in language, reading, and math for three consecutive school years

indicate increasingly greater percentages of K-3 pupils scoring at or above the 50th percentile: 1975, 46%; 1976, 52%; 1977, 55%.

## **implementation requirements**

An adoption agreement is required. Adopters must designate one person to implement and supervise the program component(s) adopted.

Inservice is required for personnel involved in implementation. Program materials must be purchased.

## **financial requirements**

Costs include time and resources necessary for implementation and supervision of program component(s) adopted. Teacher's manuals for Oral Language

Development are available at cost. English Concepts and Language kit, \$453.60\*. Parent Involvement materials are available at cost. (Figure marked\* is publisher's 1982 price. Other materials are available from project.)

## **services available**

A Follow Through Resource Center.

Awareness materials are available. Visitors are welcome by appointment for observations and demonstrations. Sample material packets are available for inspection at project site. Project staff are available for out-of-state awareness presentations. Inservice and follow-up technical assistance are available to adopter.

## **contact**

Mike Wenn, Coordinator, or Joan Wooters, Program Specialist; Tulare Follow Through Resource Center; 909 E. Cedar, Suite B; Tulare, CA 93274. (209) 688-2892.

## **PROJECT**

WATERLOO FOLLOW THROUGH: Adaptive Learning Environments Model (formerly Individualized Early Learning Program)

An individualized sequential program of instruction in readiness skills and reading.

## **target audience**

Approved by JDRP for children in grades K-3; especially adaptable to low-income students.

## **description**

The Waterloo Follow Through project provides a sequenced program of individualized instruction with emphasis on student self-management skills and classroom management techniques. Active parent participation is stressed.

The instructional program is based on the Adaptive Learning Environments Model (ALEM) sponsored by the Learning Research and Development Center (LRDC), University of Pittsburgh. A readiness program (emphasizing basic skills in a hierarchical sequence) includes classification, quantification, and four perceptual areas: visual motor, auditory motor, general motor, and letters and numerals. An individualized and adaptive reading program for grades 1, 2, and 3 follows the readiness program.

Staff training is provided for increasing teacher and teacher-associate skills in diagnosing individual student learning needs, prescribing, record keeping, and organization and management of an individualized classroom setting. The development of instructional materials and teaching strategies that provide a variety of paths for student attainment of objectives is stressed. A five-week training program is provided for parents to help them gain skills to facilitate student learning at home and in the classroom.

## **evidence of effectiveness**

Results of scores on the 1963 edition of the Metropolitan Readiness Test for children with and without Follow Through treatment have been compared from 1967-76. Follow Through students have progressed from the low-average to the high-normal range. Wide Range Achievement Test scores from 1972-76 show growth of one to two years in reading through the fifth grade for Follow Through students. Detailed information is available on request.

## **implementation requirements**

The Waterloo Follow Through instructional programs can be adopted by a single classroom unit or by several units. The PEP readiness program may be adopted as a separate component. Individualized Reading and/or Parent Involvement may be implemented in conjunction with the PEP program. Pre-adoption training, teacher-associate services, limited special classroom equipment, and construction of individualized learning materials are necessary. Adopter site must provide a liaison person. Pre-and posttest data are recommended.

## **financial requirements**

Program materials: Readiness, \$32 per child for start-up, \$10 per child for maintenance; Individualized Reading, \$75 per child for start-up, \$29 per child for maintenance. Parent involvement: one staff person and approximately \$1,000 per year for materials and supplies.

## **services available**

A Follow Through Resource Center.

Awareness materials are available at no charge. Visitors are welcome by appointment. Awareness conferences and training services are available at project or adopter site (costs to be arranged). Training manuals and implementation materials are available at cost. No Follow Through funds are available for assisting adopter sites. Field visitations can be made by Waterloo staff (costs to be arranged).

## **contact**

Dorothy Winter, Project Director; Follow Through Resource Center Project; Waterloo Community Schools; 1516 Washington St.; Waterloo, IA 50702. (319) 233-8461 or (800) 553-1775.

## **PROJECT** WAUKEGAN FOLLOW THROUGH DEMONSTRATION RESOURCE CENTER

A behavioral analysis approach program emphasizing the basic skills of reading, math, spelling, and handwriting.

**target audience** Approved by JDRP for students of all abilities, grades K-3; especially for low-income disadvantaged students.

**description** The Waukegan Behavior Analysis Follow Through program has reversed the trend among low-achievers in grades K-3 through emphasis on the basic skills -- reading, math, spelling, and handwriting. The program promotes active parent participation in their children's education.

The Behavior Analysis Follow Through model used in Waukegan was developed at the University of Kansas. Components of the model are: emphasis on basic skills, positive reinforcement techniques, continuous progress monitoring, and parent involvement.

The program introduces reading, mathematics, spelling, and handwriting at the kindergarten level and emphasizes continued mastery of these skills through the third grade. Programmed instructional materials are used at the project site for reading and spelling because they enable each child to progress at his or her own rate. Other curriculum materials can be used if adapted. A high level of motivation is maintained through use of a token economy or contract system by all members of the teaching staff.

Teachers and assistants are trained in the use of positive motivation techniques. Parents are encouraged to become trained classroom assistants and they are given priority for employment.

**evidence of effectiveness** This project was included in the national sample selected by the Stanford Research Institute for evaluation of Follow Through programs. Yearly pre/post data have been a part of the University of Kansas evaluation. Children at this site who, prior to the project, were falling progressively below grade level on national achievement tests are now scoring at or above grade level on the Wide Range Achievement Test.

**implementation requirements** Signed contract clarifies adopter commitment to replication of major program components (emphasis on basic skills, positive reinforcement techniques, continuous progress assessment, use of teaching assistants). Adopters provide at least one teaching assistant per classroom, assume financial commitment, and designate one person as local coordinator. Required training varies with number of components adopted: one to three days of preservice, three to five days of hands-on (inservice) training. School principal must be well enough acquainted with program to monitor progress. Adopter curricula must be compatible with program goals.

**financial requirements** Cost of implementation varies with number of components adopted, available staff, and existing curriculum materials. Cost drops after first year.

**services available** A Follow Through Resource Center.

Awareness booklets, brochures, and fact sheets are available at no cost. Awareness filmstrip-cassette is available on loan. Project staff are available to attend out-of-state awareness meetings. Training is provided at project site (adopter pays only its own costs). Training is also conducted at adopter site. Training materials for reading, math, classroom management, and parent involvement are free to adopters. Follow-up and evaluation assistance are available free to adopters.

**contact** Harry Bowen, Follow Through Director; Waukegan Public Schools; 1201 N. Sheridan Rd.; Waukegan, IL 60085. (312) 336-3100, ext. 418, 419.

## **PROJECT**

THE WEEKSVILLE SCHOOL/BANK STREET COLLEGE FOLLOW THROUGH PROGRAM

A project focusing on the total development of the child and his or her family through instruction, staff development, parent involvement, health and nutrition, and social and psychological services.

## **target audience**

Approved by JDRP for K-3 children of all abilities and their families.

## **description**

The program is geared toward preventing early school failure and developing attitudes in the child that enable him/her to maintain his/her academic competencies throughout the school years. Diagnostic teaching in the language and reading areas and an integrated curriculum are developed based on trained observation by staff, standardized tests, and a wide range of analytic tools developed by Bank Street College. Periodic review and evaluation of the children's progress is made by an interdisciplinary team in cooperation with parents. Emphasis is placed upon understanding each child's strengths, prior learning, competencies, needs, and learning style. The daily instructional program is organized around individual, small- and large-group instruction, and child-initiated activities. With social studies as the core, other curriculum areas are interwoven in study of the child's immediate environment that later extends to the larger environment. A wide variety of materials is used. Classroom and curriculum management are based upon agreed limits, with children participating in discussions and understanding the reasons for decisions. Ongoing workshops and parent-training programs are designed for greater parent understanding and participation. The program maintains a curriculum resource room and a children's ethnic heritage resource room. The Follow Through Program comprehensive team (consisting of the school administrators; project coordinator; the classroom team of teacher and educational assistant; staff nurse; family assistant; senior school neighborhood worker; and Bank Street College field staff and staff developers) facilitates the process of adult learning through demonstration, team planning, workshops, and supportive techniques.

## **evidence of effectiveness**

Standardized tests reveal that a smaller percentage of Follow Through children fall one or more years below grade level relative to expectations based on national norms, and that they exceed local norms at grade 3-5. In addition, Follow Through children remain above grade level after the Follow Through program.

## **implementation requirements**

Minimum staffing requirement: a classroom teacher, teacher's aide (or volunteer), and personnel to act as staff developer (assistant to principal, teacher trainer, etc.). This team, augmented by parents or a parent program developer, may be trained at the Follow Through Resource Center and/or at the adopter site.

## **financial requirements**

Training for staff teams. A variety of materials and equipment found in child-centered programs. Commercially published tests and Bank Street College-developed diagnostic tools. A wide range of children's trade books.

## **services available**

A Follow Through Resource Center

Awareness materials are available. Awareness visitations and consultations are offered on a scheduled basis. Services available at project site: observation of demonstration classrooms, training program for staff and parents, consultation staff, partially subsidized costs for released time, resource rooms for workshops and study of program materials. Services available at adopter site: ongoing training and support (costs may have to be partially subsidized), visitations and consultations at Bank Street College (sponsor).

## **contact**

June Douglas; Follow Through Program; P.S. 243; 1580 Dean St.; Brooklyn, NY 11213.  
(212) 773-2800 or -2850.

SECTION B-6: ENVIRONMENTAL EDUCATION/SCIENCE/SOCIAL SCIENCE\*

C.E.N.T.S. (CREATIVE ECONOMIC NOTIONS FOR TEACHERS AND STUDENTS) -- South Carolina . B-6.3

CURRICULUM MODIFICATION THROUGH ENVIRONMENTAL STUDIES: Environmental Studies Center  
-- Florida . . . . . B-6.4

project ECOLOGY (Environmental Career-Oriented Learning) -- Washington . . . . . B-6.5

the ENVIRONMENT AND TECHNOLOGY PROJECT -- Illinois . . . . . B-6.6

FACING HISTORY AND OURSELVES: Holocaust and Human Behavior -- Massachusetts. . . . . B-6.7

FOUNDATIONAL APPROACHES IN SCIENCE TEACHING -- Hawaii. . . . . B-6.8

GEOLOGY IS -- Illinois . . . . . B-6.9

LAW EDUCATION GOALS AND LEARNINGS (LEGAL) -- Florida . . . . . B-6.10

project LEGAL (Law-related Education: Goals for American Leadership) -- New York . B-6.11

POLLUTION CONTROL EDUCATION CENTER -- **PRIORITY ONE: ENVIRONMENT** -- New Jersey. . . . B-6.12

PREPARING FOR TOMORROW'S WORLD (PTW) -- New Jersey . . . . . B-6.13

RELIGION IN HUMAN CULTURE (RIHC) -- Minnesota. . . . . B-6.14

STONES AND BONES, A LABORATORY APPROACH TO THE STUDY OF BIOLOGY, MODERN SCIENCE,  
AND ANTHROPOLOGY -- California . . . . . B-6.15

WWAS: Women in World Area Studies -- Minnesota . . . . . B-6.16

project ZOO: ZOO OPPORTUNITIES OUTREACH -- North Carolina. . . . . B-6.17

\*See Sectional Cross-Reference, p. D-9, for related programs.



**PROJECT** C.E.N.T.\$. (CREATIVE ECONOMIC NOTIONS FOR TEACHERS AND STUDENTS)

A program designed to increase the economic knowledge of elementary students.

**target audience** Approved by JDRP for grades 3-6.

**description** Although economics is not one of the subjects included in the elementary curriculum, both the social studies and math curricula include economic concepts. The advantage of economic instruction at the elementary level is to prepare a foundation for high school, where many states require at least a semester of economics for graduation. The C.E.N.T.\$. curriculum can be a nine-week social studies unit or it can be infused in the math program.

The curriculum presents ten major economic concepts that have been identified by the Joint Council for Economic Education as the concepts essential to understanding the American economic system and the wise use of personal resources. The sub-concepts for each major concept were selected as those most appropriate for elementary instruction. The concepts and sub-concepts are introduced at specific grade levels and reviewed and reinforced at increasingly sophisticated levels throughout the grades.

The C.E.N.T.\$. program is self-contained, providing teachers with the procedures, activities, and materials necessary for economic instruction and evaluation. The student activities are designed to teach the fundamental economic concepts through participation in real-life experiences, simulations, and other activities which help them apply these concepts to their daily lives and new situations.

The program includes a Scope and Sequence chart for each teacher, individual grade-level teacher's manuals, filmstrips, puppets, instructional games, posters, transparencies, student booklets, summative tests, examiner's manuals, and an Inservice/Implementation Manual.

Each lesson in the teacher's manual provides motivational activities, instructional activities, and closure activities. As part of the instruction, after each lesson students are quizzed on the lesson's concepts. Grades are not given; rather the results are used to plan further instruction for those who do not do well. Those who master the concepts are provided with enrichment activities from the teacher's manual or teachers may use their own ideas.

**evidence of effectiveness** Summative tests of economic concepts revealed that project students' scores at all levels (K-8) were significantly greater than control students' scores. Project students' means also exceeded the control group on a commercial test of economic concepts, given only in grades 3-8.

**implementation requirements** Teachers and principals must participate in at least a one-day training session before implementing the C.E.N.T.\$. program. Adopting districts or schools may choose to conduct their own training session by following the step-by-step procedures outlined in the Inservice/Implementation Manual. However, if desired, project personnel are available to conduct workshops. C.E.N.T.\$. does not require a change in or addition to the established staffing pattern nor does it require facilities other than the regular classroom. Materials, other than the C.E.N.T.\$. kits, needed for the training sessions include: poster board, magic markers, scissors, construction paper, a filmstrip projector, and, if possible, a laminating machine.

**financial requirements** Program materials for four teachers (grades 3-6), \$165. Consumables: Student Booklets (class sets of 30), \$10 per grade (each kit contains one copy per grade); summative tests (class sets of 30), \$7.50 per grade (each kit contains one copy per grade). Per-pupil start-up cost based on 30 students per class, \$1.79; continuing cost, \$0.42.

**services available** Awareness materials are available at no cost to potential adopters. Visitors welcome at any time. Project personnel are available to attend awareness meetings (costs are negotiable). Inservice sessions at adopter site borne by adopter (\$100 per day, plus travel and per diem). Implementation/follow-up services are offered at adopter site; one visitation to each class during economic instruction and one evaluation visit with teachers and administrators at the end of instruction (costs are negotiable).

**contact** Beverly J. Townsley, Director; Creative Economic Notions for Teachers and Students; 7301-A Two Notch Rd.; Box 127; Columbia, SC 29204. (803) 736-0336.

## **PROJECT**

CURRICULUM MODIFICATION THROUGH ENVIRONMENTAL STUDIES: Environmental Studies Center

Sequential, hands-on, field-oriented study of an estuarine ecosystem as representative of the natural system and the effects of human interaction with it.

**target audience** Approved by JDRP for students of all abilities, grades K-8.

**description** This comprehensive, teacher-written program for grades K-8 provides progressive investigation of an estuarine ecosystem. Multidisciplinary in approach, it centers on a core of 37 learner-based objectives. Each objective is addressed by one or more instructional units and reinforced by a specific field activity. Each objective is also addressed on identical pre/posttests.

Immediately prior to the once-a-year field trip, the preparatory curriculum materials are used in one to four weeks of classroom preparation (one period per day). These materials include Learning Activity Packages, activities booklets, puzzles, games, and slide-tape programs. Class and teacher then visit the Center for a period of time that varies with grade level (ranging from two hours for kindergarten to two days for grades 5-8). While at the Center and on ensuing field trips to the estuary and ocean beach, each student participates in an active program of investigation, data collection, and/or problem interpretation and solution.

The programs themselves address basic-skills development, organism identification, and environmental concerns. The metric system is used extensively. Vocabulary units are a part of each grade activity. Pre- and posttests measure cognitive gains by objective. All materials and instruments were developed and refined over a three-year period and subjected to extensive data analysis.

**evidence of effectiveness** Teacher-prepared pre/posttests administered over a three-year period to 5,000 students (migrant to ultra-affluent) showed average gains ranging from 12.3 for first grade (high pretest score) to 34 for fourth grade (low pretest score). Item analysis was conducted and tests were twice revised. Split-half reliability coefficient was computed and yielded .76 to .93 (satisfactory to excellent).

**implementation requirements** Program may be implemented by a single classroom teacher and 25 students or by any level up to district-wide with special staff. One- or two-day training is required for each grade level. Training is provided on a daily basis at developer site. Training can be arranged at adopter site where 10 or more teachers are to be trained. Majority of adoptions to date have been at classroom or school level; two district-wide adoptions involving more than a dozen schools each have been established. Implementation at elementary level requires minimal investment; middle school requires somewhat more, primarily for field equipment.

**financial requirements** One complete set of all curriculum materials (AV units, flash cards, card game, felt-board pieces, etc.) for all nine grades (K-8), \$239 (price subject to change with increased costs). Duplication rights come with materials. Individual grade packages range from \$12 (kindergarten) to \$41 (seventh grade). Individual items are available separately. Staffing depends upon number of grades and students involved.

**services available** Awareness materials are available at no cost. Visitors are welcome by appointment. Training is provided at project site (adopter pays only its own costs). Training is also conducted at adopter site (adopter must assume all expenses). Technical assistance, including adaptation of project-developed materials to adopter site, is available (expenses must be paid).

**contact** Project Director; Environmental Studies Center; 2900 N.E. Indian River Dr.; Jensen Beach, FL 33457. (305) 334-1262.

**PROJECT** PROJECT ECOlogy (Environmental Career-Oriented Learning)

A project aimed at infusing ecological concepts, career information, and futures understandings into basic skills subject matter by utilizing a format that is convenient for teachers to implement.

**target audience**

Approved by JDRP for grade 2 students of all abilities, teachers, curriculum planners, and program managers. This program has been used in other settings with students in grades K-1 and 3-12, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description**

The project's goal is to infuse ecology/science concepts, career information, and futures understandings into basic skills subject matter using an easily implemented format. Cycles, recycling, food, nutrition, pollution, and careers are all topics of the ECOlogy program. The project uses a motivating series of lessons/units/strategies/activities designed by teachers. Each unit is packaged to be used in a classroom over a four-week period, typically for one hour per day. The units are called Environmental Learning Experiences (ELEs), and many of them have supporting Project Activity Kits (PAKs). Six primary, 14 intermediate, and eight secondary units, some of which have supporting Project Activity Kits, are available.

Fifteen of the units have activities that relate specifically to the development of higher-level thinking skills -- analyzing data, identifying trends/patterns/sequences, predicting outcomes, testing outcomes, and exploring open-ended questions. Fourteen of the units have information and activities that relate specifically to career information and career understandings. These materials are coded to understanding jobs, relating basic skills to occupations, entry into the labor force, job availability, relating jobs to personal potential, educational and training opportunities, and job-securing skills. Each ELE is attractively packaged with a picture of the Project Activity Kit, background information, conceptual overview, master material list, and preunit activities and guided lessons. The contents of the unit focus on energy, water, air, solid waste, and noise. The materials are easily adopted by individual classroom teachers.

**evidence of effectiveness**

Analysis of test results showed a significant pupil gain at the .05 level of confidence. The instruments were developed locally to evaluate changes in cognitive knowledge as a result of project intervention and to measure the lower cognitive processes identified in Bloom's taxonomy. The JDRP report is available.

**implementation requirements**

The ECOlogy materials are available to school districts on a limited basis. Full implementation of the program requires training, inventory and sundry support services. The Highline District recommends a training workshop as part of a full implementation, but individual teachers can easily implement the units without training. The materials are available from the district and the cost will range from \$3 to \$3,599. This cost figure includes learning units and Project Activity Kits. A cost worksheet is available upon request.

**financial requirements**

If the total program is adopted, a district purchases 20 ELEs, 14 PAKs, 15 evaluation packages. Cost of unit adoption starts at \$3. The costs of the adoption would be a maximum of \$3,599. This figure does not include release time for teachers, training, or costs for travel/expenses for the trainer.

**services available**

Awareness materials are available on a limited basis. Visitors are welcome any time by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site. Training is also available at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** Bill Guise; Highline School District; 15675 Ambaum Blvd., SW; Seattle, WA 98166. (206) 433-2453.

**PROJECT** THE ENVIRONMENT AND TECHNOLOGY PROJECT

An interdisciplinary curriculum (science-social science) in environmental education designed to prepare students to understand local environmental problems.

**target audience** Approved by JDRP for students of all ability levels, grades 9-12.

**description** The Environment and Technology Project is a curriculum for high school teachers to use as the basis for a one- or two-semester environmental education or science and society course. The curriculum is divided into four major categories: land use, pollution, urban management, and energy. A student studies a minimum of one unit in each category during a semester, choosing units of his/her interest. The units available in each category are: land use -- urbanization and zoning, streets and roads, parks and recreation, and wildlife; pollution -- air, water, noise, and rural; urban management -- solid waste, waste water, and population; energy -- gasoline, electricity, nuclear power, coal, and solar.

The curriculum is intended to teach a series of objectives: those universal to all people on the planet, those particular to each of the four broad categories, and those unique to each unit. At the beginning of each unit, a student takes a pretest to assess understanding. The student completes the unit readings/activities working individually, in a small group, or as part of the larger class. Progress is monitored on the basis of student performance objectives. When a unit is completed, students apply what they have learned to the study of environmental problems in the local community or within the school setting itself. Problems selected for study may be simple, advanced, or open-ended depending on student ability. The project presents a balanced view of the needs of a technological society and the needs of the environment. Unit tests measure student growth in terms of cognitive gains.

**evidence of effectiveness** Three standardized tests were used in a pre/posttest design with Environment and Technology students and control groups: Morehead Environmental Awareness Test (1975-76, 1976-77, 1977-78); Test of Reasoning in Conservation (ETS, 1976-77, 1977-78); and a local instrument (1975-76, 1976-77, 1977-78). Environment and Technology students showed significantly higher cognitive gains on all tests as compared to control groups.

**implementation requirements** The curriculum can be implemented as a new course or as a modification of an existing science or social studies course. A one-day workshop introduces teachers to the curriculum design and shows them how to adapt it to their own settings. Many adopters have integrated their own classroom activities/resources with project objectives, showing the Environment and Technology Project's adaptability to individual districts.

**financial requirements** There are 16 units with support materials. Each unit costs \$3.75. (Cost is subject to increase.) Curriculum materials remain in the classroom and can be used by several different classes each day. Travel expenses, lodging, meals, and trainer's fee must be paid for staff who visit an adopter site.

**services available** Awareness materials are available at no cost. Visitors are welcome anytime by appointment at project site and additional demonstration sites in Illinois and out of state. Project staff are available to attend out-of-state awareness meetings (expenses must be shared). Training is available at adopter site (travel, lodging, meals, and trainer's fee must be paid). Implementation and follow-up services are available to adopters.

**contact** Barbara A. Barchi; Environment and Technology Project; 1633 North Burling; Chicago, IL 60614. (312) 280-8163.

## **PROJECT**

FACING HISTORY AND OURSELVES: Holocaust and Human Behavior

An eight- to ten-week unit using the history of 20th-century genocide to teach the meaning of human dignity, morality, law, citizenship, and behavior.

### **target audience**

Approved by JDRP for students in grades 8 and 9. The unit has been used in other settings with grades 10, 11, and 12, but no evidence of effectiveness has been submitted to or approved by the Panel.

### **description**

The Facing History and Ourselves Project provides teachers and students with resources for studying topics in the history of the 20th century -- topics that are complex and controversial, intellectually and emotionally challenging, and rarely treated in textbooks.

By developing conceptual skills and imparting knowledge, Facing History and Ourselves helps to educate citizens as they learn to make informed judgments which democracy requires. Activities illuminate historical questions by encouraging participants to understand the consequences of choosing between competing values. They make it possible for teachers and students to reflect on issues that are meaningful to them in ways that stretch their intellectual and empathetic capacities.

Through the use of films, tapes, diary excerpts, news stories, letters, posters, and case studies, the curriculum traces the roots of prejudice and discrimination; first in our own lives and then in the history of National Socialism in the Germany of World War II. Students think about what happens in a society that abuses civil liberties and censors freedom of thought. Lessons explore the wide range of responses of individuals and institutions who became the victims, the victimizers, or the bystanders in the history of the Holocaust of European Jews and the victims of genocide.

The students' recurring questions become the content of the final chapters, Can We Learn From The Past? and What Can I Do To Make a Difference in the Future? When students learn about the "forgotten genocide" of the early 20th century, the Armenian Genocide, they think about the power of revisionism and avoidance. And when they think about their future in the nuclear age they explore the role education has in preventing human disasters.

The Facing History and Ourselves curriculum taught in a variety of disciplines is specifically designed for early adolescents in junior high and high school settings. The carefully developed methodology encourages students to understand more than one perspective in a dilemma, to place themselves in the position of another person, and to be willing to express ideas in class without fear of ridicule. When students think about history and its relationship to their lives as well as the consequences of their decisions and actions, they explore the roles and responses of individuals and groups confronting contemporary, difficult, and complex issues and dilemmas. Students are challenged to complicate their thinking by not accepting simple solutions to complex questions of human behavior and history.

### **evidence of effectiveness**

Experimental and control groups were administered a content test and a social awareness protocol. The mean global interpersonal awareness score was in every case greater for the experimental groups than for the control groups. Furthermore, in the first year the experimental students exhibited a new stage of reasoning not present on the pretest -- 24% compared to only 10% of the control students. The proportion of students correctly answering items on the content posttest was significantly greater than the proportion on the pretest while the control group change was not significant.

### **implementation requirements**

An individual teacher or entire school district may choose to adopt the Facing History and Ourselves Project to enhance existing courses or as an entire program (8-12 weeks). Teachers should attend an awareness presentation given by a certified trainer before piloting the classroom materials. Awareness sessions range from a two-hour presentation to a one- or two-day workshop. Follow-up consultation and workshops are designed to meet the needs of teachers and school districts. Evaluation activities consisting of student/teacher journals as well as pre- and posttesting designs can be arranged.

### **financial requirements**

All costs can be negotiated depending on distance from the project site, funding from community organizations and school systems, and number of workshop participants. A one-day workshop at the project site costs \$30 and the four-day Summer Institute is \$100. A one day workshop in an adopting community must include a stipend for project services and travel and per diem. Although a wide variety of commercially available materials already found in many schools is used, copies of the 416-page curriculum and resource guide may be purchased (single copies, \$15; 10 or more, \$12.50). Bibliography/Filmography and related project products are also available.

### **services available**

Brochures are available at no cost. Visitors are welcome at the Resource Center and to visit classes using the program. The Resource Center collects and distributes printed and audiovisual materials. Awareness presentations and workshops are held at both project and adopting sites. In communities where certified trainers are available, adult education courses and inservice programs are offered once a week for two hours for eight weeks (\$50/person).

### **contact**

Margot Stern Strom, William Parsons or Steven Cohen; Facing History and Ourselves National Foundation, Inc.; 25 Kennard Rd.; Brookline, MA 02146. (617) 734-1111, ext. 335 or 232-1595.

**PROJECT** FOUNDATIONAL APPROACHES IN SCIENCE TEACHING

A course in the concepts and methods of the physical, biological, and earth sciences and their relation to the environment.

**target audience**

by the Panel.

Approved by JDRP for students in grade 7. This program has also been used with students in grades 6 and 8, but no evidence of effectiveness has been submitted to or approved

**description**

This curriculum gives students a sense of the operations of the modern scientific community by involving them in typical activities and processes of inquiry and research. Students study three strands concurrently: physical science, ecology, and relational study. The physical science strand introduces such concepts as mass, volume, density, physical and chemical properties of matter, pressure, heat, temperature, vacuum, and energy; the ecology strand such concepts as ecology, plant and animal growth, weather and climate, field mapping, and population sampling; the relational study strand such concepts as resource management, technology, environmental use, food production, energy use, and conservation. Student and teacher materials promote the goal of developing scientific literacy among students. Text materials are at appropriate reading level. The Student Text contains problem statements, suggestions to guide investigations, and summary questions focused on generalizations to be drawn from the investigations. The Student Record Book enables students to maintain a concise log of individual and class activities. A classroom library of Reference Booklets, which describe use of instruments, suggest experimental designs, outline experimental techniques, and provide necessary supplemental readings, help students to practice the skill of using outside references to supplement information available from the text. The Teacher's Guide presents the logic connecting topics and sequences. Keyed to the investigations in the Student Text, the guide includes teaching suggestions, advice on classroom procedures, and detailed discussion of the conceptual and practical development of the Student Text. Other materials for teachers include an Instructional Guide and an Evaluation Guide.

**evidence of effectiveness**

Data from testing in 1978 of matched treatment and control groups having a wide range of ability levels with the project-developed Laboratory Skills Test and the Comprehensive Test of Basic Skills Level 2 Form S Science Test show that the program produces significant gains in laboratory skills and scientific achievement for participants.

**implementation requirements**

Adopting teachers require 10 days of training. Adopting schools must have basic science equipment and supplies including 6- to 10-centigram balances, and an equipment kit is required for some physical science activities. Recommended: a local project director/coordinator to monitor implementation activities, conduct bimonthly meetings with adopting teachers (project supplies a suggested agenda free to adopters), and provide help to teachers as needed. Project-developed Leadership Training Package can be used to train coordinator and/or teachers to train other teachers.

**financial requirements**

Depending on existing science facilities and equipment and on book purchase option selected (one book per student/one set per classroom), per-pupil start-up cost ranges from \$11.45 to \$17.50. These figures include laboratory equipment, classroom supplies, student instructional materials, and teacher materials. Maintenance cost: approximately \$2 per pupil per year. Teacher training and follow-up services can be provided as part of the materials purchase cost.

**services available**

Awareness materials are available at no cost. Examination copies of student and teacher materials are available at cost. Visitors are welcome at project site by appointment. Some demonstration sites are available in other states. Project staff are available to attend out-of-state awareness meetings (all expenses must be paid, including consultant's fee). Representatives of project are available in some states. Training is conducted each summer at project site and can also be conducted at adopter site.

**contact**

Donald B. Young, Co-Director; Curriculum Research Development Group; University of Hawaii; 1776 University Avenue, Room UHS2-202; Honolulu, HI 96822. (808) 948-7863.

## **PROJECT** GEOLOGY IS

An introductory geoscience course.

**target audience** Approved by JDRP for all students, grades 9-12.

**description** Designed to become part of the secondary school curriculum, GEOLOGY IS provides geoscience learning opportunities not presently available in the science curriculum. A broad range of materials and media-delivery instruments allow for varied teaching and learning techniques. The technical aspects of course content and the social implications in the wise use of earth resources combine in an effective interdisciplinary approach. Awareness and understanding of geoscience processes make students more responsible consumers of earth materials and protectors of the environment.

The five distinct but related units of GEOLOGY IS are Introduction, Earth Materials, Observing the Earth, Internal Processes, and External Processes. These are subdivided into a total of 20 chapters. Although it is a two-semester course, parts can be taught as a semester offering. Each unit contains text material, lab exercises and activities, and objective and subjective tests. Slide-tapes, films, videotapes, and guest speaker presentations are offered, and students are encouraged to evaluate these. Small groups and individuals investigate topical areas for student-led class discussions. Off- and on-campus field experiences and resource personnel add another dimension to the text. Teachers are provided with a guide and an activities handbook as a supplement to the student textbook.

Through study in this elective option, students can become more responsible consumers of earth resources and make informed decisions for the future regarding energy, geologic hazards, and land use.

**evidence of effectiveness** Statistically, GEOLOGY IS students made substantial gains in geoscience knowledge over those students not using program-developed materials in the classroom. A geoscience cognitive test was designed by a control panel of geoscience educators for testing purposes and was used with all groups throughout the development and testing of GEOLOGY IS.

**implementation requirements** The adopting district will need to provide an instructor with some basic coursework in the geosciences. Other than that, a typical science classroom and supplies are the only other requirements for adoption.

**financial requirements** The major cost to the district will be for the purchase of the GEOLOGY IS textbook and activity sheets. In addition, some supplies for the activities may have to be purchased if the district does not have an existing geoscience class.

**services available** Awareness materials are available at no cost. A slide-tape presentation is available if district will pay postage. Visitors are welcome at project site anytime by appointment. Project staff are available to attend out-of-state awareness conferences (cost to be negotiated). Training is conducted either at the project site or at the adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** Rion D. Turley; O'Fallon Township High School; 600 South Smiley; O'Fallon, IL 62269.  
(618) 632-3507.

**PROJECT** LAW EDUCATION GOALS AND LEARNINGS (LEGAL)

A comprehensive law-related curriculum program designed to promote student understanding of the criminal justice system and of the civil justice system (particularly as it relates to consumers).

**target audience** Approved by JDRP for secondary-level students, grades 7-12.

**description** Using the LEGAL curriculum program, students have the opportunity to become more knowledgeable about the legal system and to apply their knowledge in problem-solving situations. The program enables students to develop decision-making strategies while utilizing behaviors compatible with the legal codes of contemporary society. The LEGAL program includes components for student instruction and teacher inservice training. Project materials provide guidelines for community research and support for a wide range of classroom instructional activities. For grades 7-9 (the LEGAL Jr. program), the curriculum materials consist of two detailed instructional guides (Criminal Justice and Consumer Law); a workbook (in student and teacher editions) containing 10 field experiences and 10 alternative classroom activities (with five sound filmstrips); teacher implementation and resource guides; program assessment instruments; and a support manual for managers (with administrative guidelines) to aid in program implementation. For grades 10-12 (the LEGAL Sr. program), the curriculum materials consist of two detailed instructional guides (American Justice System and Community Law); a workbook (in student and teacher editions) containing four law resource units; a workbook for students that contains guidelines for the community law research project (with three sound filmstrips); teacher implementation and resource guides; program assessment instruments; and a support manual for managers (with administrative guidelines).

LEGAL inservice training for teachers provides a means through which appropriate instructional strategies can be developed, community resources can be identified, and program implementation procedures can be facilitated.

**evidence of effectiveness** Junior and senior high school students participating in the LEGAL field study program significantly outperformed their respective control groups (.001 level) on an objective-referenced, summative assessment instrument with criterion levels of mastery set for each objective. The instrument was developed by the project and validated by an independent audit team.

**implementation requirements** There are a variety of options available to adopting districts. A district may adopt the legal program on the junior and/or senior high school level. The program at each level may be implemented as a semester or full-year course of study. LEGAL curriculum units may be incorporated into existing courses of study. Teachers implementing the program (or trainer who may conduct staff training in the adopting district or a combination of both) should participate in a two-day training session and/or review the self-instructional module that has been prepared for teachers who wish to independently implement the LEGAL program. Each teacher will need a complete class set of LEGAL curriculum products designed for his/her grade level.

**financial requirements** The total start-up costs for the LEGAL Jr. program are approximately \$235. If student materials are used in a consumable manner, replacement costs are \$2.50 per workbook. The total start-up costs for the LEGAL Sr. program are approximately \$285. If student materials are used in a consumable manner, replacement costs are \$3 per workbook and \$2 per community source book. The cost of teacher training will vary depending upon the ability of the adopting district to provide time and personnel for training. The cost of training workshops held at adopter site (travel and materials) may be shared among the NDN Facilitator, adopter, and LEGAL.

**services available** Awareness materials including program brochures and sample kits on the junior and senior high school levels are available at no cost. Visitors are welcome to visit the program site to review the program materials and may visit demonstration schools by appointment. If travel expenses are provided, LEGAL project staff are available to attend out-of-state awareness meetings. No consultant fee is required. Training may be provided at either the project site or adopter site (cost of expenses, travel, and materials covered by the adopter). If training is conducted at the project site, no expenses for workshop facilities will be incurred by the adopter. Follow-up (technical assistance and monitoring) will be provided upon request (adopter pays expenses).

**contact** Ron Cole, Coordinator; LEGAL; Dade County Public Schools; 1410 N.E. Second Ave. (Room 300); Miami, FL 33132. (305) 350-3392.



## **PROJECT**

Project LEGAL (Law-related Education: Goals for American Leadership)

A curriculum to enable students to develop knowledge, problem-solving skills, and attitudes related to the functioning of the U.S. legal/judicial system.

## **target audience**

JDRP-approved for all social studies students, grades 5, 8, and 11, or those grades at which American history is taught.

## **description**

Research has found that traditional teaching approaches have failed to improve students' knowledge of the processes of the U.S. legal/judicial system. The goals, therefore, of Project LEGAL are for greater attention to teacher training and implementation of specific and sequential approaches to law and civic education.

The first component of LEGAL's curriculum is the introductory unit that is taught in American history courses early in the school year. The unit consists of 10 lessons with teaching strategies that systematically and sequentially lead to the development of high level problem-solving skills. Teacher's manuals provide detailed lesson plans for this unit. The first four lessons enable students to discover that law affects their entire lives and that our Constitution and laws are based on societal and individual values. The fifth lesson presents situations to introduce the concept of legal values conflicts. The sixth lesson demonstrates that the judicial system exists to resolve such conflicts. The remaining lessons concentrate on the case method -- analysis, formulation of issue and decision, and development of reasoning. The activities and examples are varied to meet the abilities of each grade level.

The second component is the bi-weekly lessons that teachers prepare to fit into existing state-mandated history course content. Each of these lessons reinforces the knowledge and problem-solving skills presented in the introductory units. Traditional curriculum content is therefore presented, but through LEGAL's teaching strategies.

## **evidence of effectiveness**

Locally developed and validated tests of knowledge and comprehension and problem solving related to legal issues used in a pre/post, target/control design (1978-79, 1980-81) demonstrated significant gains at grades 5, 8, and 11. Also, teachers and schools have continued to use LEGAL after the initial training/implementation year.

## **implementation requirements**

The adopting district, or group of districts, should attend a three-day workshop that provides training in the use of LEGAL's methods and materials. Adoption districts agree to infuse LEGAL into their existing American history curricula at the elementary and/or secondary levels through teaching the Introductory Unit and ten additional teacher-prepared infusion lessons during the remainder of the year. An administrator must be selected who will supervise training and act as local director throughout the implementation year.

## **financial requirements**

Generally, travel expenses for training sessions may be shared among the adoption districts, LEGAL's funding, and the State Facilitator's budget. Teacher's manuals, \$5 each; student booklets, \$1 each. Costs for training are negotiated.

## **services available**

Free awareness brochures are available. Awareness sessions, needs assessment surveys, three-day teacher training at project or adoption site, follow-up technical assistance visits, pre/posttests, and teacher and student materials at grades 5, 8 and 11 are supplied at various costs.

## **contact**

James J. Carroll, Director; Onondaga-Madison BOCES; 6820 Thompson Road; Syracuse, NY 13211.  
(315) 437-1631, ext. 235.

**PROJECT** POLLUTION CONTROL EDUCATION CENTER -- PRIORITY ONE: ENVIRONMENT

An interdisciplinary environmental education program focusing on values clarification and decision making.

**target audience**

Approved by JDRP for grades 1-6 and junior and senior high science, health, and social studies classes.

**description**

The Pollution Control Education Center's program, Priority One: Environment, is a 13-unit interdisciplinary environmental education program for grades 1-12. Values clarification and decision-making activities lead to high student involvement in seeking honest and practical solutions to problems of immediate concern to today's pupils. Each multimedia instructional unit contains comprehensive student and teacher materials. The elementary units cover air and water pollution, solid waste management, recycling, and conservation of ocean and land resources. Four secondary units -- The Energy Challenge, Protecting Our Water Supplies, Air Pollution and Your Health, and Open Lands and Wildlife -- are most often used in the science program. However, they have been designed to be equally effective in social studies and health presentations. Schools interested in interdepartmental cooperative teaching will find these units appropriate.

The entire Priority One: Environment program can be implemented without special staff. Regular classroom teachers receive sufficient help from comprehensive teacher materials. Inservice training is recommended but not mandatory.

**evidence of effectiveness**

Criterion-referenced pre/posttests designed by project staff were closely related to the instructional objectives upon which the units were based. Evaluation data have shown significantly increased mastery of program content. On both elementary and secondary units, Priority One students scored significantly higher (at the .01 level) on posttests than the control groups. Pupils learned new concepts that became part of their out-of-school experiences.

**implementation requirements**

Though not mandatory for successful adoption of the Priority One program, staff training is highly recommended. Districts providing inservice training found that a half-day program is successful for either the elementary or secondary program. If staff training is not desired, a thorough review of teacher/student materials should provide sufficient orientation to implement the program. The use of any one unit by one or more teachers is considered an adoption. The secondary-level units are not restricted to use in science classes. The program is equally effective when presented in social science and health classes.

**financial requirements**

Costs of elementary units range from \$75 to \$85. The cost of each of the four secondary units is \$70. Each kit contains complete instructional materials for 30 students. Multiclass use of kits is encouraged. Kits are durable, replacement materials minimal.

**services available**

Awareness materials are available at no cost. Visitors are welcome at project site by appointment.

**contact**

Charles Murphy, Director; Priority One: Environment; Pollution Control Education Center; 2369 Morris Ave.; Union, NJ 07083. (201) 688-1200.

## **PROJECT** PREPARING FOR TOMORROW'S WORLD (PTW)

A program of interdisciplinary curriculum modules designed to promote development of decision-making and problem-solving skills needed to deal with current and emerging issues at the interface of science, technology, and society.

**target audience** Approved by JDRP for all students, grades 7-12.

**description** In our increasingly complex technological world, issues and problems also become increasingly complex. Students need more sophisticated problem-solving and decision-making skills to deal effectively with current and future societal issues. The goals of the PTW modules are the development of logical and social reasoning skills in the context of science, technology, and society. The Socio-Scientific Reasoning Model serves as the guiding framework for the materials, activities, and teaching strategies.

For grades 7-8, the modules are Coastal Decisions, Difficult Choices; Energy: Decisions for Today and Tomorrow; Future Scenarios in Communications; Technology and Changing Lifestyles; and Space Encounters. People and Environmental Changes is available for grades 9-10; Environmental Dilemmas for grades 10-11; and Dilemmas in Bioethics is available for grades 11-12. They have been successfully field-tested on over 6,000 students to complement courses such as English, science, reading, social studies, and biology. Student handouts, booklets, and filmstrips are utilized in activities such as scenario writing, graphing, problem-solving, conducting surveys, and futures forecasting, to add another dimension to existing curricula. Discussion and debate among students encourage critical self-evaluation and promote more complex reasoning ability along with increased perspective-taking abilities. Depending on the module selected and the course structure in which it is to be used, activities may be used in continuous sequence, interspersed throughout existing courses, or, as in the senior high grades, taught as discrete units of study. A Teacher's Guide accompanies each module.

**evidence of effectiveness** Preparing for Tomorrow's World has been shown to effectively increase secondary school students' (7-12) knowledge and social reasoning levels about issues at the interfaces of science, technology, and society. Not only are the results achieved using this program statistically significant, but use of the program has been shown to increase social reasoning levels from between 13.0 months (Technology and Changing Life Styles) and 27.1 months (Environmental Dilemmas) after only one month's (or less) exposure to the program.

**implementation requirements** No special staffing or facilities are required to implement Preparing for Tomorrow's World in any school district. This program is intended to supplement existing courses of study and to be implemented by the regular classroom teacher in his/her regular classroom. Because unique teaching strategies are employed, a two-day teacher training workshop is highly recommended for all teachers desiring to implement the program.

**financial requirements** Modules are modestly priced. Each module contains classroom quantities (for a class of 25-30 students) of materials, and, depending upon the module(s) selected, range in price from \$58 to \$105. Adoption costs, including teacher training, costs for substitutes, travel, evaluation, and materials range from \$8.15 per pupil (one year, one teacher, one class) to \$2.25 per pupil (one year, five teachers, five classes) for the most expensive modules. Since the materials can be reused over a period of several years, these per pupil costs can be reduced appreciatively, depending upon the number of years each module is used.

**services available** Awareness materials are available at no cost. Arrangements can be made, if given advance notice, for visitors to observe the program in use in various settings. Project personnel are available to attend out-of-state awareness meetings. Training is conducted at the project site or at the adopter site. Implementation, follow-up, and evaluation services are available to adopters. Costs for all services available to be negotiated.

**contact** Dr. Louis A. Iozzi, Associate Professor; Rutgers-The State University of New Jersey; Cook College; Education Department; P.O. Box 231; New Brunswick, NJ 08903. (201) 932-9164.

**PROJECT** RELIGION IN HUMAN CULTURE (RIHC)

A social studies program about religious traditions and topics.

**target audience** Approved by JDRP for students of all abilities, grades 9-12.

**description** Religion in Human Culture (RIHC) is a semester-length, elective social studies course about religion for high school students. It consists of six instructional units which may be implemented wholly or in part; these include a unit on religious expression and five separate units on the Hindu, Buddhist, Judaic, Christian, and Islamic traditions. RIHC is a program for learning about religions and is intended to help students acquire greater awareness, understanding, and appreciation of religious diversity. The curriculum content is consistent with United States Supreme Court decisions that public schools shall neither teach nor practice religion but may teach about religion as it affects human history and culture. The overall objectives for the Religion in Human Culture series fall within four categories established by the National Council for the Social Studies Curriculum Guidelines.

Religion in Human Culture exposes students to religious diversity; develops attitudes of understanding and respect for the beliefs and practices of others; centers on the study of religions as part of the social studies curriculum; furnishes a total teaching package about the major religions of the world; follows an easy-to-use, lesson-by-lesson format; and emphasizes inquiry strategies, a developmental process, and substantive content.

**evidence of effectiveness** In comparison with control groups, students enrolled in Religion in Human Culture showed substantial cognitive gains based on pre/posttest scores from a project-developed test collected during 1977-1982 in urban, suburban, and rural communities. Evaluation data are available.

**implementation requirements** Acquisition of the RIHC materials and their use in a high school classroom for one semester, implementation/teacher-training workshop of one to three days depending on adopter needs, and implementation monitoring or follow-up for one year are required.

**financial requirements** Complete set of materials for all six curriculum units, \$320. For each unit there is a teacher guide, a student reader, filmstrips and guides, cassettes, and blackline masters. Additional student readers for each unit, approximately \$2.50. Individual units may be purchased separately. Individual items from each unit may also be purchased separately. Travel and per diem for teacher training are negotiable.

**services available** Awareness materials are available at no cost. Visitors are welcome at project site anytime by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (costs to be negotiated). Training is also available at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** Wes Bodin and Lee Smith, Co-Directors; World Religions Curriculum Development Center; St. Louis Park Schools; ISD #283; 6425 W. 33rd St.; Minneapolis, MN 55426. (612) 925-4300.

## **PROJECT**

STONES AND BONES, A LABORATORY APPROACH TO THE STUDY OF BIOLOGY, MODERN SCIENCE, AND ANTHROPOLOGY

An innovative program designed to enrich and meet the present modern or life science, biology, and physical anthropology courses.

### **target audience**

Approved by JDRP for science students of all ability levels. The program has been successfully implemented in grades 7-12.

### **description**

Three instructional pathways emphasize the study of humankind. The program meets the needs of all ability students emphasizing active student participation through laboratory explorations. An interdisciplinary approach to other basic subject areas in the sciences is also stressed as well as mathematics, social sciences, and language arts. Modern (general) or life science and biology instructional units supplement, enrich, and extend current science curriculum.

**Modern (General) Science Pathway:** This pathway is specifically designed to highly motivate non-college-oriented students. Each of the 20 laboratory explorations offers the general science student with "hands-on" opportunities to investigate topics such as geologic time, measuring radioactivity, mapping, behavior of primates, and fossil hominids. During the four to six weeks needed to complete the unit, students will also have an opportunity to simulate archeological excavation using tools and materials provided in the fossil dig classroom kit.

**Biology Pathway:** This pathway is a four- to six-week overview of physical anthropology. This unit provides students with "hands-on," in-depth experiences as a supplement to the presentation of physical anthropology by their biology textbook. A series of 11 investigative explorations focuses on topics including primate behavior and distribution, interpreting archeological records, primate locomotion and morphology, and early hominids. This approach reinforces and extends many basic concepts taught in the study of biology.

**Semester Course Pathway:** This pathway in physical anthropology provides students the opportunity to study the story of humankind in depth. Laboratory investigations pursue such topics as phylogeny through time, continental drift, locomotion and behavior of primates, classification and morphology, *Australopithecus*, *Neanderthal*, *Homo erectus*, and *Cro-Magnon*.

Instructional materials for all three pathways are self-directive, requiring minimal teacher training. In addition to printed materials, cast replicas of fossil casts and instructional materials used in the explorations have been validated to be scientifically accurate by the L.S.B. Leakey Foundation, Los Angeles County Museum of Natural History, and by world-recognized anthropologists from various major universities.

### **evidence of effectiveness**

Evaluation data were from high school students in urban and suburban areas that included a wide spectrum of ethnic and socioeconomic populations. Based on results of criterion-referenced tests developed by the project, data indicate that scores increased by 56% in modern (general) science, 123% in the biology unit, and by 110% in the semester course. By contrast, comparison groups increased by 1%, remained the same, and decreased by 1% in these same trends. Differences are evident in the comparison of the absentee rate between project and comparison groups with marked lower absentee rates for participating project students.

### **implementation requirements**

"Stones and Bones" can be implemented in various ways. The selection of the pathway is determined by school and student needs. All three pathways require no special facilities or equipment. Existing classrooms and readily available items from any classroom such as rulers, scissors, and paste will be adequate. Teachers with none to minimal anthropology background will need no more than one day of training for initiating each of the three pathways successfully. Teacher's Guides for the three pathways are available to effectively implement the program.

### **financial requirements**

Based on the recommended basic materials needed for implementation, the start-up cost will be approximately \$430 for modern (general) science unit, \$820 for biology unit, and \$1200 for semester course. An alternative is to implement the program with fossil cast photo reprints in actual size in lieu of the fossil replica cast; the cost will then be approximately \$55 for each of the instructional pathways. Any number of classes can share the materials if classes are scheduled at different periods or days. Cost per student can be greatly reduced as more students utilize the materials. There is no additional cost in subsequent years of operation.

### **services available**

Awareness materials are available at no cost. Visitors are welcome at project's demonstration school site by appointment. Training workshops are conducted at project sites and/or adopter sites with cost to be shared. Project staff is available to attend awareness meetings out of state with cost to be negotiated.

### **contact**

Dr. Sid Sitkoff, Project Director; Los Angeles Unified School District; Office of Instruction; 450 N. Grand Ave.; Los Angeles, CA 90012. (213) 625-6419. Matt Matsumoto, Project Disseminator; Physical Anthropology Center; 6625 Balboa Blvd.; Van Nuys, CA 91406. (213) 997-2389.

## **PROJECT**

WWAS: Women in World Area Studies

Four two- to four-week units for high school students on the roles, status, and symbolic representations of women in world culture.

## **target audience**

Approved by JDRP for students in grade 11.

## **description**

This project has developed four units about the roles, status, and symbolic representations of women in Russia, the Middle East, India, and China. Each unit can be taught within a two- to four-week period, and two units can be taught in one semester. Content is organized by a conceptual framework that associates women's roles, status, and symbolic representations with six cultural universals: economics, politics, religion, social organization, esthetics, and education. The units link women's status in a society to economic and political factors, roles to social and educational factors, and symbolic representations to esthetic forms and religion. Each unit is a self-contained instructional package consisting of a student book, a teacher guide, a sound-filmstrip and guide, student worksheets, an annotated bibliography, and criterion-referenced instruments for measuring students' general and specific learning outcomes. Student books, which range in length from 90 to 200 pages, relate the concept of cultural diversity to women's roles and status. Each book contains readings, case studies, graphic information, primary source materials, and a bibliography to promote individual student research. Each teacher guide contains an introductory essay on women in the particular culture, teaching objectives, suggested teaching methods and activities, and an overview of the unit. Project-developed instructional materials accommodate a variety of teaching styles. Content is new, but methods and activities are those with which teachers are familiar. For each unit, a sound-filmstrip summarizes major themes. The accompanying sound-filmstrip guide includes the script and student worksheets for use after viewing. The project also has developed masters for overhead projection. Student worksheets, which may be reproduced as needed, present exercises referenced to the student book and the teacher guide.

## **evidence of effectiveness**

Compared to control groups who studied the same units, but without the program materials, WWAS students showed statistically significant and sizeable learning gains on specific tests.

## **implementation requirements**

For each unit desired, enough books must be purchased for every student. WWAS suggests that at least two units be used. The program is a flexible one that provides a manual on using WWAS materials. Adopting districts should plan for a one-day teacher-training workshop before adoption to introduce WWAS materials. A follow-up half-day workshop at the end of the first unit is desirable to address curriculum problems.

## **financial requirements**

Student books can be purchased through WWAS at a special 25% discount for 10 or more copies of the same title (each of the eight published books is \$5.95). Teacher guides (\$1.25) and an extensive manual on teaching women's history cross-culturally (\$10) are suggested for each adopting school district.

## **services available**

Awareness materials are available at no cost. Visitors are welcome at the WWAS offices. Training is conducted at the WWAS offices or adopting sites (costs to be negotiated). Testing materials and follow-up services are available (costs to be negotiated).

## **contact**

Marjorie Bingham or Susan Gross, Co-Directors; Women in World Area Studies; St. Louis Park Schools; 6425 W. 33rd St.; St. Louis Park, MN 55426. (612) 925-3632.

**PROJECT** Project ZOO: ZOO OPPORTUNITIES OUTREACH

A series of curriculum materials related to the study of animals to supplement and enrich existing classroom programs through experiential learning.

**target audience** Approved by JDRP for K-6 students of all abilities.

**description** Project ZOO is a science-oriented animal studies program that offers varied multi-sensory and multimedia learning experiences to augment zoo field trips. While children explore the world of animals and learn about conservation and ecology, activities are introduced in which students experience not only science, but aspects of language, mathematics, social studies, music, and art. Through the use of nearly 300 project-developed materials, six units of study are explored: Animal Characteristics, Animal Behavior, and Animal Homes and Habitats for primary grades; and Classification, Adaptation, and Interdependence for the intermediate grades. Study prints, flash cards, student booklets, worksheets, and games make the program an interesting and successful experience, stimulating more self-direction and causing more positive personal interaction. The materials accommodate any learning style and have proved effective even though a trip to the zoo is not possible. The teacher's unit book contains background and introductory information, activity suggestions, and a bibliography of resources. This manual, along with all needed materials, comprises a teaching kit. Materials include worksheet activities such as crossword puzzles, word search games, and matching items that can be enlarged for posters or games. These materials were teacher-created to reflect teacher needs and can be used in regular classroom programs. A sample kit of materials is available for review.

**evidence of effectiveness** Project ZOO has supporting data for pre/posttesting, "Design 4 as defined by Campbell and Stanley." The materials have proved valid and significant both statistically and educationally in teaching K-6 children about the characteristics, homes and habitats, behavior, classification, adaptation, and interdependence of animals. Project ZOO materials provide varied multi-sensory and multimedia learning experiences for students and help to relieve teachers of much time spent planning, researching, and making their own materials.

**implementation requirements** Full or partial adoption can be made. It is Project ZOO's suggestion that the Characteristics, Behavior, and Homes and Habitats kits be used for K-3, and Classification, Adaptation, and Interdependence of Animals be used in 4-6. With the teacher unit book that comes with each kit, teachers can teach the units without training, but Project ZOO highly recommends a one-day workshop session.

**financial requirements** Since single kits can be purchased, each kit is individually priced. The kits are self-contained except for occasional materials, such as yarn, paper, and plastic bags, which can be easily procured locally at little or no cost. The cost of individual kits are: Characteristics, \$55; Behavior, \$49.50; Homes and Habitats, \$55; Classification, \$93.50; Adaptation, \$99; Interdependence of Animals, \$82.50.

**services available** Awareness materials are available at no cost. ZOO materials currently are available from the project, but eventually will be distributed by a publisher. Training is usually done at adopter site (per diem must be paid).

**contact** Clarice Cox, or Edith Briles; Randolph County Schools; 2222 South Fayetteville Street, Asheboro, NC 27203. (919) 629-3151, ext. 3132.

SECTION B-7: ORGANIZATIONAL ARRANGEMENTS/ADMINISTRATION\*

ACE: Administrative Cooperative in Education -- Nebraska . . . . . B-7.3  
ARIZONA CONSORTIUM FOR INDIVIDUALIZED LEARNING (ACIL) -- Arizona . . . . . B-7.4  
CASHFLOW FORECASTING SYSTEM -- Kentucky. . . . . B-7.5  
COMPUTERIZED PUPIL ATTENDANCE ACCOUNTING/CENSUS SYSTEM -- Kentucky . . . . . B-7.6  
LEM: Learning Experience Module (Educational Management Design) -- New Jersey. . . . B-7.7  
MICROCOMPUTER-BASED ADMINISTRATIVE RESOURCES: Project Simu-School -- Texas . . . . . B-7.8

\*See Sectional Cross-Reference, p. D-9, for related programs.



## **PROJECT**

ACE: Administrative Cooperative in Education

A multidistrict cooperative program providing services to Title I teachers, students, and parents.

### **target audience**

Approved by JDRP for administrators, teachers, intermediate service agencies, and students involved in ESEA Title I projects.

### **description**

The primary goal of ACE is to provide quality Title I services to rather sparsely populated rural districts, which are often too small to furnish all the necessary features of a successful mastery learning program.

Project ACE has four key elements: an administrative model, teacher inservice and evaluation, a materials resource center, and parent involvement.

The cooperative makes a cost-effective instructional materials support center a reality. Selected commercial materials for checkout and mass-produced teacher-made materials, accompanied by inservice on the efficient use of both, are a critical dimension. A well-defined staff development plan, evolving from identified needs based on developmental teacher evaluation, instructional strategy fidelity, and program objectives, guidelines, and regulations, is a second critical component.

Parents' participation in their child's instructional program is a priority. A variety of both school-year and summer programs has been developed and instituted successfully through the combined efforts of the teachers across the districts.

### **evidence of effectiveness**

Fall-to-spring pre/posttesting on the Gates-MacGinitie Reading Test in 1976-77 showed a mean adjusted gain of 1.86 years for project students, compared with a 1.18 mean adjusted gain for a control group also receiving Title I services in schools of similar size outside the cooperative. 1977-78 scores showed a mean gain of 13.88 NCE units for project students, as compared with 8.63 for control students.

### **implementation requirements**

This program is best suited to a large district with multiple attendance centers or to small districts that want to work cooperatively. Some reading and administrative consultant time must be guaranteed. Access to mimeograph equipment is required for the materials support dimension. Project staff will spend a minimum of one day on cooperative management inservice with adopting schools and additional days with support personnel and/or teachers as required.

### **financial requirements**

Cooperative efficiency has enabled this project to operate at or slightly below the average per-pupil cost of districts of similar size administering their own Title I programs.

### **services available**

Visitors are welcome by appointment. Assistance in implementing a cooperative model is available at the project site or adopter site.

### **contact**

Norman Ronell, Project Director; ESU #7 Title I Cooperative; P.O. Box 947; Columbus, NB 68601. (402) 564-4414.

**PROJECT** ARIZONA CONSORTIUM FOR INDIVIDUALIZED LEARNING (ACIL)

Inservice training and materials to help administrators and teachers meet the individual needs of children through use of effective classroom-management techniques.

**target audience**

Approved by JDRP for teachers grades 1-6. This program has been used in other settings with grades K and 7-8, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description**

ACIL's inservice program is oriented toward systematic implementation of a humane, individualized environment emphasizing student development of a more positive self-image and concept mastery in the basic skill areas (reading, writing, and arithmetic). Diagnostic/prescriptive curriculum-support materials, recommended in this program and developed by the Utah System Approach to Individualized Learning (U-SAIL) project, help teachers establish an instructional management plan that more nearly meets individual learner needs. Basic components include humane environment, functional use of space and time, learning centers, flexible grouping, diagnosis/prescription, teaching the concept, daily drill, retrievals, conferencing materials, commitment sheets, learning principles, and teaching strategies. These components are installed through an integrated and systematic inservice training program. The teacher inservice training uses a practical how-to approach supplemented by parallel principal inservice training that heavily emphasizes development and use of instructional leadership skills. In separate sessions, key district staff members learn how to become an inservice cadre for future implementation and continuation. ACIL has been effectively implemented in schools representing the four major population areas in Arizona -- urban, inner-city, suburban, and rural communities -- with diverse socioeconomic, ethnic, and cultural student characteristics. The ACIL process is used in many schools where individual ethnic groups of Spanish surname, Native American, Black, or Anglo students constitute more than 50% of the school population. No changes in facilities or staffing are necessary for implementation. All certified instructional staff of a school should participate in the inservice training, but effective adoptions may also take place with partial staff involvement. Administrative support is essential.

**evidence of effectiveness**

Pre/posttest reading and math gains, measured with Comprehensive Test of Basic Skills Form S subscores, showed a significant difference ( $p < .001$ ) in favor of ACIL students ( $n=1,559$ ) compared with students not using the ACIL process ( $n=422$ ). Both samples were randomly selected from approximately 27,000 participating and control students throughout Arizona. Pretest, fall 1974; posttest, spring 1976.

**implementation requirements**

Recommended adopting unit is an entire school, although an individual teacher can adopt the program. No modification of staffing or facility is required. Training is required. Inservice training of two or three sessions per year is recommended. Concept-oriented materials are essential to effective implementation.

**financial requirements**

One-week in-depth initial cadre training at project site: \$250 per person, plus travel and expenses. Two-day initial training at adopter site, plus one to three days of follow-up monitoring and inservice is available for trainer's fee and travel expenses. Inservice support materials: approximately \$20 a year per teacher. A wide variety of commercially available materials already found in most classrooms is used. Optional concept-oriented U-SAIL curriculum materials: reading, approximately \$5 per student; mathematics, approximately \$8 per student.

**services available**

Awareness materials are available at no cost. Visitors are welcome by appointment. Project staff are available to attend out-of-state awareness meetings (expenses must be paid). Training is provided at project site (adopter must assume all expenses). Training is also conducted at adopter site (adopter must assume all expenses). Follow-up technical assistance is available to adopters (expenses must be paid).

**contact**

L. Leon Webb, Director; ACIL; 161 E. First St.; Mesa, AZ 85201. (602) 969-4880.

**PROJECT** CASHFLOW FORECASTING SYSTEM

A computerized method of forecasting cashflow for use in making investment and loan decisions.

**target audience**

Approved by JDRP for school administrators and accountants who make investment or loan decisions.

**description**

This system was installed to assist in the making of investment and loan decisions and, specifically, to produce at least an eight percent increase in general fund interest earnings for the Jefferson County School District. The system provides the ability to enter forecasted and actual data for four different funds and then to project the cash balance for each day of a fiscal year. The data are revised to reflect actual transactions, and the projected cashflow balance is automatically recalculated for each day remaining in the fiscal year.

Since it was put into operation in April 1979, the system has proved to be far more effective than the informal, manual system it replaced. Financial management can now be based on the most complete and up-to-date information possible, with the data available almost instantly.

A computer terminal and a computer system that supports terminal operations and provides disk availability are used. The programming language is BASIC because this is the language normally used to teach computer programming to students. The Jefferson County School District already had a BASIC instructional program, so the necessary hardware and software were available for the Cashflow Forecasting System at no additional cost. The system provides the ability to process four separate funds. The types of financial data processed include loans and investments, payroll deductions, bond payments, and four optional revenue and three optional expense categories.

**evidence of effectiveness**

During the first year of use, a 46% increase was realized in earnings from investments.

**implementation requirements**

A computer system with timesharing capability and BASIC language must be available with a minimum of 64K memory.

**financial requirements**

The indicated computer equipment is all that is needed.

**services available**

Printed documentation for the computer programs and operating instructions will be provided at no cost to adopting districts.

**contact**

Charles W. Grissett, Treasurer; Jefferson County Board of Education; 3332 Newburg Rd.; Louisville, KY 40218. (502) 456-3234.

**PROJECT** COMPUTERIZED PUPIL ATTENDANCE ACCOUNTING/CENSUS SYSTEM

A computerized system for tabulating and processing state-mandated census and pupil attendance figures and reports.

**target audience** Approved by JDRP for local education agencies and consortia of local education agencies.

**description** This system was set up with the objective of reducing by 40% the time required to compile and maintain pupil accounting and census information and to prepare the monthly and annual reports that are state-mandated in Kentucky and that are the basis for determining each school district's funding. By shifting from a system maintained by hand to a computerized system, the 38 school districts that are members of the Eastern Kentucky Educational Development Corporation have found it possible to make more efficient use of district personnel. The system is set up to allow for yearly initial input of student information, ten monthly cycles of collecting and reporting attendance data, annual reporting of attendance and other statistical data, and periodic and annual reports of census data for state and local use. The system is designed to produce these reports: teacher's record of daily attendance, teacher's monthly attendance report, principal's monthly attendance report, principal's annual attendance report, superintendent's annual statistical report, attendance growth factor report for first two months, annual census report, district census report, and other management reports needed by school district administrators.

**evidence of effectiveness** The time saved was shown on an average to be 40% based on a survey instrument used in districts that calculated attendance figures by hand as well as those utilizing the computer system. This time savings for teachers and administrators allowed them additional free time to be more productive in areas involving their expertise as opposed to the tedious clerical task of preparing monthly and annual reports by hand.

**implementation requirements** The programming language in which the programs are written is COBOL 74. The equipment currently being utilized is Sperry Univac System 80. Extensive training in the proper administration and operation of the system is required. Purchase of specialized forms is also required. Chapter II funds are currently being used by participating school districts to fund the project.

**financial requirements** Actual costs for adoption and maintenance of the project will vary according to size, availability of computer services, and other such factors. Costs for operating this system in 35 school districts with approximately 150,000 students is \$264,879 or \$1.79 per student. An adopting district or group of districts not having data processing equipment will experience certain start-up costs, such as purchase of computer equipment, data center staff development, and the cost of providing necessary facilities to house the data processing equipment and staff.

**services available** Awareness materials are available at no cost. Visitors are welcome at project site by appointment. Project staff are available by phone and are able to travel to adopter's site. Training can be conducted at either developer or adopter site. Implementation and follow-up services are available (costs to be negotiated).

**contact** Harry P. Brown; Eastern Kentucky Educational Development Corporation; P.O. Box 1269; 925 Winchester Ave.; Ashland, KY 41105-1269. (606) 324-5161.

## **PROJECT**

LEM: Learning Experience Module (Educational Management Design)

A team-teaching approach with a coordinated scheduling and student grouping procedure.

### **target audience**

Approved by JDRP for students in grades 2-5. This program has been used in grades 6-8, but no evidence of effectiveness has been submitted to or approved by the Panel.

### **description**

Project LEM is an educational plan originally designed for open-space schools. It provides methods for organizing facilities, staff, and students into a coordinated plan that develops positive community-school interaction, increases parent involvement, improves staff skills in instructional techniques, and raises students' mathematical achievement scores.

The LEM design removes classroom walls to create large open spaces that provide for a variety of instructional modes. Each Learning Experience Module spans two grade levels. Team teaching and differentiated staffing allow teachers to specialize in subject-matter areas as well as to prepare and/or teach lessons in other areas. Cross-age teaching is organized around skill topics. Students rotate from group to group. Flexible scheduling allows teachers to work closely with small groups of students on a variety of topics and also to develop and teach one subject in depth. Students with common skills needs are grouped homogeneously for reading, language arts, and mathematics. They are heterogeneously grouped for social studies, science, art, music, and physical education. Teacher-student ratio is one teacher per 25 students and one aide per LEM unit. A diversified instructional program is used, comprised of individualized approaches that vary according to the learning objectives and instructional methods selected by teacher or students. A diagnostic teaching methodology is used.

### **evidence of effectiveness**

Student achievement objectives were reached and surpassed. The mean percentile ranking of children functioning below the 40th percentile increased by at least 50% during the school year (California Achievement Test for Math and Reading), while those functioning at or above the 40th percentile maintained or improved their rankings.

### **implementation requirements**

Administrator of adopter school district is required to supply a written commitment to provide time for a team of teachers to participate in a three- to five-day training workshop. The workshop may be conducted either at the LEM site during Hackensack Public Schools' summer vacation or recess days or at the adopter site. Evaluation of project outcomes must be completed by the adopting site with assistance from the LEM staff.

### **financial requirements**

Adopting districts provide transportation, housing, and salaries for their personnel (if appropriate) and LEM training team.

### **services available**

Awareness materials are available at no cost. Visitors are welcome by appointment. Training may be conducted at project site or adopter site. Project staff are available to attend out-of-state conferences (expenses must be paid).

### **contact**

Eleanor Russo, Director of Instructional Programs; Hackensack Public Schools; 355 State St.; Hackensack, NJ 07601. (201) 488-4100, ext. 224.

**PROJECT** MICROCOMPUTER-BASED ADMINISTRATIVE RESOURCES: Project Simu-School

A program using microcomputers for improved educational planning and decision making.

**target audience** Approved by JDRP for school administrators, regional education agency directors, colleges of education, and educational computing consortia wishing to supply computerized planning and administrative assistance to schools.

**description** Financial Projection Program: Includes tax, revenue, and expenditure history and projection; accommodates multiple funds and objects; may be used to develop a two-year budget. Ten economic indicators and key parameters may be used to "drive" the forecasts; projection methods selectable by single key-stroke. Arrow keys are used to locate data to be entered or revised. An "electronic spread sheet" program with built-in projection formulas is included. Program allows data to be stored and retrieved.

Automated Library System: A full-function automated library system with check-in/check-out, fines accounting, due and past-due notice printing, current borrower identification, circulation analysis, and reference searching capabilities. Electronic catalog contains accession number, title, author, call number, category, publisher, copy-right year, and up to seven subject areas. For libraries with 5,000 to 50,000 volumes.

Attendance and Cumulative Record System: Data include demographic information, schedule, absence and tardy data -- both excused and unexcused. Allows absences to be pre-excused. Input by punched card, mark sense card, OCR wand, scan sheets, or badge reader. Has report writer with user-selectable sorts and multiple-inquiry keys. Program interfaces upline to central or regional system. Program prints weekly scan sheets automatically.

**evidence of effectiveness** These criteria are suggested for model evaluation relative to actual application: flexibility, increased comprehensiveness, increased variety of alternatives, speed, and reduced time in managing a larger volume of data. The system can be used by an individual administrator or an entire educational consortium.

**implementation requirements** All programs require a TRS-80 Model III or equivalent microcomputer. Library and attendance systems also require hard disk drive, 5 megabyte minimum.

**financial requirements** Financial Projection Program: \$2,000. Automated Library System: \$2,800. Attendance and Cumulative Record System: \$2,400.

**services available** Awareness materials are available at no cost. Visitors are welcome at project site by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is provided by tape and manual or by trainers at project site for Financial Projection Program (adopter to pay only its own costs). Training is conducted at adopter sites for Library Attendance Systems with adopter paying only travel expenses.

**contact** M. William Dunklau, Director; Project Simu-School; 8160 San Cristobol; Dallas, TX 75218. (214) 327-6913.

SECTION B-8: PRESERVICE/INSERVICE TRAINING\*

ECOS TRAINING INSTITUTE (ETI) -- New York . . . . . B-8.3

INSERVICE TRAINING IN DEVELOPMENTAL THERAPY -- Georgia . . . . . B-8.4

INTENSIVE READING IMPROVEMENT PROGRAM (IRIP) -- Illinois . . . . . B-8.5

PILOT PROJECT UTILIZING SUPPORTIVE PERSONNEL USING BEHAVIOR MODIFICATION  
TECHNIQUES WITH ARTICULATORY DISORDERED CHILDREN -- Iowa . . . . . B-8.6

PROJECT MANAGEMENT BASIC PRINCIPLES AND TECHNIQUES -- New Jersey . . . . . B-8.7

SIGMA: System for Individually Guiding Mastery Attainment -- California. . . . . B-8.8

\*See Sectional Cross-Reference, p. D-9, for related programs.

## **PROJECT** ECOS TRAINING INSTITUTE (ETI)

A program offering workshops designed to assist diverse local school districts with infusing career education, life-role skills, basics, environmental education, and other components into their curricula.

### **target audience**

Approved by JDRP for teams of K-12 teachers and administrators and community representatives invited by the team.

### **description**

The ECOS Training Institute offers a three-day workshop in a process of curriculum design. Participating teams should have three to eight members, with more than one person from a school building; a maximum of 35 participants can be accommodated. The ETI process has proven effective on a national level in assisting diverse local school districts to achieve their educational goals (e.g., environmental education, career education).

The process has four interrelated elements: curriculum infusion, stewardship, community/school interaction, and teamwork.

Curriculum infusion is basic to the program. Through a step-by-step procedure, teachers examine their courses and incorporate priority concepts, knowledge, skills, attitudes, and activities of career education, environmental education, basics, life-role skills, etc., into appropriate segments of their courses. If needed, they can create new courses.

Stewardship is the students' active participation in the management of problems, i.e., a decision-making process. Suggested stewardship activities are demonstrated at the workshop. These and additional activities will be built into the new, infused curriculum.

Community/school interaction is the joint cooperation of schools and community in mutually beneficial educational efforts. Teachers are encouraged to call upon a wide range of resources when implementing their curricula, and community interaction provides a ready source of people and materials.

Teamwork is a cooperative effort on the part of the administration, students, teachers, and community members to coordinate and manage the change process in a school district.

### **evidence of effectiveness**

Six aspects of the program were evaluated between 1971-74: materials, student achievement, student attitude, student behavior, teacher behavior, and administrative behavior. Evaluation data submitted to JDRP in May 1974 show that participation in ETI produced a significant increase in ecological awareness at the .001 level and an improvement in SRA subtest performance.

### **implementation requirements**

Attendance at a three-day workshop is essential to understanding the ECOS process, developing a curriculum, and implementing the program. Before training, the superintendent must complete a district profile and sign a letter of agreement stating that workshop participants will have planning time to meet as a group, if they wish, for a period of nine months after the workshop, and that workshop participants will present an awareness program to colleagues, board of education, and community members. Space found in and around most schools is satisfactory. No equipment need be purchased unless a school elects to become involved with environmental monitoring.

### **financial requirements**

Costs to district for training (\$100/day per trainer), travel, room and board. No charge for materials.

### **services available**

Awareness materials are available at no cost. Visitors are welcome at project site anytime by appointment. Project staff are available to attend out-of-state awareness meetings (at \$100/day per person, travel, room and board). Training is conducted at project site or adopter site (costs as above). Implementation and follow-up services are available to adopters (costs as above).

### **contact**

Frank Thompson, Director; ECOS Training Institute; P.O. Box 369; Yorktown Heights, NY 10598. (914) 245-6154.



**PROJECT** INSERVICE TRAINING IN DEVELOPMENTAL THERAPY

Training in the use of developmental therapy with severely emotionally disturbed and autistic children in public school classrooms.

**target audience** Approved by JDRP for teachers of autistic and severely emotionally disturbed children.

**description** This program offers training in the University of Georgia/Rutland Center Developmental Therapy curriculum for autistic and emotionally disturbed children that is based on identified normal social-emotional milestones of development. (For an outline of this curriculum, see the Rutland Center description in this catalog.) Teachers are trained to use the sequence of developmental objectives in selecting materials and activities for the classroom. Content of the training includes basic skills for working with children at any stage of development, advanced skills in use of group processes with older children, verbal and interpersonal skills, use of classroom structure for management of behavior, procedures for designing and scheduling complete programs, and assessment of social-emotional development of children. In addition, clear roles and techniques for teachers, aides, and support personnel are specified.

**evidence of effectiveness** Data indicate that teachers participating in this training program can obtain at least a passing level of proficiency in classroom skills with 30 contact hours of training. In addition, teachers obtain knowledge of Developmental Therapy principles and attain accuracy in assessing social-emotional development of autistic and severely emotionally disturbed children.

**implementation requirements** Agencies interested in receiving inservice training are asked to use the Developmental Therapy curriculum; seek appropriate mainstreaming placements; provide a minimum of one coordinator, two teachers, and two support personnel; provide released time for all personnel for training; and include parents and mainstream teachers in the treatment process. Training is also available to individuals at the project site.

**financial requirements** A minimum of five days of released time must be provided for all participants. Each teaching team should have a basic set of training materials (two books) at \$22. Each agency should provide a complete set of training materials (seven books) at \$105.

**services available** Services provided by the project staff include assessment of training needs, design of an instructional sequence, and implementation of training. Awareness materials are available at no cost. Visitors are welcome at project site by appointment. Project staff are available to attend a limited number of out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site and/or adopter site (costs to be negotiated). Follow-up services are available to adopters (costs to be negotiated).

**contact** Mary M. Wood or Carolyn Combs, Co-Directors; Developmental Therapy Institute; University of Georgia; 570 Aderhold Hall; Athens, GA 30602. (404) 542-1685.

**PROJECT** INTENSIVE READING IMPROVEMENT PROGRAM (IRIP)

A program for staff development of elementary school teachers intended to upgrade reading teaching skills.

**target audience** Approved by JDRP for elementary school teachers serving children in grades K-8.

**description** IRIP aims to raise elementary school reading achievement by upgrading teacher skills in reading instruction. One teacher from each participating school serves as a reading resource teacher. IRIP provides this teacher with 30 hours of training in essential theories and methods of teaching reading. The reading resource teacher then returns to school to conduct 30 hours of inservice training sessions for the school's other classroom teachers. Staffing includes school reading resource teacher(s) and classroom teachers, and may include a citywide or district coordinator.

Currently, 21 teacher-training units written especially for IRIP are used in the 30-hour preservice for reading resource teachers and the 30-hour inservice for classroom teachers. These units are: Self-Assessment, Test Data Interpretation, Continuous Progress-Mastery Learning Program, Grouping for Instruction, Directed Reading Lesson, Word Attack (Sight Vocabulary), Word Attack (Phonics), Word Attack (Structural Analysis), Comprehension (Vocabulary Development), Comprehension (Literal), Comprehension (Interpretation), Comprehension (Critical Reading), Study Skills (Parts One and Two), Literature Program, Oral Reading Development, Content Area Reading, Audio-Visual Resources, Teaching Reading to Speakers of Non-Standard English, Reading and the Non-English Speaker, and Home-School Partnership.

**evidence of effectiveness** An Inventory of Teacher Knowledge of Reading was administered to participating teachers. Pre- and posttesting with a norm-referenced test was used to measure student performance. The project was validated over a four-year period in 207 sites. Approximately 7,000 teachers and 250,000 learners were involved.

**implementation requirements** IRIP can be implemented in schools of any size having any organization pattern (K-8, K-3, K-4, 6-8, 7-8) or any instructional philosophy (graded/nongraded/individually guided). Involvement of total staff (administrative, teaching, paraprofessional) is recommended; however, IRIP can be implemented in phases (primary/intermediate/upper teachers).

**financial requirements** Cost depends on the number of reading resource teachers freed from classroom responsibilities to conduct inservice training and on the type of reproduction used for teacher-training units.

**services available** Awareness materials are available at no charge. Visitors are welcome at project site by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is provided at project site (adopter pays only its own costs). Training is also conducted at adopter sites (costs to be negotiated).

**contact** Carita A. Chapman, Director; Bureau of Reading Services; Chicago Board of Education; 228 N. LaSalle St.; Chicago, IL 60601. (312) 641-4059.

## **PROJECT**

PILOT PROJECT UTILIZING SUPPORTIVE PERSONNEL USING BEHAVIOR MODIFICATION TECHNIQUES WITH ARTICULATORY DISORDERED CHILDREN

A model for expanding speech therapy delivery through training of paraprofessionals as communication aides.

### **target audience**

Approved by JDRP for speech clinicians and administrators.

### **description**

The basic aim is to release clinicians from minor problems so that they are able to spend more time with children with severe speech difficulties. Communication aides are hired and trained to run operant programs with K-12 children with minor articulation problems under the direct supervision of a speech clinician. The professional clinicians train the aides, perform all diagnostic testing, determine prescriptions, and make all therapy decisions. If the problem is mild, such as simple lisping, sound distortion, or omission, the child is turned over to an aide. Aides work with 9-14 students for 20-30 minutes each.

Initial aide training takes two days followed by a week of work with a clinician. The aides handle an average of 70 students per year.

Before the project began, it cost about \$120 to give each student the speech assistance he or she needed. The use of aides has cut this figure in half. Formerly, clinicians spent 85% of their time in group speech sessions and only 15% in individual therapy sessions. Two years after the project started, these figures were almost reversed with 83% of the treatment in individual therapy and 17% in group.

### **evidence of effectiveness**

Data show that children with minor problems can correct a sound in eight weeks at 96%-correct criterion (McDonald Screening DEEP Test of Articulation, 1971-72). After one year of operation, 46% of the moderately disordered children in the project were dismissed from therapy. In the previous year, only 23% had been considered eligible for release from the program.

### **implementation requirements**

facilities are required.

Hiring, training, inservice, and scheduling of communication aides require approximately one month for speech clinicians. No special

### **financial requirements**

Approximately \$5,500 per communication aide. This figure includes training, salary, and materials for 70 children. Commercial as well as locally prepared materials and record-keeping forms may be used.

### **services available**

Awareness materials are available at no cost. Visitors are welcome anytime. Training is conducted at the project site (costs to be arranged). Training is conducted out of state (costs to be arranged). Project staff can attend out-of-state conferences.

### **contact**

Kenneth D. Barker, Supervisor; Clinical Speech Services; Area Education Agency #16; 509 Melrose Ct.; Burlington, IA 52601-1998. (319) 753-6561.

## **PROJECT** PROJECT MANAGEMENT BASIC PRINCIPLES AND TECHNIQUES

A skill-building training program designed to increase skills and knowledge across four phases of project management: planning, preparation, operational control, and termination.

**target audience** Approved by JDRP for school personnel with present or expected responsibility for planning and managing projects. This program has proved useful to State Department of Education staff, Intermediate Service Agency staff, and all levels of school district personnel, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** Project Management Basic Principles and Techniques is a training product that teaches school district staffs to manage educational projects so as to assure attainment of project objectives within time, cost, and performance constraints. Specific areas covered by the product are: defining the project goals, developing the project work breakdown and work-flow diagram, preparing time estimates, estimating and scheduling resources, developing the project budget, planning project start-up, developing a project information system and a procedures handbook, monitoring project operations, project problem solving through management action, implementing changes in project operations, and developing a project termination plan.

For each lesson, the trainee may view filmstrips, read, listen to tapes, or perform a combination of these activities. The product provides a mixture of individual and group activities. Each lesson can be easily modified to apply to a wide range of school district projects or program activities. The self-contained material requires no special training for its use, although a structured training session with a knowledgeable leader is recommended. Lessons are grouped into four phases according to the life span of a project and usually are studied sequentially. The material is quite flexible and adaptable to varied school district training patterns.

**evidence of effectiveness** Work sample data (proposal/plans) from one large urban school district and five "single state" school districts were evaluated by three experts using a project-developed Work Sample Criteria instrument before and after exposure to Project Management Basic Principles. There was an increase of 68% in the group mean scores from the large urban district and an increase of 110% in the group mean scores from the five "single state" districts.

**implementation requirements** A training workshop is recommended.

**financial requirements** Notebooks (one set per user), \$27.50.

**services available** Awareness materials are available at no charge. Visitors are welcome by appointment. Project staff can attend out-of-state awareness conferences (expenses must be paid). Training is conducted out of state (expenses must be paid).

**contact** Dr. John A. McAdams; Project Management; 15 E. Seventh Ave.; Pine Hill, NJ 08021.  
(609) 783-5300.

## **PROJECT**

**SIGMA: System for Individually Guiding Mastery Attainment**

A program guiding preservice teachers in their mastery of specified sets of teaching skills sequenced to form a developmental pattern.

### **target audience**

Approved by JDRP as a preservice elementary program. This program has been used in other settings as inservice for elementary teachers and as preservice and inservice for secondary teachers, but no evidence of effectiveness has been submitted to or approved by the Panel.

### **description**

The SIGMA program develops basic teaching skills in seven broad-based strands: learning management (behavioral objectives, diagnosis, transfer, reinforcement, motivation, retention); implementation of instruction (long-range planning, program development, accountability); communication skills (language acquisition, reading diagnosis); interaction skills (self-concept, group dynamics, community study skills); development of affect (creativity, role playing, valuing); multicultural and bilingual education; and evaluation in education. The program is centered on flow-chart competencies rather than courses and organized as a system of competency-based instructional modules (learning packages). The modular system is self-paced and individualized, requiring knowledge to be acquired, skill to be demonstrated, and consequences or changes in pupil behavior to be evaluated. It allows considerable flexibility in the way in which students are programmed. In an Individualized Study Center, SIGMA instructors work with students individually and in groups on the basic teaching skills as outlined by behavioral objectives in the modules. Instructors are also responsible for on-site supervision and evaluation of student teachers' performances in regular school classrooms.

**Key Elements:** use of modules that include behavioral objectives, prerequisites, preassessment, learning alternatives, postassessment, and remediation; Individualized Study Center for group interaction, individual study, and material storage; availability of instructors to facilitate student learning; and use of the program evaluation system necessary for ongoing revision and regeneration.

### **evidence of effectiveness**

Compared with a control group of elementary student teachers in a 1976 evaluation, recipients of SIGMA training showed large gains in knowledge of teaching skills, verbal interaction with children, and amount of individualized instruction provided. Elementary school children rated the performance of SIGMA student teachers much higher.

### **implementation requirements**

The SIGMA method may be adopted by a single instructor or by a team of instructors. Materials for student use must be duplicated, and all instructional support materials must be housed in a resource center. Training may be required in writing instructional objectives; writing or revising competency-based curricula and materials; evaluating students on knowledge, performance, or consequence objectives; managing competency-based programs; in the role of the instructor; and/or in program evaluation and regeneration.

### **financial requirements**

A wide variety of commercially available materials related to teacher training is used. These materials constitute the majority of the learning alternatives referenced in instructional modules. A complete set of 31 modules is made available for duplication (at cost) to adopter following training. Audiovisual equipment required is that generally found in most classrooms.

### **services available**

Awareness materials are available at no cost. Visitors are welcome by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be paid by the adopter). Training is provided at project site (adopter pays only its own costs). Follow-up to provide aid in implementation and evaluation is available at adopter sites.

### **contact**

Thomas Nagel, Professor of Education; College of Education; San Diego State University; San Diego, CA 92182-0415. (714) 265-6544.

SECTION B-9: **READING/LANGUAGE ARTS/MATHEMATICS/WRITING\***

AIRS: Andover's Individualized Reading System -- Massachusetts . . . . .	B-9.5
BASIC: Basic Adaptable Skills for the Individual Child -- Minnesota. . . . .	B-9.6
BASIC SKILLS IN READING (BASK) -- New Hampshire . . . . .	B-9.7
BOULDER VALLEY PUBLIC SCHOOLS FOLLOW THROUGH -- Colorado . . . . .	B-9.8
CAMBRIDGE FOLLOW THROUGH -- Massachusetts . . . . .	B-9.9
CATCH UP - KEEP UP -- Arizona . . . . .	B-9.10
a CHANCE FOR EVERY CHILD -- Michigan . . . . .	B-9.11
CHAPTER I READING, GRADES 2-6 (formerly Title I Reading, Grades 2-6) -- Iowa . . . . .	B-9.12
CHEROKEE FOLLOW THROUGH: A Direct Instruction Model -- North Carolina. . . . .	B-9.13
CLASSROOM INTERVENTION: Individualized Basic Skill Reading Program -- Washington . . . . .	B-9.14
a CLASSROOM TEAM APPROACH (formerly Personalized Instruction: A Classroom Team Approach) -- Colorado . . . . .	B-9.15
COMMUNITY SCHOOL 6 BRONX FOLLOW THROUGH -- New York. . . . .	B-9.16
project CONQUEST -- Illinois . . . . .	B-9.17
CRITERION READING INSTRUCTION PROJECT (CRIP) -- New Jersey . . . . .	B-9.18
DAYTON DIRECT INSTRUCTION FOLLOW THROUGH RESOURCE CENTER -- Ohio . . . . .	B-9.19
DISCOVERY THROUGH READING -- Michigan. . . . .	B-9.20
project DPI -- California. . . . .	B-9.21
EARLY CHILDHOOD PREVENTIVE CURRICULUM (ECPC) -- Florida. . . . .	B-9.22
EAST LAS VEGAS FOLLOW THROUGH: A Direct Instruction Model -- New Mexico. . . . .	B-9.23
the ELECTRIC COMPANY -- New York . . . . .	B-9.24
ENRICHING THE CURRICULUM (ETC) -- Massachusetts. . . . .	B-9.25
EVERY STUDENT EVERY DAY -- Louisiana . . . . .	B-9.26
FLINT FOLLOW THROUGH DIRECT INSTRUCTION RESOURCE CENTER -- Michigan. . . . .	B-9.27
FLIPPIN FOLLOW THROUGH: A Direct Instruction Model -- Arkansas . . . . .	B-9.28
"GAMES CHILDREN PLAY..." -- ATLANTA FOLLOW THROUGH/INTERDEPENDENT LEARNING MODEL -- Georgia . . . . .	B-9.29
the GLASSBORO RIGHT-TO-READ PROJECT -- New Jersey. . . . .	B-9.30
"GO METRIC": A Supplemental Low-Cost Metric Curriculum -- Oklahoma . . . . .	B-9.31
GULFPORT FOLLOW THROUGH: Mathemagenic Activities Program (MAP) -- Mississippi. . . . .	B-9.32
HAWAII FOLLOW THROUGH PROJECT -- Hawaii. . . . .	B-9.33
HIGHER HORIZONS 100 -- Connecticut . . . . .	B-9.34
IMPROVEMENT OF BASIC READING SKILLS -- Alabama . . . . .	B-9.35
IMPROVING ACHIEVEMENT (READING) THROUGH USE OF TEACHERS AND TEACHER AIDES -- Utah. . . . .	B-9.36
INDIVIDUALIZED COMPUTER ASSISTED REMEDIAL READING PROGRAM (I CARE) -- Pennsylvania . . . . .	B-9.37

\*See Sectional Cross-Reference Index, p. D-9, for related programs.

IRIT: Intensive Reading Instructional Teams -- Connecticut . . . . .	.B-9.38
LEARNING TO READ BY READING -- California. . . . .	.B-9.39
LEFLORE COUNTY (MISSISSIPPI) FOLLOW THROUGH RESOURCE CENTER -- Mississippi . . . . .	.B-9.40
MARC: Multisensory Approach to Reading and Reading Readiness Curriculum -- Florida .B-9.41	
MATHEMATICS ACHIEVEMENT PROGRAM (MAP) -- Pennsylvania. . . . .	.B-9.42
MATTESON FOUR-DIMENSIONAL READING PROGRAM -- Illinois. . . . .	.B-9.43
MCCORMICK COUNTY FOLLOW THROUGH: Mathemagenic Activities Program (MAP) -- South Carolina . . . . .	.B-9.44
MOUNT VERNON TV READING AND COMMUNICATION -- New York. . . . .	.B-9.45
NICHOLS AVENUE FOLLOW THROUGH: A Direct Instruction Model -- District of Columbia. .B-9.46	
PEGASUS: Personalized Educational Growth and Achievement with Selective Utilization of Staff -- Illinois . . . . .	.B-9.47
PHILADELPHIA FOLLOW THROUGH BEHAVIOR ANALYSIS RESOURCE CENTER (BARC) -- Pennsylvania. . . . .	.B-9.48
PICKENS COUNTY FOLLOW THROUGH: Mathemagenic Activities Program (MAP) -- Georgia. . .B-9.49	
PLATTSBURGH FOLLOW THROUGH PROGRAM -- New York . . . . .	.B-9.50
POCATELLO FOLLOW THROUGH: Mathemagenic Activities Program (MAP) -- Idaho . . . . .	.B-9.51
project PRIDE: Professional Reading Instruction with Desirable Effects -- Pennsylvania. . . . .	.B-9.52
PRIOR: Preschool and Improvement Of Reading -- Colorado. . . . .	.B-9.53
PROGRAMED TUTORIAL READING -- Utah . . . . .	.B-9.54
PSYCHOMOTOR LEARNINGS FOR ACADEMIC YIELDS (Project PLAY) -- Virginia . . . . .	.B-9.55
PUBLIC SCHOOL 33 MANHATTAN FOLLOW THROUGH PROJECT: A Child Development Approach -- New York. . . . .	.B-9.56
PUBLIC SCHOOL 92 MANHATTAN FOLLOW THROUGH -- New York. . . . .	.B-9.57
PUBLIC SCHOOL 137 BROOKLYN FOLLOW THROUGH: A Direct Instruction Model -- New York. .B-9.58	
RANDOLPH COUNTY FOLLOW THROUGH PROGRAM -- West Virginia. . . . .	.B-9.59
READING ACHIEVEMENT PROGRAM (RAP) -- Pennsylvania. . . . .	.B-9.60
project READING IMPROVEMENT -- North Carolina. . . . .	.B-9.61
READING -- INDIVIDUALIZED REMEDIAL LABORATORIES/MATH -- INDIVIDUALIZED REMEDICATION -- Georgia . . . . .	.B-9.62
READING INSTRUCTION AND PUPIL PERSONNEL SERVICES (RIPPS) -- Rhode Island . . . . .	.B-9.63
project READ-WRITE -- New Jersey . . . . .	.B-9.64
the RESPONSIVE EARLY CHILDHOOD EDUCATION PROGRAM (RECEP) -- North Carolina . . . . .	.B-9.65
SAN DIEGO CITY SCHOOLS FOLLOW THROUGH: A Direct Instruction Model -- California. . .B-9.66	
SEAPORT: Student Education Assuring Positive Organized Reading Techniques -- Rhode Island. . . . .	.B-9.67
STRATEGIES IN EARLY CHILDHOOD EDUCATION -- Wisconsin . . . . .	.B-9.68
STUDENT TEAM LEARNING: Intergroup Relations -- Maryland. . . . .	.B-9.69
STUDENT TEAMS-ACHIEVEMENT DIVISIONS (STAD): Language Arts -- Maryland. . . . .	.B-9.70
a SYSTEMS APPROACH TO INDIVIDUALIZED INSTRUCTION (SAII) -- Oregon. . . . .	.B-9.71
TEAM ORIENTED CORRECTIVE READING (TOCR) -- Kansas. . . . .	.B-9.72
TITLE I COMPENSATORY MATHEMATICS PROGRAM -- Iowa . . . . .	.B-9.73
TITLE I COMPENSATORY READING PROGRAM -- Iowa . . . . .	.B-9.74
TITLE I MATHEMATICS COMPUTER ASSISTED INSTRUCTION (CAI) -- Louisiana . . . . .	.B-9.75

PROJECT UNDERSTAND: Arlington's Title I Program -- Massachusetts . . . . .B-9.76  
UPSTAIRS SCHOOL -- Oregon. . . . .B-9.77  
UVALDE FOLLOW THROUGH: A Direct Instruction Model -- Texas . . . . .B-9.78  
WEST HILLS FOLLOW THROUGH PROJECT (formerly New Haven Follow Through)  
-- Connecticut . . . . .B-9.79  
WILLIAMSBURG COUNTY FOLLOW THROUGH: A Direct Instruction Model -- South Carolina . .B-9.80



**PROJECT** BASIC SKILLS IN READING (BASK)

An exemplary project providing special instruction in the basic skills necessary for reading success.

**target audience** Approved by JDRP for readers grades 1-3 scoring below the 40th percentile on the Gates-MacGinitie Reading Survey. This program has been used in other settings with grades 4-6, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** BASK is an adoptable/adaptable program that can be used in several ways to upgrade reading skills. Target pupils are remedial. It is a pull-out project, using a criterion-referenced format and including individualized diagnosis, prescription, and instruction. The BASK curriculum is targeted to basic reading skills -- readiness, phonics, structural analysis, comprehension, and study reference skills. Each child in the program receives 150 minutes of instruction weekly (30 minutes daily), working in small groups or on a one-to-one basis. The heart of the project is the individualized small-group instruction given daily. Frequent diagnosis and flexible prescriptive teaching ensure pupils' experience of success. Computerized information retrieval is used for diagnosis, prescription, and record keeping. The computer processes progress reports for parents and school staff. The project is also designed for manual record keeping and data processing.

**evidence of effectiveness** The Stanford Diagnostic Reading Test, 1976 edition, has been used for project evaluation. Since 1974, 76.7% of all participants reached or exceeded project goals.

**implementation requirements** Adopting district must make firm commitment to the use of BASK, provide necessary training, and assign supportive staff to concentrate on the project.

**financial requirements** Cost of adoption varies with the number of persons trained, length of training required, project staff expenses for adopter-site training, adopter staff expenses for project-site training. Adopters must purchase training materials. Training manual (one per trainee), \$15. A reading specialist trained at project site to train others at adopter site also needs a trainer's guide, \$25. Adopter must purchase one set of tests, \$25. A cost analysis sheet is available.

**services available** Awareness materials are available at no cost. Visitors are welcome by appointment. Project staff are available to attend out-of-state awareness meetings (expenses must be paid). Training (two or more days) is provided at project site (adopter pays its own expenses and purchases training materials). Training is also conducted at adopter site (costs to be negotiated).

**contact** Mary C. Freitas, Coordinator; ECIA Chapter I Office; 49 Ashland Street, Manchester, NH 03104. (603) 624-6426.

**PROJECT** BOULDER VALLEY PUBLIC SCHOOLS FOLLOW THROUGH

A program intended to build a strong foundation for success in school among children from low-income families.

**target audience** Approved by JDRP for grades K-3.

**description** The Boulder Valley Follow Through program is based on the Bank Street College model. Its purpose is to provide extra support in grades K-3 for low-income children and their families in order to build a strong foundation for learning and school success.

The classrooms are activity-oriented, with individualized programs in which children are encouraged to be self-directed learners. Each classroom is organized into learning areas, such as language, math, science, art, and blocks. In addition to their daily work in reading, writing, and math, and activities in science, art, and blockbuilding, children often cook (with supervision), take field trips, and do woodworking. Children transform everyday experiences into symbols through printing, drawing, and writing. Although all children may read or write at the same time, the work varies from child to child.

The program provides health, nutrition, and psychological services to participating children who are eligible for certain medical and dental benefits. Two Follow Through nurses make home visits and cooperate with other staff members to help families meet children's health needs.

The program offers a variety of social activities, educational opportunities, and workshops to parents. Parents are encouraged to visit classes and to volunteer in classrooms whenever possible. The program's Policy Advisory Council participates in staff selection, budget and proposal planning, and curriculum development.

**evidence of effectiveness** Follow Through children performed at or beyond their anticipated level in reading vocabulary and comprehension, language expression, and math concepts on the Comprehensive Test of Basic Skills and Short Form Test of Academic Aptitude. From 11% to 21% of Follow Through students scored above their expected levels. Project students equalled or exceeded the average scores of children of similar academic aptitude, age, grade, and sex.

**implementation requirements** This program can be replicated with children within a wide range of ability levels whose backgrounds may include a number of high-risk factors. The number of children per class is comparable in the Follow Through and the regular elementary classes. A willingness to learn a new approach to instruction is the critical teacher factor in this program. The essential components of the program are: staff development for all staff; a full-time teacher aide for each classroom; and materials for individualizing instruction.

**financial requirements** This project is planned at an initial cost of \$625 per child, and a continuing cost of \$590 annually per child. Personnel includes a full-time teacher for each kindergarten section and a full-time teacher aide for each classroom. Personnel training includes a staff developer who supports teachers and aides and provides on-going staff development activities. Support services are important to successful program operation.

**services available** A Follow Through Resource Center

A brochure describing the program is available upon request. Visitors are welcome at the project site anytime by appointment. A slide show describing the program is available on loan (borrower must pay postage and insurance costs). A booklet, Blockbuilding: Some Practical Suggestions for Teachers, is available for \$3 per copy.

**contact** Carolyn Topping, Director; Boulder Valley Public Schools Follow Through; P.O. Box 9011; Boulder, CO 80301. (303) 447-1010, ext. 407.

**PROJECT** CAMBRIDGE FOLLOW THROUGH

Reading, language, and math for children from low-income families.

**target audience** Approved by JDRP for grades K-3.

**description** The Cambridge Follow Through Program offers a child-centered curriculum based on elements of the Bank Street College approach to Follow Through. The learning experiences which promote skills in reading, writing, number work, social studies, arts, and science are presented as an integrated curriculum. Classroom activities are based on experiences that have practical meaning for the children, and children are encouraged to learn from each other. Each classroom is staffed by a teacher and a paraprofessional, usually a parent.

Comprehensive Services, an important part of Cambridge Follow Through, are provided for each classroom by an interdisciplinary team composed of the teacher, the paraprofessional, a staff developer, a parent liaison, a health worker, and a psychologist or social worker. Working together, this team develops a planning and assessment process to support each child and family. Staff development is offered to all staff. A career development and training program for paraprofessionals includes coursework which may be applied to the completion of an Associate's or Bachelors's Degree. Parents are encouraged to volunteer in the classroom and to take an active part in the decisions that affect their children's education.

**evidence of effectiveness** Comparisons made between Follow Through children and the national norm group on Stanford Achievement Test reading scores at third grade revealed that a smaller than expected proportion of Follow Through children performed more than one year below grade level for four of five cohorts. Further evidence of program success is found in a longitudinal study in which children with at least two years of exposure to the program had scores roughly equivalent to those of the national norm group despite the relative economic disadvantage of the Follow Through sample.

**implementation requirements** The successful development of a program would need to involve adequate staffing for the classroom, provision for staff development, and support for instructional staff. At a minimum the adoption should span grades K-3, but could represent a program within a school. The community should have the capacity to create the interdisciplinary team, drawing on, for example, existing health and social services organizations. Parental support and participation are vital to successful implementation.

**financial requirements** Staffing could be represented by existing staff who express an interest in the developmental-interaction model. Most of the classroom materials could be purchased out of the school district per pupil allocation for supplies.

**services available** A Follow Through Resource Center.

The Cambridge Follow Through Program has compiled an annotated bibliography of awareness materials. This bibliography is available upon request. The materials listed in the bibliography are available at cost which covers postage and duplication. Training and support services are available at cost. The Cambridge Follow Through Program welcomes visitations. Requests should be made in writing to the program director.

**contact** Joseph Petner, Director; Cambridge Follow Through; Cambridge School District; 159 Thorndike St.; Cambridge, MA 02141. (617) 498-9231.

## **PROJECT**

CATCH UP - KEEP UP

A remedial reading program and inservice teacher training.

### **target audience**

Approved by JDRP for students in grades 5-8 who are reading two or more years below grade level. This program has been used in other settings with students in grades K-4 and 9-12, but no evidence of effectiveness has been submitted to or approved by the Panel.

### **description**

The goal of this project is to raise the reading level of children who read below their grade level -- one month growth for each month in the program. Children who score two or more years below grade level on the Gates-MacGinitie reading test receive instruction in small groups from reading specialists in the reading lab and/or in the classroom. Reading specialists spend at least 50 percent of their instructional time working in the special reading lab. The rest is spent working with target children in their regular classrooms in concert with classroom teachers to provide inservice teacher training. Students meet with the reading specialist for 20-50 minutes four days each week and remain in the program for at least one semester. Instruction in reading is individualized for each student using the Flowing Wells Reading Support System, which carefully diagnoses a student's reading deficits, provides prescriptive activities, and includes an evaluation procedure to determine the student's progress. The reading labs serve as locations for specialized instruction, as well as reading materials resource centers for teachers. The reading specialists offer demonstrations, workshops, and seminars for teachers and provide creative reading materials such as board games, posters, audiotapes, and self-paced exercises for loan to students, teachers, and parents. The reading labs are decorated in lively and interesting fashion with unique niches and private retreats to enhance the appeal of reading. Students are evaluated on an ongoing basis using the Flowing Wells Reading Support System; a current record of student growth in reading skills is thus readily at hand for the reading specialist and classroom teacher. Gates-MacGinitie standardized reading tests are administered three times per year as a means of determining normative growth.

### **evidence of effectiveness**

In 1974, Gates-MacGinitie reading scores collected during 1973-74 from students in grades 5-8 enrolled in Title I funded schools were submitted to JDRP. Data analysis indicated that students who remained in the program for at least three months made significant gains in their reading level. From the beginning of the program, students have met or exceeded the program goal; at least 75% of the students gain one month in reading level for each month in the program.

### **implementation requirements**

This program involves the entire school system. It would be difficult for a single teacher to adopt only a portion of it. Basic implementation requirements are: one highly qualified and motivated reading specialist for every 225 students; a separate comfortable work area for small reading groups; a reading management system; active support from top-level administrators; teachers willing to release children to attend labs and willing to work with reading specialists; inservice training for administrators and reading specialists; administration of evaluation forms before and after the program.

### **financial requirements**

Costs budgeted for the 1975-76 school year based on 225 students in the program were approximately \$370 per student. Most of the cost is salaries for reading specialists. The Flowing Wells Reading Support System (RSS) is available for \$30.

### **services available**

Awareness materials are available at no cost. Visitors are welcome at project site by appointment. Training is provided at project site (adopter pays only its own costs). Training is also conducted at adopter sites (expenses and honorarium must be paid).

### **contact**

James L. Neeley, Coordinator; Dissemination Project; Project Catch Up - Keep Up; Flowing Wells Schools; 1444 W. Prince Rd.; Tucson, AZ 85705. (602) 887-1100, ext. 232.

**PROJECT** A CHANCE FOR EVERY CHILD

A diagnostic/prescriptive program for low-achievers carried out within the regular classroom and monitored by consultants.

**target audience** Approved by JDRP for low-achieving students and their teachers in grades 1-6. This program has been used in other settings with students of average or above-average abilities, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** A Chance For Every Child uses a team approach to solve the problems of low-achieving students within the regular classroom. Reading specialists work with classroom teachers and principals to develop a sequential program for selected students.

The project's unique success cycle is due to eight factors: the classroom teacher retains instructional responsibility; classroom teacher-consultant dialogue is continual; teacher managerial and instructional skills are upgraded; the student is provided with instruction at his/her individual level; high-interest materials and student recognition are effective motivators; teacher and student attitudes change gradually; high morale is maintained for teachers and students; and achievement, self-confidence, and motivation continue to grow.

**evidence of effectiveness** Student population is low-achieving, low-income, and urban fringe. Alternate forms of the Gates-MacGinitie Reading Test are used for pre- and post-testing. In the last three years, 52% of program students made gains of 1.6 or greater; 76% gained one year or more.

**implementation requirements** Key personnel visit the demonstration site. Formal approval for adoption and statement of assistance must be signed by the superintendent and the board of education. Potential adopter provides numerical evidence showing a need for the project, human resources capable of carrying it out, and financial resources to implement and continue the project for a minimum of two years. Smallest adopting unit possible is one school. One reading consultant is required for every 10-12 teachers, who will monitor approximately 80 students.

**financial requirements** Initial costs for materials and equipment vary from \$500 to \$3,000 per building. Pre- and posttesting costs average approximately 60¢ per child. The largest single item in the budget is personnel. Minimum cost per building for project materials is \$150.

**services available** Awareness materials are available at no cost. Visitors are welcome by appointment. Project staff are available to attend out-of-state awareness meetings (expenses must be paid). Training is provided at project site (adopter pays only its own costs). Training is also conducted at adopter site (expenses must be paid). Management and consultant manuals and follow-up consultant service are also available (costs to be negotiated).

**contact** Kathryne D. Sowinski, Director; Title I; Van Dyke Public Schools; 22100 Federal; Warren, MI 48089. (313) 757-3438 or 757-6600, ext. 316.

**PROJECT**

CHAPTER I READING, GRADES 2-6 (formerly Title I Reading, Grades 2-6)

A diagnostic/prescriptive approach to the teaching of remedial reading through the use of a locally developed management system.

**target audience**

Approved by JDRP for students grades 2-6 residing in identified Chapter I attendance centers and performing at or below the 40th percentile in reading.

**description**

The major goal of the Fort Dodge ECIA Chapter I (formerly ESEA Title I) reading project is to provide individualized instruction for target students so that they may become competent, independent readers. A management system developed by the Fort Dodge staff is the core of the program. It is flexible enough to be adapted to any basal series and to the needs and philosophy of any adopting district. This system has five components. The Hierarchy of Skills is a listing of essential reading skills stated in behavioral terms, placed in sequential order, and divided into three levels of difficulty. The three skill strands within the hierarchy are decoding, language development, and comprehension. There are pre- and posttests for each skill. The Individual Student Record Form is a chart listing all of the skills in the hierarchy in condensed form. For each skill there is space for pre- and posttesting dates and teacher's comments. These forms become the children's individual educational plans and transfer with them if they leave the attendance center. Because Title I, now called Chapter I, has been in existence in Fort Dodge since 1965, there is an abundance of teaching materials in each of the centers. These materials were coded to correspond to skills in the hierarchy and were described on file cards, which were placed in a Resource File. Suggestions for teaching specific skills and examples of student activities were also coded and placed in the file. Provisions have been made for staff members to continue to expand their own files with workable resources. The Parent Report Form, "From School House to Your House," is a nonthreatening progress report form to be used when conferences are not held. The Parent Handbook was developed as an idea book of activities for parents to use at home in everyday situations to build reading skills. It is distributed at Chapter I parent conferences.

This uncomplicated structure allows a staff member to conduct comprehensive individual student diagnoses, to plan an appropriate program for students based on diagnoses and use of materials, supplies, and equipment coded to skills and available in the resource file, and to keep a record of students' progress using the individual student record form to communicate with classroom teachers, administrators, and parents.

**evidence of effectiveness**

Pre/post scores from the Gates-MacGinitie Reading test Comprehension subtest were examined over a three-year period (1975-78) using Model A of the USOE evaluation and reporting system. NCE gains ranged between 4.3 and 14.6 with the weighted average 8.6. (Approximately 7 NCEs are considered exemplary.)

**implementation requirements**

Purchase of the three basic management system components -- Hierarchy of Skills, Individual Student Folder, and Resource File -- is necessary. They can be adapted to the needs of a district regardless of staff size or caseload. Inservice time with the Fort Dodge project director is required for staff to become familiar with the materials and to adapt them to their needs. The length of time depends on the size of the staff and the level of thoroughness they wish to achieve.

**financial requirements**

The basic costs are salaries and fringe benefits. With the exception of the management system developed by the Fort Dodge staff (approximately \$29), no new materials are required. Per-pupil cost ranged from \$351 to \$439 for the three-year period.

**services available**

Costs (travel and per diem) must be met by the requesting district. Printed management system materials may be purchased by mail.

**contact**

Carol Johannsen, Chapter I Coordinator; or Earl O. Berge, Superintendent of Schools; 330 First Avenue North; Fort Dodge, IA 50501. (515) 576-1161.

**PROJECT** CHEROKEE FOLLOW THROUGH: A Direct Instruction Model

Reading, arithmetic, language, and Cherokee culture for Cherokee children.

**target audience** Approved by JDRP for grades K-3.

**description** Cherokee Follow Through is a planned learning program for Cherokee children beginning with a full-day kindergarten. It employs the DISTAR instructional system in reading, arithmetic, and language, and focuses on Cherokee language and culture. When the children have finished the three DISTAR levels, they move into the regular program of the school's upper elementary grades. In an effort to perpetuate the Cherokee language and crafts, children are given instruction in language and folklore by a full-time Cherokee aide each week and then make pottery, baskets, beadwork, and fingerweaving in the traditional ways. Fast learners in groups of ten, slow learners in groups of five receive instruction four periods a day. Teachers and aides are trained in the techniques of eliciting group response, error correction, reinforcement, and teaching to mastery. Criterion-referenced tests and daily data on the children make continuous progress planning possible.

The decision by Cherokee parents in 1970 that the DISTAR materials were most suitable for their children illustrates the extent of parent involvement in the Follow Through program. The Policy Advisory Committee has hiring and firing power and participates in many administrative decisions. Parents are aides, testers, and workers who visit other parents at home.

A variety of health services is provided by the project.

**evidence of effectiveness** Students at the end of the third grade performed significantly higher than would be expected for low-income minority students on all areas tested and across six cohorts of children. Testing instruments were the MAT, CAT, and WRAT. Performance of six cohorts of Cherokee third-graders were within one-quarter standard deviation of the national norm in reading, and above the national norm in spelling, language, and arithmetic.

**implementation requirements** An adopting school would need to provide one or more paraprofessional aides to assist a full-time teacher in each classroom. The classroom should be arranged for teaching in small groups. Direct Instruction is adaptable to any system from one classroom to an entire district. The program, however, holds its greatest strength in continuity from the kindergarten through the third-grade levels. Training is available through the Direct Instruction Follow Through Model, College of Education, University of Oregon, Eugene, Oregon 97403, or through the publisher of DISTAR materials, Scientific Research Associates, Inc., 155 North Wacker Drive, Chicago, Illinois. One well trained person could train the staff of an entire project.

**financial requirements** Student and teacher materials are commercially available from Scientific Research Associates. Training arrangements can be made with them, also. The Direct Instruction Model at the University of Oregon should be contacted for contract training arrangements or consultant services. There should be no added expenditures for facilities or equipment and the expenses of currently used materials could be applied to the cost of DISTAR materials.

**services available** Awareness materials are available from the site and from the Direct Instruction Follow Through Model at the University of Oregon at no cost. Visitors are welcome at the project site by appointment. Consultant and training services are available through the Direct Instruction Model and through the DISTAR publishers, Scientific Research Associates.

**contact** J. Edward Sharpe, Director; Cherokee Follow Through; Cherokee Elementary School; Cherokee, NC 28719. (704) 497-9131.

## **PROJECT**

CLASSROOM INTERVENTION: Individualized Basic Skill Reading Program

An individualized reading program increasing the basic skill reading-achievement levels of inner-city students.

### **target audience**

Approved by JDRP for pupils grades 1-6. Although developed for the disadvantaged student population, this program can be used in other settings for any comprehensive elementary school reading program, grades 1-6, but no evidence of effectiveness has been submitted to or approved by the Panel.

### **description**

Each student is individually assessed and placed on a level where he/she can function effectively with the curricular materials in use. The student's progress is continuously measured and his/her successes are immediately reinforced. The program is conducted within the regular classroom, using any number of basal reading series. Classroom instruction is coordinated with supportive drill for remedial students in a separate "intervention" classroom. A teacher and an instructional aide are responsible for program individualization within each classroom. According to validators, this program provides teachers with an accurate assessment of each student's reading skills on a day-to-day basis. Curricular programs are coordinated across grade levels to eliminate student frustration as a result of changing instructional strategies from one grade level to the next. The validators judged the program to be inexpensive to implement and highly motivating for participating students because of its use of contracts and self-correctional procedures and its built-in success factors.

The Classroom Intervention Project has three major objectives: attainment of a year's growth per year in regular inner-city classrooms; attainment of a .8 growth in reading per year with contained classes for the educable mentally retarded and learning language disabled; development and implementation of an intervention-center classroom to provide supplementary reading services functionally related to each student's regular reading program, so that underachievers acquire reading skills at a rate of 1.0 gain per year.

### **evidence of effectiveness**

Regular students more than doubled their average reading gain, averaging 1.29 years' growth as shown by pre/posttesting with the Metropolitan Achievement Test. Similarly, 63.68% of 121 students gained a year's growth or more in reading. Special education students across two project years averaged 1.09 years' growth. The resource room, serving severely disadvantaged readers, produced 1.35 years' gain per student.

### **implementation requirements**

Any basal reading series can be converted from group into an individualized instructional procedure. By May 1978, individual contracts had been developed for nine major series. Adoption is easier for districts choosing a series for which individualizing has been completed, but an adoption can be made for any reading series. For most school districts, the expense of support aide time is not available, so either cross-age peer tutors or community volunteers must be recruited to support the classroom teacher during the individualized reading period.

### **financial requirements**

Most of the curricular costs are first-year start-up expenses. Curricular material costs can run as high as \$11.03 per student if no basal reading series are available. Aide time during reading costs \$32.70 per student in Seattle. Program maintenance costs approximately \$5 per student.

### **services available**

Awareness materials are available. Visitors are welcome any time. Training is conducted out of state (exemplary project staff costs must be paid). Project staff can attend out-of-state conferences (expenses must be paid).

### **contact**

Wayne E. Foley, or Robert B. Hamilton; 520 N.E. Ravenna Blvd.; Seattle, WA 98115.  
(206) 587-4334.



## **PROJECT**

A CLASSROOM TEAM APPROACH (formerly PERSONALIZED INSTRUCTION: A Classroom Team Approach)

A classroom team approach to improving language arts skills.

### **target audience**

Approved by JDRP for pupils in grades 1-5 scoring in lowest quartile in reading achievement. This program has been used in other settings with grades 6-7, but no evidence of effectiveness has been submitted to or approved by the Panel.

### **description**

A Classroom Team Approach is designed to provide an instructional model that will be successful in helping pupils improve their language arts skills. The program includes reading and communication skills, language development, creative writing, and recreational reading.

Specialists, working in a team relationship with cooperating classroom teachers and aides, devise and implement instructional activities that relate the pupils' characteristics and learning styles to the classroom teachers' existing curriculum. Pupils selected for the program are in the lowest quartile in reading achievement. They are cross-age grouped in regular classrooms, with 24 Chapter I (formerly Title I) pupils served for a 60-80 minute language arts period. Each class is divided into three or four subgroups of six to eight pupils; during the period, each subgroup receives 20 minutes of regular reading instruction from the participating classroom teacher, 20 minutes of supplementary instruction from the Chapter I teacher, and 20 minutes of reinforcement activities from the aide. (In the case of an 80-minute period, the class regroups for 20 minutes of instruction in written communications). In addition to the regular classroom program, a resource classroom may be provided, offering supervised activities in recreational reading and creative writing. These activities are scheduled during the afternoon, when classroom regroupings are not feasible.

The program presently serves 503 pupils in six elementary schools, grades 1-6, 61 pupils in junior high grades 7-8, and 19 pupils in two private schools grades 1-6. The Chapter I staff (22.00 fte) consists of eight language arts specialists, 10.5 teacher's aides, one substitute teacher, one part-time parent-contact aide, one secretary, and one coordinator.

### **evidence of effectiveness**

average 8.53 N.C.E. gain.

The Metropolitan Reading Achievement Tests were administered to all students in grades 2-8 in Fall-Spring testing. The 1981-82 data show an

### **implementation requirements**

The average staff requirement for each school is one language arts teacher and one instructional aide. Staff training in setting up and organizing the model is recommended. The program is conducted in the regular classroom; no special facilities are required. Since cross-age teaching takes place, a unit of two grade levels is the smallest that can be implemented.

### **financial requirements**

Per-pupil cost for the total program in 1982-83 is \$600. A basic program requires salaries for one teacher and one instructional aide. Additional materials and equipment may be employed to reinforce or enhance the basic program.

### **services available**

Awareness materials are available at no cost. Visitors are welcome by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is provided at project site (adopter pays only its own costs). Training is also conducted at adopter site (costs to be negotiated).

### **contact**

Sally Jo Case, Coordinator, or Lillian Cannon, Developer; 7200 Lowell Blvd.; Westminster, CO 80030. (303) 428-3511, ext. 267.

**PROJECT**

COMMUNITY SCHOOL 6 BRONX FOLLOW THROUGH

A program using positive reinforcement to teach reading, math, and language.

**target audience**

Approved by JDRP for grades K-3. Program components have also been used in other settings, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description**

The primary goal of this Follow Through program is to produce achievement at or near grade level in reading, math, and language. To achieve this goal, a positive classroom environment is designed relying on systematic motivation, continuous progress monitoring, small-group instruction, in class staff training, and parent involvement.

Two motivational systems, token economy and performance contracting, are used to increase academic performance. Younger children receive tokens for appropriate academic and social behavior during instructional periods; after each instructional period, they exchange accumulated tokens for special activities of their choice in a back-up period. Older children contract to complete certain amounts of academic work in exchange for special activities. Daily routines and activity schedules are established to ensure that children spend a majority of their school day learning basic skills.

Parent volunteers assist in the classroom on a rotating basis and are trained in behavior analysis techniques, group management procedures, and use of curricular materials. Through parental involvement activities, Follow Through families receive assistance in utilizing social, medical, and dental services from community agencies.

**evidence of effectiveness**

Testing with standardized tests (including WRAT, SAT, and SESAT) since 1969 indicates that project students scored at or above national norms in reading and math. A higher percentage of Follow Through children scored above the national average in reading and a lower percentage experienced failure in reading when compared to local groups.

**implementation requirements**

Teachers must participate in three-day preservice training. Training is also required for other staff members involved in implementation. Comprehensive health and social services can be provided through utilization of school/community resources.

**financial requirements**

The costs of replication are basically of staffing, although existing staff can be identified to meet program needs.

**services available**

A Follow Through Resource Center.

Awareness materials are available at no cost. Visitors are welcome at project site by appointment. Project staff are available to attend awareness presentations (costs to be negotiated). Preservice training, inservice training, and technical assistance are available at project site (at no cost) or at adoption site (costs to be negotiated).

**contact**

Ruth Khelseau, Project Coordinator, or Judith A. Scher, Trainer; Community School 6 Follow Through; District 12; 1000 E. Tremont Ave.; Bronx, NY 10460. (212) 893-8991 or 542-7676.

**PROJECT** PROJECT CONQUEST

A highly individualized diagnostic and prescriptive reading program.

**target audience**

Approved by JDRP as a reading program for grades 1-6. This program has been used in other settings as a first-grade (repeaters) through ninth-grade program for students below grade level but potentially able, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description**

Project Conquest, a clinical but flexible approach to reading, diagnoses the child's reading problems through a 17-step diagnostic procedure and prescribes an individualized, structured learning program to be followed by the child throughout the year. The teacher receives extensive training in remediation, testing, and related areas.

Pupils work principally alone in individual carrels while being supervised by clinicians and aides. Clinicians work individually with six students for approximately 45 minutes, four and a half days a week. Friday is game day, and only group activities are scheduled. Learning tasks are selected by teacher and/or student.

**evidence of effectiveness**

Conquest students and comparison groups were pretested and posttested in fall and spring on the Gates-MacGinitie (grade 1 repeaters only through grade 3) and CAT (grades 4-6). The test results indicated that Conquest students scored higher on these tests than comparison groups and achieved a gain of at least nine months to two years annually in the program. Financial and evaluation data were collected in 1973-76.

**implementation requirements**

Materials used: programmed materials, phonovisual charts and words, books, kits, audiovisual materials, games, supplemental nonprogrammed materials, teaching machines (commercial), commercial materials, and teacher-made materials, including Conquest Instructional Survival Kit (CISK).

**financial requirements**

Total estimated costs are \$450 per pupil after start-up. Initial cost for equipping one reading-room/clinic is approximately \$6,000.

**services available**

Awareness materials are available at no cost. Visitors are welcome at project site and additional out-of-state demonstration sites by appointment. Project staff are available to attend out-of-state awareness meetings (expenses must be paid). Training is provided at project site (adopter pays only its own costs). Training is also conducted at adopter site (expenses must be paid).

**contact**

Bettye P. Spann, Director; Conquest Demonstration Site; 1005 State St.; East St. Louis, IL 62201. (618) 274-0926.

**PROJECT**

CRITERION READING INSTRUCTION PROJECT (CRIP)

An individualized language arts readiness program.

**target audience** Approved by JDRP for grades pre-K through 3.**description** Specific performance objectives are divided into four major readiness areas: psychomotor, auditory, visual, and oral language. These four areas are further segmented by 11 subdivisions: small motor, large motor, coordination, directionality, auditory discrimination and classification, visual discrimination, visual comprehension, visual memory, oral composition, and oral vocabulary. A hierarchy of 115 reading readiness skills constitutes the CRIP continuum.

Children go to a specially equipped room where instruction is geared to demonstrated individual needs. Activities are arranged around learning centers in an open-classroom fashion, and the children work independently or in small groups.

Pre-kindergarten and kindergarten children in the public schools meet for two and one-half hours in morning or afternoon sessions five days per week. First-, second-, and third-grade students are scheduled for a minimum of one-half hour per day, five days per week. Teacher's aides are helpful for maintaining the classroom inventory of equipment and instructional supplies, recording test scores, and assisting teachers in nonteaching duties.

**evidence of effectiveness** Pre-kindergarten through grade 3 students were assessed for levels of functioning in cognitive, affective, and psychomotor domains. Pre-kindergarten through grade 1 students met the cognitive performance objectives, many scores approximating national norms. All grades met psychomotor performance objectives. On the affective measure, pre-kindergarten through grade 1 students met the criterion.**implementation requirements** Inservice training is helpful; however, no special training is available to districts through the project. Teachers are provided with a Teacher's Guide, Test-Teach-Test handbook, individual pupil profile cards, and class record booklet. All instructional materials have been coded to specific skills for easy reference.**financial requirements** For 1979-80, the per-student cost was approximately \$800, including supplies, equipment, and staff salaries.**services available** Awareness materials are available at no cost. Visitors are welcome by appointment. Project staff are available to attend out-of-state awareness meetings.**contact**

Anita M. Schmidt, Director; Elementary Education and Chapter I; School #4 Annex; Dill Ave.; Linden, NJ 07036. (201) 486-2530.

**PROJECT** DAYTON DIRECT INSTRUCTION FOLLOW THROUGH RESOURCE CENTER

A program emphasizing small-group face-to-face instruction by teachers and aides using carefully sequenced lessons to achieve proficiency in reading, math, and language.

**target audience** Approved by JDRP for K-3.

**description** The Dayton Follow Through Program attributes its success to: a system of carefully sequenced skills in reading, math, and language programmed for teacher use; highly specific teacher training; and careful monitoring of student progress. A positive-reinforcement management system is employed.

Teaching is by direct programmed instruction consisting of a fast-moving series of programmed questions and answers. This involves frequent verbal responses by the children, and requires basic teaching techniques to hold children's attention. The following represents a basic teaching sequence: teacher presents a task from a developed manual, using specified questions; children respond verbally; teacher evaluates their answers, reinforcing good responses; teacher uses a specified procedure to correct wrong answers; all tasks in a lesson are completed, following steps 1 to 4; children are given take-home materials related to the lesson, which are later reviewed in class.

Another aspect of the program is active parent involvement -- as members of the Parent Advisory Council; as participants in classes, in which they are taught how to teach their children using the program instructional model; and as classroom volunteers or paid paraprofessionals.

**evidence of effectiveness** Testing of low-income children in the first cohort of participants (1968-71) with the Stanford-Binet showed significant gains. Testing in subsequent years using the Multiple Access Test showed significant growth in math, language, and spelling, while results of the Wide-Range Achievement Test showed gains meeting or exceeding national norms in all areas. In 1976, IARS Responsibility for Failure and Responsibility for Success showed positive effects for project participants.

**implementation requirements** The decision to adopt the Dayton Follow Through Program should be jointly shared by administrators, teachers, and parents. Program implementation can begin immediately after training. The program is adaptable for pre-kindergarten through third grade. Paraprofessional or volunteer assistance is strongly suggested.

**financial requirements** Assuming 30 students per class, per-pupil costs by subject area and grade level for initiation and maintenance (maintenance costs in parentheses): Reading I, \$17.36 (\$8.25); Reading II, \$18.51 (\$8.25); Reading III, \$18.13 (\$7.30); Language I, \$19.77 (\$5.30); Language II, \$18.90 (\$6.30); Language III, \$15.15 (\$7.45); Math I and II, \$15.15 each (\$8.20 each).

**services available** A Follow Through Resource Center

General descriptive materials available free. Multimedia materials (films, videotapes, cassettes, and printed information) are also available. Visitors welcome by appointment. On- and off-site one-day awareness sessions and three-day training sessions (including program orientation, introduction to curriculum materials, and laboratory experiences) are offered to teachers, paraprofessionals, supervisors, and administrators. Project staff will provide training and monitoring services averaging one day per month at no cost to adopter site.

**contact** Willetta C. Weatherford, Director, or Jeannie Boeke, Consultant; Dayton Follow Through Resource Center; 4280 N Western Ave.; Dayton, OH 45427. (513) 262-3745 or (collect) (513) 461-3301.

**PROJECT** DISCOVERY THROUGH READING

A remedial reading program for underachievers utilizing a modified tutorial, highly structured approach.

**target audience** Approved by JDRP for low-achieving students in reading, grades 2-3. (Limited grade span was due to available funding.) It has been used in other settings with grades 1 and 4-6, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** Discovery Through Reading is an instructional program in reading that stresses rapid skill development for second- and third-grade students who are having (or have had) difficulties in their regular classrooms. Its goals are the improvement of students' ability to recognize words and improvement of their reading comprehension. In the Discovery project, teachers work with two students at a time in 45-minute sessions scheduled twice a week at a location outside the regular classroom. Each full-time Discovery teacher's maximum case load is 30 students. A key organizational feature of instruction is the "task sheet," an agenda that lists six specific activities to be completed by a student during each session. The task sheet helps teachers decide what tasks are within the capabilities of students. An important aspect of the project is the way in which teachers interact with students, emphasizing a style that provides students with a nonthreatening environment. A student competes only with himself/herself, and performance and achievement are reinforced with concrete rewards. All activities are charted and graphed immediately, showing teacher and student that progress is being made and that goals are being achieved.

**evidence of effectiveness** Students were pre- and posttested with appropriate levels of the Botel Word Inventory and the Stanford Reading Test each year until 1978. Evaluation results indicate 85-95% of students make a year's gain (or better) annually in the program. (Beginning in 1978-79, only the Stanford Test was used.) Target schools are identified on the basis of low income. Students selected must be reading at least one year below grade level.

**implementation requirements** Several alternatives for adoption are available: PIP (Project Information Package) alone; training by Project Director, with/without PIP, at adopter site; training with PIP of a trainer at demonstration site. Program can be adopted by a single school, grades 2-6; by a single grade level within a school; or by all elementary schools within a district.

**financial requirements** A wide variety of commercially available materials is used. We specifically require the use of five. Cost of these consumables is \$15 per student per year. Certified teachers with no previous special training in reading are used at the original site. Paraprofessionals have been trained to conduct the program at other sites.

**services available** Awareness materials are available at no cost. Visitors are welcome by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project or adopter site.

**contact** Dorothy Neff, Project Director; Clarkston Community Schools; 6590 Middle Lake Rd.; Clarkston, MI 48016. (313) 625-3330.

## **PROJECT** PROJECT DPI

A diagnostic, prescriptive, individualized mathematics program.

**target audience** Approved by JDRP for junior high school students, grades 7-9. The program also has been widely replicated in senior high schools, grades 10-12, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** Research studies in the Long Beach Unified School District show that students with limited mathematical competency can increase that competency more effectively if they are given a diagnostic, prescriptive, and individualized instructional program rather than if they are taught by the traditional group textbook approach.

The heart of the DPI curriculum consists of 23 "advancement tracks" or levels which encompass key learnings in arithmetic, pre-algebra, algebra, and geometry that range in difficulty from grade 4-10. For each track -- or continuum -- a sequential set of about 15 study packets (daily lessons) is available. Results of a criterion-referenced pretest are the basis on which teachers diagnose each student's strengths and weaknesses to determine placement of that student in the appropriate study packet of an appropriate track. Each packet -- which concentrates on a single objective -- contains practice exercises which are written in a multiple-choice format together with explicit instructions. After students complete four study packets, a checkpoint test is given. Successful students advance to the next packet or track, while unsuccessful students are retaught the skills just tested and then given an alternate checkpoint test.

At the beginning of each day, quickie quizzes are given to all students in a class. At this point, one fifth of those students go to the mathematics laboratory. This procedure ensures that the entire class attends the "lab" once a week. Review exercises are given each day to those students not going to the lab, and those students continue with their track lessons. Students move at their own learning pace and use materials which help strengthen specific weaknesses as well as known skills. Students who find they need help beyond the packet instructions benefit from individual assistance given by the teacher or an instructional aide. At the end of each track, students are given a posttest to insure mastery of the skills presented in that track.

In the laboratory, students are given lessons whose concepts correlate with current classroom learnings. A laboratory is outfitted with calculators, computer terminals, cash registers, and other math equipment not found in the classroom. The laboratory teacher is informed of the current track assigned to each student as well as the packet within that track on which the student is working. Lab activities require students to manipulate appropriate equipment and materials and to make general statements regarding discoveries made during the lab lessons.

**evidence of effectiveness** The achievement of DPI students is measured by the nationally normed Comprehensive Test of Basic Skills, and typical gains made by project students are considerably higher than expected from similar students enrolled in traditional large-group instructional programs. Longitudinal studies also show greater gains by project students than norm groups. The DPI project has been operational at the project school for more than 12 years and results have been similar each year.

**implementation requirements** The basic track curricula -- including tests, refresher drills, quickie quizzes, selected lab lessons, and a pre-algebra set -- are available at no charge on a loan basis for duplicating purposes. A variety of adoptive patterns is possible, ranging from one teacher with no lab to a complete schoolwide program.

**financial requirements** Financial requirements can range from minimal printing costs -- if just the track curricula are used -- to adding staff (e.g., classroom aides, lab teacher) if a math lab is implemented.

**services available** The project's descriptive booklet is available upon request at no charge. Visitors are welcome at any time.

**contact** Roger W. Shickler, Project Director; Project DPI; Long Beach Unified School District; Franklin Junior High School; 540 Cerritos Ave.; Long Beach CA 90802. (213) 437-8212.

**PROJECT** EARLY CHILDHOOD PREVENTIVE CURRICULUM (ECPC)

A program for high-risk first-grade students developing the perceptual, cognitive, and language skills they need to respond successfully to beginning reading instruction.

**target audience** Approved by JDRP for identified high-risk first-grade students. It has been used in other settings with primary learning-disabled children and children whose prereading perceptual skills development shows limited beginning reading ability, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** The project focuses on high-risk first-grade students by means of an individualized diagnostic curriculum. (High-risk children are those who have normal capacity to learn, but who begin first grade lacking prereading perceptual skills and exhibit poor concept and/or oral language development.) Classrooms are established as primary learning laboratories, in which the environment, management, and materials facilitate small-group instruction and independent learning. Teachers receive special training in diagnostic teaching skills and in individualizing instruction.

Using results of criterion-referenced tests, the teacher prescribes for prereading perceptual needs. Self-correction, self-direction, reinforcement for learning, prereading skills development, and listening skills are all interwoven in an all-day first-grade program that includes small-group reading instruction. (For other children who lack independent reading ability, the criterion-referenced assessments provide the teacher with a means of identifying learning needs and styles.)

Although primarily utilized as a full-time, self-contained unit, the program can be implemented on a resource or part-time basis.

**evidence of effectiveness** For the third year of project development (1972-73), the project children scored greater gains on end-of-year Stanford Achievement Test: Paragraph Meaning than control groups. (Random control mean 13.024, project mean 18.741; matched control mean 10.916, project mean 18.974. Probability < .001, significant at .05 level.) Follow-up studies available.

**implementation requirements** Any experienced primary teacher can implement the program following training. Attendance at a three-day workshop is essential for adoption. Training is practical, and includes hands-on learning. A support-resource person (curriculum specialist, reading teacher/coordinator, psychologist) knowledgeable in the program should be available to advise and assist the teacher. A full-time paraprofessional aide is required for full implementation. Any primary classroom can be used to create a student learning-centered environment. No special equipment is necessary.

**financial requirements** Project-developed Prereading Assessment test and various guides must be purchased from the project. Manuals and guides are costed per teacher. Some materials are per school/district usage. Utilization of Listening Lessons components demands purchase of multiple copies of paperback books and cassette tapes. Costs will vary from \$100-\$2,000.

**services available** In-depth awareness materials are available at no charge. Visitors are welcome by appointment at project and at demonstration sites around the country. Awareness sessions are offered at potential adopter sites (honorarium and expenses must be paid). Training is available at adopter site (honorarium and expenses must be paid). Materials may be purchased without adoption training. Technical assistance in preparing adoption/adaptation proposals is available.

**contact** Nathan Farber, Director; ECPC Program; 9240 S.W. 124 St.; Miami, FL 33176. (305) 251-5445.



**PROJECT**

EAST LAS VEGAS FOLLOW THROUGH: A Direct Instruction Model

Reading, math, and language for bilingual, bicultural children in rural communities.

**target audience**

Approved by JDRP for grades K-3.

**description**

The goal of the East Las Vegas Follow Through project is development of enthusiastic and successful students through use of a variety of basal reading and math series along with the highly structured DISTAR system for reading, math, and oral language. In each subject, teachers work with skill lists to anticipate where children should be at the end of each school year.

Independently and in small groups based on ability, children work 90 minutes daily on both oral and silent reading instruction and activities. Special correction procedures, frequent opportunities for student oral and written responses, and biweekly criterion-referenced testing and reporting are essential elements of the program.

Children with limited English-speaking ability are taught in their native language by teachers and aides using locally developed materials. Children are encouraged to take pride in their cultural heritage by learning the songs, games, foods, folk dances, and customs of northeastern New Mexico.

The parent program has been instrumental in establishing both the bilingual program and a home reading program in which the children are expected to participate.

**evidence of effectiveness**

On both the Metropolitan Achievement Test and the Stanford Achievement Test, Follow Through students consistently scored at or above the national median in math and reading, which is higher than would be expected on the basis of pretest scores for this population. Over the 12 years of Follow Through, there has been a steady increase in the percentage of students at all three grade levels who perform at or above grade level on subtests of the SAT.

**implementation requirements**

The adopting district may choose to implement the program throughout the entire district, in one school, or in only one classroom. An adopter may start with one subject area only in K or 1st level, i.e., Reading Level I followed by Reading Level II, Language Levels I and II, Arithmetic Levels I and II, or any combination of these. If adopting several subject areas, the services of an instructional aide would be required. Initial training is important and a later follow-up site visit is advisable.

**financial requirements**

Initial one-time expenses: teacher presentation materials, approximately \$200 per classroom per subject; Level II Readers, approximately \$120 per classroom. Consumable student materials are approximately \$7.50 per child. A wide variety of commercially available materials found in most classrooms is used.

**services available**

A Follow Through Resource Center.

Awareness materials are available at no cost. Visitors are welcome at project site anytime by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training available at project or adopter site (costs to be negotiated).

**contact**

Ann Costello, Director; East Las Vegas Follow Through; Las Vegas City Schools; 901 Douglas Ave.; Las Vegas, NM 87701. (505) 425-6784.

**PROJECT** THE ELECTRIC COMPANY

The use of television in teaching reading skills to young children.

**target audience** Approved by JDRP for children, grades 2-4, who are below grade level in reading.

**description** The Electric Company represents the first large-scale experiment in the use of television in teaching reading skills to young children. Televised curriculum and its accompanying classroom materials are built around specific goals in 19 curriculum areas. It began as a national program in many schools throughout the country and was incorporated as a part of the teaching program as a supplement to the regular school reading instructional program. Show guides are available.

**evidence of effectiveness** Comparison was between experimental and control students. The former viewed the Electric Company once daily, in school, for one season (130 thirty-minute programs). Controls received only regular school reading instruction. Neither group could view the program outside school. Students who viewed the program scored generally higher on reading subtests than nonviewers.

**implementation requirements** Not applicable.

**financial requirements** Curriculum is televised nationally.

**services available** Awareness materials are available. Visitors in educational administration or research are welcome by appointment, but there are no facilities for teacher visitations. Out-of-state training is available through field officers who are located in different states. For referral, contact Evelyn P. Davis at One Lincoln Plaza, New York, NY 10023; (212) 595-3456. Project staff may be able to attend out-of-state conferences.

**contact** Evelyn P. Davis; Children's Television Workshop; One Lincoln Plaza; New York, NY 10023.  
(212) 595-3456.

**PROJECT** ENRICHING THE CURRICULUM (ETC)

An exemplary project which involves the community in providing remedial instruction in reading and math to children who live in Chapter I designated areas.

**target audience** Approved by JDRP for educationally disadvantaged students in grades 2-6.

**description** The ETC program was developed to provide intensive individualized remedial math and/or reading instruction and to involve parents in the implementation of the program. The basis of the program is a careful diagnosis of the educational strengths and weaknesses of each child and the writing of an individualized diagnostic prescriptive educational plan. Each plan contains a summary of a student's performance objectives, schedule, teaching strategies, and suitable materials.

All teachers are remedial specialists and all aides are parents of children in the community. Specialists are responsible for the diagnosis, design of the program, close coordination with classroom teachers, and supervision of parent aides. Parent aides follow the teacher's lesson plans and tutor children four or five times per week for 30-40 minute periods either individually or in small groups of two or three students. Once a week the specialist reviews the diagnostic/prescriptive program of each child, writes lesson plans for the following week, and teaches a model lesson to the children who are working with the aide. The purpose of the model lesson is to enable the specialist to reassess the program and to demonstrate to the aide new techniques and strategies. Ongoing training for aides is an important facet of this program.

The Chapter I specialist works closely with the classroom teacher to coordinate the remedial program and classroom instruction. When a child is accepted into the program, the classroom teacher receives a diagnostic summary and a copy of the educational plan. Teachers meet regularly on a formal and informal basis to exchange information on specific skills that need continual reinforcement and on reading materials and techniques which will strengthen each other's efforts.

Parents are kept informed of their child's program and progress through conferences, meetings, telephone calls, and homework. A parent coordinator is employed to serve as a liaison between school and parents and to increase parental involvement in the program.

Children graduate when their reading and/or math performance is at grade level or above according to the California Achievement Test and individual diagnostic tests. The Chapter I teacher monitors classroom performance to insure that there is no regression.

**evidence of effectiveness** The ETC Chapter I program significantly improved the achievement level of its participants in both reading and mathematics at every grade level. These gains ranged between 3.0 and 20.1 Normal Curve Equivalents (NCEs) in reading and between 8.2 and 26.3 NCEs in mathematics.

**implementation requirements** ETC may be implemented in one school, several schools, or a whole school district. A project coordinator is necessary for effective management and supervision of the program, and a parent coordinator is necessary to facilitate parent interest and involvement. The number of specialists and parent aides is dependent upon the number of children in the program. A two-day training session is recommended prior to implementation. Weekly or monthly meetings are recommended for the local staff.

**financial requirements** There are no extensive start-up costs as 82% of the budget is for instructional salaries. This is a cost-effective method of delivering remedial services and total cost per pupil is dependent upon the salary scale. One full-time teacher and three part-time aides (three hours per day) can provide services to 50 children. The model rationale emphasizes teacher and aide contact rather than a materials approach. A wide variety of commercially made materials usually available in most schools is used.

**services available** Contact the project regarding available services.

**contact** Charlotte S. Laven, Project Coordinator; ETC Project; Brookline Public Schools; 25 Kennard Rd.; Brookline, MA 02146. (617) 734-1111, ext. 183, 118.

**PROJECT** EVERY STUDENT EVERY DAY

A diagnostic/prescriptive program designed to meet the fundamental language, reading, and arithmetic skill needs of children in grades K-8 who score in the bottom CTBS quartile.

**target audience** Approved by JDRP for low achievers in grades K-8.

**description** Ongoing diagnosis of pupil need is the core of this program. Students are guided through graded learning experiences until they achieve mastery. Each day's teaching-learning experience is specific to each child. Both teachers and paraprofessionals are used to maintain a ratio of four or five children per adult. An optical mark reader that scores each teaching practice or exercise the moment the student finishes it makes immediate shifts in teaching strategy possible and acts as a strong motivator for students and teacher. Students attend special classes for 45 minutes daily. Each student's program provides three changes of activity during the period to assure full concentration. The program is an instructional management system using every possible strategy to ensure that the right instruction reaches each student at the moment it can be most effective. Test and practice materials copyrighted as the "Precision Teaching Program" form the major part of the program. Some commercially available materials have been adapted for machine scoring, and teachers and aides are shown ways of developing their own materials. Inservice work with teachers and aides is a very important part of the program. A week-long workshop before the start of the school year is followed by biweekly half-day meetings. Teachers and aides are taught to individualize instruction, recognize and teach to each student's need, use commercial materials properly, and build materials. This basic-skills program is self-correcting; it draws attention to specific learning problems and indicates where help is needed. In 10 years, more than 1,500 pages of tests and special exercises have been prepared. The self-correcting feature gives the program potential for meeting the instructional needs of any group of students in any region.

**evidence of effectiveness** Scores on the Comprehensive Test of Basic Skills (CTBS for the years 1976-77 and 1977-78) show average improvement of 16 percentile rankings for 2,400 children in the reading program, 20 percentile rankings for 900 children in math, and 50 percentile rankings for 440 children in the kindergarten language program.

**implementation requirements** The reading program uses a teacher and an aide who work with five groups of 10-12 students per day. The math program can operate in the same way or with a paraprofessional tutor working with five groups of five students. The language program also operates with tutors working with five groups. The reading and math programs are geared to an optical mark reader for scoring exercises. This equipment is available on a monthly rental basis. Special materials developed for the program are available from Precision Teaching Associates.

**financial requirements** St. Mary Parish serves more than 2,000 students per year in its Chapter I (formerly Title I) programs. The per-pupil cost, including all salaries, is under \$500 per year. Start-up costs are slightly higher.

**services available** Awareness materials (brochure, slide-tape presentation) are available at no cost. Visitors are welcome by appointment at project site and additional demonstration sites in home state and out of state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is provided at project site (adopter pays only its own costs). Training is also conducted at adopter site (costs to be negotiated).

**contact** Carlton M. Singleton, Project Director; 3908 So. 12th St.; Arlington, VA 22204. (703) 521-3885.  
Darryl Boudreaux, Federal Project Administrator; St. Mary Parish School Board; P.O. Box 1239;  
Morgan City, LA 70380. (504) 384-1250 or -0218.

## **PROJECT** FLINT FOLLOW THROUGH DIRECT INSTRUCTION RESOURCE CENTER

A parent-implemented program using the Direct Instruction Method of Teaching Reading, Language, and Arithmetic to potentially low-achieving children.

**target audience** Approved by JDRP for low-income children grades K-3. This program has been used in suburban, rural, and bilingual communities and in compensatory, talented, and special education classrooms, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** Flint Follow Through provides comprehensive services to students. A parent-implemented project, it encourages and facilitates active parental involvement at an advisory level.

The program's nationally validated instructional model, the Direct Instruction Method of Teaching Reading, Language, and Arithmetic, employs skillfully designed materials requiring precise teacher behaviors. The materials are highly structured and sequenced, with scripted lessons in each curricular area. Each area is taught in daily 30-minute blocks, with rapid pacing and varied reinforcement activities. The instructional groups are small, and the teacher is seated within touching distance of the students in order to focus on students' performance. Sufficient time-on-task, active student participation, and clearly defined student expectations are integral to Direct Instruction. Individual student progress is regularly monitored through criterion-referenced materials. Continuous staff development assures proficiency in correction/precorrection strategies, behavior management, and classroom organization techniques.

**evidence of effectiveness** Evaluation data show that students who participated in the Flint Follow Through Project scored at the 50th percentile on standardized achievement tests. Students in the Direct Instruction model scored at a significantly higher level in the affective and cognitive domains.

**implementation requirements** The decision to adopt the Direct Instruction model should be jointly shared by administrators, teachers, and parents. The instructional model is installed in kindergarten or first grade the first year, and a grade level is added in subsequent years.

**financial requirements** Costs of program replication include staff training, materials, and evaluation. Local capacity building funds established by Flint Follow Through Resource Center enable adopting districts to partially defray expenditures. Installation of program costs less than \$12 per child.

**services available** A Follow Through Resource Center.

Awareness materials are available. Awareness sessions are available. Visitors are welcome at demonstrator site. Adopting districts receive a complete set of teacher materials, preservice training, continuous inservice, regular consultant services, pre/posttest materials, and technical assistance.

**contact** Marian Williams, Director; Flint Follow Through; 923 E. Kearsley St.; Flint, MI 48502. (313) 762-1452.

## **PROJECT**

FLIPPIN FOLLOW THROUGH: A Direct Instruction Model

Basic reading, arithmetic and oral and written language for economically disadvantaged children.

### **target audience**

Approved by JDRP for grades K-3. Approved grade levels are based on claims for children in the program for four full years.

### **description**

Flippin, Arkansas is a rural community with a strong Head Start program for four-year-olds. The goal of Flippin Follow Through is to build on the Head Start gains, giving economically disadvantaged children a firm background in reading, mathematics, oral language, written language, spelling, science, and social studies so that they may compete later in life with their peers for higher education and vocational opportunities. The DISTAR Instructional System is the core of the program, with three programmed levels each in reading, arithmetic, and language. Level I is begun in kindergarten. On completion of the three levels, regardless of grade level, children move into the regular programs of Flippin schools.

The three levels of reading progress from decoding and basic comprehension through increasing fluency and accuracy, to reading for new information, for understanding, and to apply rules and principles. Arithmetic is taught by a problem-solving approach, progressing from basic addition and subtraction to multiplication and fractions, regrouping, measurements, long division, and column addition, and involves many story problems. The language sequence teaches standard spoken English and language as a basis for reading comprehension. Names and classes of objects and concepts, logical processes (causality, deductions, etc.), spelling, punctuation, rules of grammar, and writing are all features of the language sequence. Learning tasks are presented to the children in groups of ten (fast learners) or five (slower learners). One teacher and one aide staff each K-3 classroom; they are expected to use all of these techniques: teaching to mastery, group response, positive reinforcement, immediate correction of errors, individual turns, and rapid pacing.

### **evidence of effectiveness**

Compared to data collected from children in similar compensatory education programs, Follow Through students performed significantly above the national median in the areas of reading, mathematics, and language on the Metropolitan Achievement Test. These results were consistently replicated over eight cohorts of low-income children. Children in the program for the full four years made significant pre-post gains when measured against the standardization sample of the Wide Range Achievement Test in areas of decoding and math computation -- from 30th to 92nd percentile for reading, 32nd to 63rd percentile for arithmetic, and 21st to 58th percentile for spelling.

### **implementation requirements**

The Direct Instruction system could be implemented in part or as a whole system that would include four grade levels of reading, three grade levels of language, three grade levels of arithmetic, and two levels of spelling. Depending on the degree of implementation, the classroom teacher can implement the program either alone or with one or two trained paraprofessionals, either paid or parent volunteers. Training is necessary and free workshops are provided by SRA (publishers for DISTAR). A single classroom can adopt the program, but it is best if a whole school makes the adoption so the children have the opportunity of completing more than one level of each subject.

### **financial requirements**

In addition to the regular classroom teacher, if desired, paraprofessionals can be hired and trained to teach the DISTAR subjects in small groups. DISTAR materials must be purchased from SRA. Teacher's kits and student materials are priced in the current SRA catalog.

### **services available**

A Follow Through Resource Center

Flippin offers a brochure explaining the Direct Instruction Model to potential adopters free of charge. Members of the project staff could possibly be available for awareness meetings, training workshops, and implementation/follow-up. Costs are borne by the adopter.

### **contact**

Rosalee Wade, Director; Flippin Follow Through; P.O. Box 256; Flippin, AR 72634. (501) 453-2234.

## **PROJECT**

"GAMES CHILDREN PLAY" -- ATLANTA FOLLOW THROUGH/INTERDEPENDENT LEARNING MODEL

A program emphasizing use of instructional games and other self-management techniques for children to help them learn problem-solving skills and to reinforce basic skills.

## **target audience**

Approved by JDRP for grades K-3. This program can be used with grades 4-6, but no evidence of effectiveness has been submitted to or approved by the Panel.

## **description**

The four major Interdependent Learning Model (ILM) developmental goals are independence, interdependence, positive self-concepts, and positive attitudes toward learning. Learning activities are designed to promote these goals and to reflect the culture and environment of the children. Classroom management, which includes room arrangement, grouping, scheduling, record keeping, evaluation, classroom rules, and team functioning, is one of the most important model processes used to accomplish these goals. Children work in small groups, independent of direct adult participation. Heterogeneous skill-level grouping is encouraged so that children learn from their peers. Children schedule the majority of their own work activities and record and evaluate the results of their own work.

The model combines principles of programmed instruction, cognitive-developmental, and group process theories. A variety of instructional game formats is used to implement these principles. The Transactional Instructional Games are Table Games, Conversation Games, and Street/Folk/Musical Games. Instructional content is "plugged in" to the games according to the children's needs and levels. The Integrated Skills Method of teaching reading is used to coordinate small-group reading instruction in the Direct Approach to Decoding, with the basal series used in individual schools. All instructional processes -- instructional games, classroom management system, and reading program -- help children to achieve the four major goals and enable teachers to be responsive to children's interests and learning styles.

## **evidence of effectiveness**

Average Iowa Test of Basic Skills grade equivalent scores in reading and math (composite) grades 1-3 for Follow Through and non-Follow Through comparison schools in Atlanta (1973-74 through 1976-77): Follow Through sites exceeded non-Follow Through sites in 91.7% of the cases (FT = non-FT, 5.5%; FT < non-FT, 2.8%).

## **implementation requirements**

Successful replication of the ILM program in reading and/or math requires the active support of the local education agency. Supervisory personnel should participate in training activities. Adoption in reading requires funding for one paraprofessional per classroom. Training for an adoption in reading takes seven days and for an adoption in math, four days. Implementation must be for at least one year.

## **financial requirements**

Approximate cost of materials for an adoption in reading: \$75 per classroom. Approximate cost of materials for an adoption in math: \$50 per classroom. Approximate cost of materials for an adoption in reading and math: \$90 per classroom. Adoptions in reading entail salaries for paraprofessionals (one per classroom). Training and manuals are provided at no cost to adopting sites.

## **services available**

A Follow Through Resource Center.

Awareness materials, awareness presentations, and guided classroom observations are available, the last by appointment. Following an agreement to adopt the ILM, the Center provides no-cost training at project or adopter site, follow-up, and assistance in evaluating classroom management, instructional games, and integrated skills method of reading.

## **contact**

Stella S. Lewis, Director, or Jeanne M. Gray, Coordinator; Follow Through Resource Center; Atlanta Public Schools; 2960 Forrest Hill Drive Southwest; Atlanta, GA 30315. (404) 762-7206 or -6386.

**PROJECT** THE GLASSBORO RIGHT-TO-READ PROJECT

An individualized, diagnostic/prescriptive, complete reading program based on a district assessment of staff and community needs.

**target audience** Approved by JDRP for students grades K-3. This program has been used in other settings with students pre-K through grade 6, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** An essential element of the Right-to-Read program is a comprehensive assessment of student reading competencies, staff capabilities in the teaching of reading, and community (including parental) interest in reading programs. On the basis of this assessment, a program of staff development, reading instruction, and community support is drawn up and put into operation. Both assessment and program development are the responsibility of a Local Unit Task Force appointed by the superintendent and comprised of district staff members and parents. Upon entering the program, each child receives a battery of teacher-administered diagnostic reading tests. Teachers use test results to ascertain each child's instructional reading level. Teachers then write individual instructional sequences for each child, which they follow either on a one-to-one basis or with small groups of children who are at the same developmental stage. Each child progresses at an appropriate rate for his or her developmental level. The array of reading skills used comes from commercially available sources. Districts interested in replicating the program may write their own skill array or use one or more of those available commercially.

Staff members inaugurate this program and carry it out on the strength of a staff development program directed by the Right-to-Read Coordinator. Among the topics covered are development of instructional materials and procedures of classroom management that complement the individualization of reading instruction. Community interest in the program has resulted in the formation of a parent volunteer group whose members serve as classroom aides and reading tutors.

**evidence of effectiveness** For the 1972-73 school year, the Classroom Reading Inventory, (William Brown Company, Dubuque, Iowa) was used. Between the pretest in September 1972 and the posttest in April 1973, there was an average gain of 2.14 years among children of all reading levels.

**implementation requirements** Commitment to the project's replication includes participation in a two-part, four-day training program in the essential elements of the Glassboro Right-to-Read project. Part I is a two-day workshop on "Developing a Plan for the Right-to-Read Program," following which the consumer district conducts a local needs assessment and develops a work plan. Sessions are conducted for the Local Unit Task Force and/or R<sub>2</sub>R directors and teaching staff. In order to be eligible for the second part of the training program, a consumer district must submit the work plan to the Glassboro project staff. Part II is a two-day workshop on program implementation.

**financial requirements** The major cost consideration is training of teachers who will carry out the diagnostic/prescriptive activities that are the heart of the program. Glassboro estimates a need for 20 hours of inservice training in diagnostic and prescriptive functions, as well as classroom management and instructional record keeping. After implementation, about one hour per week is needed for inservice training and planning.

**services available** Awareness materials are available at no cost. Awareness filmstrip available for loan or purchase. Visitors are welcome at project site. Training manuals available at cost: Program Planning Procedure, Program Implementation, and Parent/Community Involvement. Turnkey Training Kit available at cost. Training and follow-up consultation available to educators whose districts agree to replicate the program's essential elements. Training is conducted at adopter site (expenses must be paid).

**contact** Dorothy Wriggens, Reading Coordinator; Carpenter St. & Bowe Blvd.; Glassboro, NJ 08028. (609) 881-6366.



**PROJECT** "GO METRIC": A Supplemental Low-Cost Metric Curriculum

A low-cost metric curriculum that supplements existing programs.

**target audience**

Approved by JDRP for students of all abilities, grades 5-8. It has been used in other settings with grades K-4 and 9-12, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description**

The unique design of "Go Metric" provides interested metropolitan and rural school systems, as well as communities, with a model for incorporating metric education into existing instructional programs at minimal additional cost and with no additional personnel.

This innovative program includes an elementary and secondary curriculum for all pupils in the school population and identifies a range of teaching techniques involving the pupils in a variety of hands-on activities using metric equipment. Audio, visuals, and games are also utilized to accommodate the special needs of all students. To provide additional in-depth understanding of metrics, the inservice requires teachers to participate in the same metric exercises that are used in the classroom. The curriculum is arranged so that it does not intrude on an already crowded schedule but enhances metric instruction as teachers integrate it into appropriate instructional areas.

Upon request by school systems implementing the program, trained personnel are available to conduct a 15-hour inservice for school personnel. Content of this inservice includes background in metric measurement, orientation to the curriculum guides, use of metric equipment, and a plan for implementing the program within the regular curriculum.

**evidence of effectiveness**

Data were collected using a locally developed metric criterion-referenced test and analyzed by a pre/post comparison of experimental and control groups. The experimental design was implemented annually over a three-year period. Results confirm program effectiveness in increasing students' knowledge and understanding of metrics.

**implementation requirements**

The "Go Metric" program is designed to be adapted to any educational setting. Metric kits containing curriculum guides, tests, demonstration equipment, metric items for student hands-on experience, games, and puzzles are packaged in classroom sets for 30 students and require no additional facilities. For full use of the metric curriculum units, staff training by the project developer is recommended. The two-day training workshop, for one to 10 participants, may be provided either at the developer or adopter site.

**financial requirements**

Local cost per pupil was \$2.23 including the metric kit, teacher training, and 150 pupils per teacher. The metric kit costs \$300. Staff training must be arranged.

**services available**

Awareness materials are available on request. Visitors are welcome at the project site by appointment. Project staff can attend out-of-state awareness conferences (expenses must be paid). Implementation consultation and staff training are provided at project site or adopter site (adopter must assume all costs).

**contact**

John E. Roller, Director; "Go Metric" Project; or Roger E. Kruse, Director of Federal Programs; Tulsa Public Schools; 3027 S. New Haven; P.O. Box 45208; Tulsa, OK 74145. (918) 743-3381.

## **PROJECT**

GULFPORT FOLLOW THROUGH: Mathemagenic Activities Program (MAP)

Comprehensive education and intellectual model for developing cognitive and/or problem-solving skills for children of all ability levels in grades 1-3.

### **target audience**

Approved by JDRP as a comprehensive approach for teaching mathematics grades 1 and 3.

### **description**

The Gulfport Follow Through Program is based on the University of Georgia Mathemagenic Activities Program. This program uses the assessment of cognitive level as a guide in structuring a learning environment that maximizes development of the thinking process. Learning activities encourage the child to experiment with problems and discover solutions; this experience enhances the shift from concrete to abstract levels of thinking.

Based on the idea that learning occurs most easily when the child is an active agent in the process, all aspects of the classroom environment are designed in terms of three elements. The child is (1) presented materials just slightly more difficult than previously mastered (mis-match), (2) encouraged to choose his/her own method of problem solution (self-regulation), and (3) given time to manipulate learning materials (activity).

Basic mathematical skills are utilized, and a combination of individual and group activities encourages physical, mental, and social involvement. Small-group instruction is stressed.

Teachers use a variety of guides prepared by the University of Georgia. Regular inservice training on teaching techniques and Piagetian assessment is conducted with guidance from the university sponsor.

Medical and dental health, nutrition, psychological and social services, and parent involvement are other essential elements of the University of Georgia model.

### **evidence of effectiveness**

Program students in a pre/post design have maintained educationally and statistically significant gains in mathematics achievement as measured by the Metropolitan Achievement Test since 1979. Successful replications have been made in urban and rural settings. The program has been effective regardless of the ethnic or economic factors present at the replication site.

### **implementation requirements**

A single teacher, a school, or an entire district can adopt the program. One or more resource teachers are needed, depending on the size of the population to be served. Reassignment of existing personnel (supervisors or coordinators) may suffice. An instructional aide should be provided in each classroom to reinforce and supplement the teacher's presentation of skills. Involvement of classroom volunteers is encouraged. This program can be implemented with most existing curriculum materials. A staff training program of two to four days should be planned, based on needs of the adopter, with follow-up inservice as needed. Facilities, space, and instructional equipment are found in most elementary schools.

### **financial requirements**

In addition to the adopter's basal math program, manuals and materials (costing between \$6 and \$8) are available from the Follow Through Program, University of Georgia. Manipulative/concrete objects (cuisenaire rods, multi-base blocks, and logic blocks) should be available for children in each classroom. A variety of inexpensive teacher-made learning activities and commercially available materials found in most classrooms may be used to reinforce concepts and skills.

### **services available**

Awareness brochure is available at no cost. Visitors are welcome at project site by appointment. Project staff are available to attend in-state and out-of-state awareness meetings (all expenses must be paid). Training is conducted at project site (adopter pays only its own costs) or at adopter site (all expenses must be paid). Follow-up services are available (all expenses must be paid). A staff is also maintained at the University of Georgia to offer assistance in development, training, and evaluation (all expenses must be paid).

### **contact**

Jo Kelley, Director; Gulfport Follow Through Project; 1906 17th Ave.; P.O. Box 220; Gulfport, MS 39501. (601) 864-3392.

**PROJECT** HAWAII FOLLOW THROUGH PROJECT

A comprehensive program including an experience-based basic skills curriculum for children in multilingual classrooms.

**target audience** Approved by JDRP for grades K-3.

**description** Based on the Bank Street College of Education developmental-interaction model, the purpose of the Hawaii Follow Through Project is to further the cognitive, affective, social, and physical development of low-income children, most of whom have a limited command of English. The experience-based integrated curriculum, which emphasizes reading and math, is expected to motivate the children to engage in both formal and informal classroom activities as well as to develop children's attitudes toward other people and their ability to conduct themselves well in a group. The teacher's consideration of the children's developmental needs and levels of interest and learning styles results in individualization of the curriculum. In addition, ongoing assessment and child study are important aspects of each teacher's functions. The language experience approach, which integrates oral language, reading, and writing instruction and which makes learning relevant and meaningful, is considered especially appropriate for children with mixed language backgrounds. The integrated curriculum allows for practice in applying math skills, especially through social studies activities. Classrooms staffed by a teacher and an aide are set up as workrooms for self-directed learning in reading, math, language, arts and crafts, and music, and children are encouraged to take responsibility for the materials they select and use. A supportive learning environment permits child-child and adult-child interactions as part of the daily learning process.

Staff development is based on the premise that teachers must consider themselves learners, too, and parents are encouraged to assume a role in their children's learning, both in school and at home.

**evidence of effectiveness** At the end of third grade, Follow Through students scored higher and made significantly greater gains on the Stanford Achievement Test of reading and mathematics than a local comparison group. Observed Follow Through children exhibited behaviors that demonstrated independence of learning and positive self-concept, as measured by the Behavioral Rating and Assessment and Analysis of Communication in Education, developed by Bank Street College.

**implementation requirements** The program can be adopted by an individual teacher as well as a school, district, and statewide school system. The program is identifiable by six major strands; therefore, the program can be implemented incrementally by single or multiple strands. Pre-implementation and ongoing inservice education is required to eventually adopt all six strands (development of each child as a learner; interaction which enhances learning; supportive and challenging environment for learning; direct experiences as basic to learning; parent involvement; and assessment). Self-assessment and external validation of model implementation can be conducted to help teachers assess their progress in implementation.

**financial requirements** Basic handbooks, reference papers and materials, and slide/tape packages are available for reproduction without copyright problems from the Hawaii Follow Through Project. Other reference materials and slide/tape/filmstrip packages can be purchased from Bank Street College, 610 West 112th St., NY, NY 10025. Postage reimbursement for extensive mailing will be appreciated when materials need to be borrowed for reproduction/review purposes.

**services available** Twenty-one model classes are taught by state-funded teachers and assisted by state-funded administrators and curricular specialists. These model classrooms are available for visitation during six monthly scheduled dissemination sessions per year. Semester workshops and summer institutes are conducted annually at no cost to participants at the project site in Honolulu, Hawaii. Inservice education services are available at adopter sites; however, travel and per diem as needed will have to be provided by adopters.

**contact** Janet Sumida, Director; Hawaii Follow Through Project; Hawaii State Department of Education; 2106 10th Ave.; Honolulu, HI 96816. (808) 737-1949.

**PROJECT** HIGHER HORIZONS 100

A program for students with reading retardation problems, with a coordinated effort in language arts development in all content areas.

**target audience**

Approved by JDRP for students in grade 9 with reading retardation problems. This program has been used in other settings with students in grades 7, 8, and 10 with reading retardation problems, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description**

The primary goal of the reading section of the program is to enable a student to make eight months' reading progress during the school year and thereby regain lost ground. Other goals are improvement of speech, mathematics, science, and social studies; helping students to adjust to high school behavior patterns; expanding students' background of experience; and improving self-concept. After completing one year in the program, students are evaluated and may return to the regular school program. Enrollees are within normal range of intelligence and without serious emotional problems but have one to four years of reading retardation. The speech of many is affected by a second language or dialect. Students are counseled frequently by the Higher Horizons counselor and instructors. The counselor-student ratio is one counselor to 100 students. Collaboration between instructors in the various subjects makes it possible to remedy weaknesses in language arts and other classes.

**evidence of effectiveness**

Pre/posttesting in September and May uses Metropolitan Achievement Test for grades 7-9 and Comprehensive Test of Basic Skills for grade 10. A Self-Rating Scale is also used. Attendance is higher for students in program than for regular students, based on a variable school average. Average reading gain for program has been 1.5 years per group. Evaluation is conducted by central administration.

**implementation requirements**

The Higher Horizons concept employs teachers in the core subject areas of reading, English, language arts, math, science, and social studies. This cluster of basic skills developers functions as a school-within-a-school, making its own determinations about grouping, curriculum development, cultural enrichment, and career awareness. Ongoing inservice meetings and summer workshops allow for staff development and interdisciplinary coordination.

**financial requirements**

Approximately \$250 per pupil over and above the cost of students in the regular school program.

**services available**

No awareness materials are available. Visitors are welcome by appointment. No training is conducted at the project site. Training may be conducted out of state (exemplary project staff costs must be paid). Project staff may be able to attend out-of-state conferences (expenses must be paid).

**contact**

John Di Benedetto, Resource Coordinator; Higher Horizons 100; Hartford Public High School; 55 Forest St.; Hartford, CT 06105. (203) 278-5920. Robert Nearine, Title I Director; Hartford Board of Education; 249 High St.; Hartford, CT 06103. (203) 566-6074.

**PROJECT** IMPROVEMENT OF BASIC READING SKILLS

Reading centers providing an individualized approach to remedial reading for educationally deprived children.

**target audience** Approved by JDRP for pupils in grades 1-8 who are reading below grade level.

**description** Reading centers established in participating schools are staffed by a reading teacher who works with eight to 10 children per period every day for the regular school term. Diagnostic tests are administered to determine specific needs of individual children. A "Need Sheet" is prepared for each child, providing a written prescription to help in mastering basic reading skills and to reinforce classroom learning. A "Weekly Plan" sheet is maintained for each class, listing plans for each child. Correlation with regular classroom activity is stressed. Teacher's aides and parents are assigned to work with children needing additional help over and above that received in the classroom and reading center. Parent participation, through volunteer work and workshops, is a significant aspect of the project. Individualized attention shows the pupil that he/she is important and can excel in some way, which reinforces the primary goal of the project: to meet individual needs of students and to help them achieve their potential.

Materials used include the Hoffman Reading Program supplemented by numerous other commercially available and teacher-made materials.

Students are selected for the program on the basis of scores from standardized tests (below 50th percentile), scores from diagnostic tests, cumulative record cards, teacher opinions, posttest scores of previous Title I students, and learning disabilities.

**evidence of effectiveness** Pre-post Gates-MacGinitie Reading Test scores were submitted to the Joint Dissemination Review Panel in 1973-74. The average gain for students, grades 1-8, was 1.6. Evaluation results since 1973-74 show consistently significant gains. Data available upon request.

**implementation requirements** At least one well-equipped space per school for a reading center, with one teacher per center. Detailed information upon request. A revised Project Information Package is available for examination and for sale to adopters. The PIP materials include orientation materials, management calendar, management directory, teacher's manual, staff development manual, and evaluator's manual.

**financial requirements** At the original site, per-pupil costs totaled \$500.41 (for 1981-82); this figure includes administrative and instructional personnel, materials and equipment, and continuing inservice training. This figure is a continuing cost based on 469 students. Specific start-up costs are available upon request.

**services available** Awareness materials are available free of charge upon request. Visitors are welcome by appointment.

**contact** Phillip B. Hammonds; Improvement of Basic Reading Skills; Sylacauga City Schools; P.O. Drawer 1127; Sylacauga, AL 35150-1127. (205) 249-0393.

**PROJECT**

IMPROVING ACHIEVEMENT (READING) THROUGH USE OF TEACHERS AND TEACHER AIDES

A personalized and concentrated reading improvement program for secondary students.

**target audience**

Approved by JDRP for students, grades 10-12, reading two or more years below grade level with low or failing grades in English classes. It has been used in other settings with grades 7-9, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description**

This project treats the problem of reading deficiency in secondary students through personalized and concentrated interaction: personalized in that the adult/student ratio is most often one-to-one; concentrated in that instruction occurs daily, one period per day. Each student's reading skills are thoroughly analyzed during the first few weeks. Instruction and rebuilding of attitude begin on a personalized basis at the point of identified deficiency (in many cases at point zero in the reading process). Individual records of areas of weakness and patterns of improvement are maintained. The importance of personal interest and positive reinforcement from the adult aide cannot be overemphasized. Reading instruction develops within the context of the total language arts curriculum. The project teacher and a team of eight aides supplement the regular teacher's instruction.

**evidence of effectiveness**

Project evaluation was based on successful accomplishment of stated behavioral objectives. Pre- and posttesting used the Gates-MacGinitie Reading Test. Grade equivalent scores were reduced to average monthly gains. Eighty-five percent of participating students (rural low- to middle-income) measured an average monthly gain of 1.1 months or more per month.

**implementation requirements**

All instructional management materials used are commercially available. No particular products or systems are stressed. An eclectic approach is used to prescribe materials as needed.

**financial requirements**

Start-up costs run \$200-\$225 per student (based on 180 students at 1975 prices). These figures include the cost of hiring one project teacher and eight adult aides, as well as the cost of materials, equipment, and inservice. Per-student yearly costs remain relatively constant allowing for inflationary increases.

**services available**

Awareness materials are available. Visitors are welcome by appointment. No training is conducted at the project site. Training may be conducted out of state (exemplary project staff costs must be paid). Project staff can attend out-of-state conferences (expenses must be paid).

**contact**

Leon West, Director; Sky View High School Project; Cache County School District; 2063 North 12th East; Logan UT 84321. (801) 752-3925.

## **PROJECT** INDIVIDUALIZED COMPUTER ASSISTED REMEDIAL READING PROGRAM (I CARE)

A computer-assisted program to provide basic reading instruction.

**target audience** Approved by JDRP for educationally deprived vocational education students in grades 10-12.

**description** This project is an effort to supplement the existing reading program for the high school vocational education student. Through the use of a microcomputer, individualized and small group instruction allows the student to set his/her own learning pace. Each student must spend a 50-minute class period each day involved in this program in lieu of the regular English class. On a rotating basis, a student spends one week in each of the following five areas:

**Vocabulary:** More than 100 vocabulary programs exist, each of which contain at least 20 words. Words are spelled out letter by letter, and four choices are offered. Students are informed by the computer of correct and incorrect responses, percent score, and a list of the incorrectly defined. Students must complete a minimum of 30 computerized vocabulary programs. A mastery score of 80 is necessary to move on to another program. **Reading:** Students must also complete a minimum of 30 computerized reading programs. There are a total of 190 programs that allow the students or teacher to select number of words per minute. The computer then displays the reading material, followed by 5-10 questions related to the reading. Students are presented with number of correct responses and a percent grade. An 80% mastery rate is requisite for the next program. **Reading & Writing Skills:** Students must complete a minimum of 25 audiovisual reading programs in areas including basic math, English grammar, word usage, and reading and writing skills. **Audio tapes:** Subject matter is graphically displayed accompanied by sound. The vocationally-oriented learning material has companion worksheet(s) that enable students to assimilate the material and respond in writing. Four sets of headphones effect a multiple listening station. Units are available in vocabulary development, reading, comprehension, and basic skills math. A minimum of 10 audio tapes is required. **Paperback books:** A minimum of two paperbound books of the student's choice. More than 100 are available.

Rotation among these five areas reduces boredom and discipline problems. The ability of the microcomputer to repeatedly review materials without making value judgments, tiring, or losing enthusiasm enables the curriculum to be highly effective.

The main benefits of the program are that teachers determine the content of the computer programs and work with individual students, and the student is able to interact with the computer and set his/her own learning pace.

**evidence of effectiveness** Students in regular English classes decreased in vocabulary during the same semester in which I CARE students increased substantially on both subtests of American School Achievement Test, Reading Comprehension and Vocabulary. A mean gain resulted of 9.77 on vocabulary for treatment group (comparison was 1.96) and 7.33 on Reading Comprehension for treatment group (comparison was 4.07).

**implementation requirements** I CARE can be adopted by a single teacher, a teacher aide, a classroom unit, or by several units. Extensive staff development and training in computer literacy is not a requirement. Many companies (Radio Shack, Apple, IBM) offer free computer literacy training workshops for teachers.

**financial requirements** Cost per participant is \$185 for installation, and \$140 for subsequent years, based on 30 students. Costs would be reduced as the number of students increases. Three computer master tape programs have been developed to enable teachers to author their own programs in vocabulary, spelling, speed reading, and comprehension at a cost of \$50 per program or all three programs for \$125.

**services available** Awareness materials are available at no cost. Visitors are welcome at project site by appointment. Project staff are available for awareness conferences and training (costs to be negotiated). Training workshops are also conducted at project site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** Mr. Victor A. Miller, Project ICARE; Blue Mountain School District; Blue Mountain High School; R.D. #1; Schuylkill Haven, PA 17972. (717) 366-0515.

## **PROJECT**

IRIT: Intensive Reading Instructional Teams

A laboratory project for third- and fourth-grade students with difficulty in reading.

### **target audience**

Approved by JDRP for pupils in grades 3-4 who are deficient in the basic skills of reading and language. The program has been used in other settings with grades 1, 2, and 5-8 and as a summer program, but no evidence of effectiveness has been submitted to or approved by the Panel.

### **description**

IRIT features a carefully individualized diagnostic approach made possible by low student-teacher ratios and the use of a wide variety of materials and equipment. The unique features of IRIT are the high-intensity and team approach toward reading instruction. Forty-five students per team of teachers are selected for each of the three 10-week cycles. The teachers have classes of approximately 15 pupils, and all pupils see each teacher daily. The program design includes three areas of concentration: encoding-decoding, individualized reading, and vocabulary/comprehension. Students move from one area to the next at approximately one-hour intervals. Pupils return to their sending teachers in the afternoon for instruction in other basic subjects. The individualized reading area provides a wide variety of reading materials and offers assignments that enrich the student's background, promote written and oral language skills, and instill pleasure in reading. The vocabulary and comprehension area puts emphasis on the various subskills of comprehension. Meaningful experiences are provided in order to promote concept development. Encoding-decoding uses an individualized approach to assist the student in his/her ability to attack new words and get meaning from them. The specific skills needs in phonics are taught to develop independent methods of word analysis. The IRIT teachers work with students for the entire morning. They spend the afternoon preparing the individualized lessons, discussing the skills of the 45 students, coordinating the lessons for them, and updating their individual records; developing new instructional materials based on student needs; meeting with teachers and parents from the sending schools; participating in professional development and training sessions; and providing inservice training for other classroom teachers.

### **evidence of effectiveness**

Tests used for evaluation include the Stanford Achievement Test (pre- and posttest) and the Botel Phonics Inventory. These tests are administered at the beginning and end of each cycle. Mean total reading scores for 1973-74 were raised from 2.5 to 3.2, a gain of seven months in 10 weeks. Mean total reading scores for 1974-75 were raised from 2.6 to 3.7, a gain of one year and one month in 10 weeks.

### **implementation requirements**

One reading specialist (the team leader) and two other teachers who have strengths in the teaching of reading are required. One IRIT Center requires three classrooms and office space for a part-time secretary. Staff need training in diagnosis and evaluation of test results. A school system may want to begin with a single center, but a project director can easily supervise an additional center.

### **financial requirements**

Budget for one IRIT team (1982-83) serving 135 pupils for one year is \$97,000 (approximately \$718 per pupil). Start-up costs average an additional \$25-\$50 per pupil, depending on equipment ordered.

### **services available**

Awareness materials are available. Visitors are welcome by appointment. Training may be conducted at project or adopter site (training costs to be negotiated among adopter, NDN Facilitator, and D/D).

### **contact**

Donald Carso, Coordinator of Reading and Communication Arts; 249 High St.; Hartford, CT 06103.  
(203) 722-8736.



**PROJECT** LEARNING TO READ BY READING

A unique method of teaching reading to sub-par achievers at upper-elementary through junior college levels who have failed to progress with the use of conventional methods and materials; especially useful in alternative schools.

**target audience** Approved by JDRP for students from upper-elementary through adult levels with potential for reading and/or reading improvement.

**description** The program is a multimedia system for teaching reading especially applicable to students reading below 3.0 Grade Placement Level (GPL), including nonreaders, and effective through 6.0 GPL. Reading With Symbols (cued reading using familiar objects to represent sounds) begins at primary level and progresses through an approximate tenth-grade reading level; it represents a new approach to phonetic and sight-word vocabulary development. Students (usually in groups of three) read orally to a teacher or aide an approximate 700 pages of cued stories. The system also incorporates "read-along" materials (radio plays, short stories, and captioned filmstrips) to be used either in conjunction with upper-level Reading With Symbols materials or alone for students at higher reading levels (GPL 3 and 5-8). Symbols representing 34 basic sounds are learned through use of a workbook. (Instruction on an individual or small-group basis is recommended.) Students learn symbol-sound relationships in less than one week. Thereafter, they read orally daily until they have progressed through the set of 16 cued readers. After completion of the first six books (2.0 to 4.5 reading level), the identical stories are read in the uncued version. This cued reading provides a bridge to regular reading and an opportunity to teach the more significant conventional rules of phonics and furnishes an opportunity for assessment of reading progress. Read-along materials (43 short stories and 40 half-hour radio plays) are used at a higher level of the program. Instruction in preparing this type of material as well as read-along captioned filmstrips is provided in the teacher-training program.

**evidence of effectiveness** On Gates-MacGinitie, best project group made gain of 2.2 years in 12 weeks' time (one half-day school). Some students at 4.0 made four or five grades' gain using read-alongs exclusively.

**implementation requirements** Aides should be provided. Normal classroom facilities are sufficient, but listening stations equipped with cassette recorders and headsets must be available for read-along phase. Adopters may use only Reading With Symbols, only read-alongs, or both. Program is applicable to remedial groups within a conventional classroom or to specially equipped remedial classes. Single-student tutoring is a viable possibility.

**financial requirements** Beginning set of eight Reading With Symbols (R/W/S) readers and teacher's manual free. Set of eight supplementary R/W/S readers (400 pages), \$80; set of two uncued readers (400 pages), \$20; flashcards, \$5; 40 read-along radio plays on cassette with script, \$445 for set; 30 read-along short stories on cassette with script, \$165 for set; 13 stories on six longer tapes, \$60 for set.

**services available** Awareness materials are available at no charge. Personnel are available for awareness and training sessions (expenses to be negotiated).

**contact** Philip K. Glossa, Director; 18 N. Banner Dr.; Sonora, CA 95370. (209) 532-3556. Orval S. Hillman, Director; Reading Learning Center; P.O. Box 778; Jamestown, CA 95327. (209) 984-5741.

**PROJECT** LEFLORE COUNTY (MISSISSIPPI) FOLLOW THROUGH RESOURCE CENTER

A program based in part on the cognitive-developmental theory of Jean Piaget and the educational philosophy of John Dewey that blends open-ended child-initiated activities with teacher-structured lessons.

**target audience** Approved by JDRP for school administrators, teacher trainers, paraprofessionals, and teachers of grades K-3. Intended beneficiaries are children and their parents.

**description** The LeFlore County Follow Through program employs the High/Scope cognitively oriented curriculum as a framework for education. This curriculum was developed by the High/Scope Educational Research Foundation of Ypsilanti, Michigan.

Children assume responsibility for their own learning by planning self-initiated activities, carrying out their plans, presenting what they have learned, and sharing their experiences with others. Teaching teams structure specific learning experiences based on children's needs and their ability to learn a concept or skill. Adults help children apply acquired skills within student-initiated projects. Through this process, children become knowledgeable in the areas of writing and reading, mathematics, science, social studies, music, physical education, health, and safety.

Recognizing that parental commitment to children's education is a major factor in a child's school success, the LeFlore County Follow Through project has developed and implemented a parent program that takes the school to the home and brings parents to the school. Parents participate in classroom activities and use school facilities for group meetings and workshops. Through these efforts, parents have contributed their knowledge, skills, and resources to the school's educational goals and at the same time have extended their formal school training.

**evidence of effectiveness** In spring 1975, second- and third-graders in the program scored significantly higher ( $p < .05$ ) than similar nonprogram children on both an academic achievement test (California Achievement Test) and on measures designed by High/Scope Foundation to assess the effectiveness of children's writing (Productive Language Assessment Tasks). Data collected in spring 1976 and 1977 revealed the same pattern.

**implementation requirements** High/Scope Foundation's experience in a large number of settings, both in the U.S. and abroad, indicates that the program can be successfully implemented provided the following conditions are met: voluntary participation of teachers in the program; low staff turnover; active program support from building and district administrators; presence of a full-time staff trainer/curriculum superior; provision for adequate staff training; and a paraprofessional aide for each classroom.

**financial requirements** Additional staff may be required depending on available staff and number of students served; cost depends on local salary schedule. Training is required for adopter staff; cost can be negotiated. Manuals for training and operation may be purchased from the model sponsor, High/Scope Educational Research Foundation, 600 N. River St., Ypsilanti, MI 48197. Cost of additional materials (teacher-made or commercially produced) depends on materials already available.

**services available** A Follow Through Resource Center.

Awareness materials are available. Visitors are welcome by appointment. Project staff are available to attend out-of-state awareness meetings. Training is provided at project site (adopter pays only its own costs). Training is also conducted at adopter site. Follow-up and evaluation assistance is available to adopters at no cost.

**contact** Robert Pickett, or Linda Brower; Educational Service Building; Hi-way 82 West; Greenwood, MS 38930. (601) 453-4819 or 455-4107.

## **PROJECT**

MARC: Multisensory Approach to Reading and Reading Readiness Curriculum

A multisensory approach to beginning readiness that emphasizes slow pacing of skills, diagnosis of student needs, and inservice training of teachers and administrators.

### **target audience**

Approved by JDRP as a K-1 reading program for students from low-income families in rural areas and as an inservice program for teachers and administrators. MARC also serves grade 2 students, remedial readers, learning-disabled students, special education students, and students in urban settings, but no evidence of effectiveness has been submitted to or approved by the Panel.

### **description**

Project MARC trains teachers to use a systematic approach in teaching reading. It combines instructional materials, multisensory techniques, and teacher training in a practical, effective program. Students are grouped for instructional purposes based upon continuous diagnosis, and are taught through a combination of activities designed to use all the learning modalities. Kindergarten materials and techniques focus on developing knowledge of letters and sounds as well as concepts. Children are taught letters and sounds through a unique technique called The Linkages, which integrates auditory, visual, and kinesthetic modalities to enable children to learn through the avenue most appropriate to their needs. Materials for this level include alphabet booklets, wall cards, an alphabet sound pack, readiness skill sheets and a poetry book, language master alphabet cards, and an alphabet drill pack. First-grade materials emphasize linguistic word families, decoding and word attack skills, and vocabulary and comprehension skills. During initial reading instruction, the teacher uses blending techniques that feature multisensory learning, slow pacing, and reinforcement of the processes involved in decoding. Each lesson focuses on one linguistic or phonetic feature, and workbooks and supplementary materials supply reinforcement activities. As students progress, instruction and reading become more complex, so that once children complete the series it is easy for them to make the transition to commercial basal reading materials. Reading materials include storybooks, reinforcement exercises, tapes and worksheets, diagnostic instruments, and 16 readers, workbooks, and manuals. The teacher training program is described in a guide with accompanying cassette tapes. The guide covers materials, philosophy, multisensory techniques, teaching reading, diagnosis, classroom games, learning centers, and conducting a training session.

### **evidence of effectiveness**

Scores from Stanford Achievement Tests indicated that readiness and reading subtest scores of project students were significantly higher (greater than .01 level) than for nonproject students. Project mean scores were above the national norms, whereas prior to program implementation mean scores were below the 20th percentile. Scores were collected over a two-year period.

### **implementation requirements**

Any teacher can implement the program in a classroom or remedial lab. If the program is used as a total school or district program, a principal or coordinator should receive training, then train the school staff. Training takes one to three days, depending on the extent of the adoption. Training is conducted at the project site and at adopter sites.

### **financial requirements**

Required start-up materials for class of 25: K, \$171.76; 1, \$419.76; 2, \$442.83. Optional materials: K, \$19.41; 1, \$21; 2, \$78.54. Maintenance costs vary depending on whether materials are consumable or nonconsumable (K, \$12/\$90; 1, \$50/\$250; 2, \$50/\$300). Training, \$10 per teacher. Principal or coordinator, \$20 plus travel to developer site and per diem.

### **services available**

Awareness materials are available at no cost. Visitors are welcome at project site and additional demonstration sites in home state by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is provided at project site (adopter pays only its own costs). Training is also conducted at adopter sites (expenses must be paid).

### **contact**

Annie Ruth Perryman, Director; Project MARC; P.O. Box 98; Crawfordville, FL 32327.  
(904) 926-7909.

**PROJECT** MATHEMATICS ACHIEVEMENT PROGRAM (MAP)

A pull-out remedial math program.

**target audience** Approved by JDRP for educationally disadvantaged children, grades 2-5.

**description** To help students overcome difficulties in computation and mathematical concepts and to learn basic measurements and geometry skills, eligible students are scheduled into learning centers and provided instruction through a diagnostic/prescriptive system. Scheduling students is a cooperative effort of the Title I teacher and the regular classroom teacher that insures daily instructional sessions without interruption of classroom math or supportive instructional electives, and no more than one interruption weekly of all other major subject areas. Classroom teachers provide Title I teachers with all classwork that will be missed by each student attending the learning center sessions. The Title I teacher incorporates pupil needs revealed in the classroom with needs diagnosed in the center to promote maximum learning transfer.

Using a composite analysis of several criterion-referenced achievement tests, an individual Math Profile is developed for each student. Behavior objectives are used to formulate a prescription to meet the interests and needs of each pupil. The Crossreference Guide supplies information on materials available in every center to be used in remediation of a stated skill. Each MAP Learning Center is staffed with a certified elementary teacher and a teacher aide who serve about 62 pupils. Thirty-minute instructional sessions are conducted in small groups in which the teacher-pupil ratio does not exceed 6/1 per class period. Instructional methodology varies with pupil need and interest. The number of sessions ranges from three to five per week.

Staff development provides for the planning, implementation, and evaluation program. The Program Guide, developed by Title I staff, directs the instructional and supportive procedures.

**evidence of effectiveness** Based on results from the California Achievement Test, students showed improvement from pre- to posttesting at grades 2-5 for both project years (1979-80 and 1980-81). The 1980-81 posttest performance was at the 50th percentile, the national average.

**implementation requirements** Staff development is conducted during the school year for teachers and aides.

**financial requirements** Seven hundred pupils in 10 public school buildings were served by the project for an average cost of \$309 per pupil. Expenditures for salaries included 11 full-time certified teachers, a prorated Project Director, a prorated Math Program manager, 11 full-time teacher aides, and prorated clerical services. Start-up and continuing costs can be minimized by using many of the resources that may already be available in the adopting school and/or district. Approximately 90% of all instructional materials are commercial and 10% are locally produced by staff.

**services available** Awareness materials are available at no cost. Visitations may be arranged at the discretion of the project director. The availability of the project staff to attend in-state and out-of-state awareness meetings and to conduct training services in state and out of state may be negotiated, with adopter bearing all costs. Implementation/follow-up services are negotiable, with adopter bearing all costs.

**contact** John W. Williams; Mathematics Achievement Program; Chester Upland School District; 18th and Melrose Avenue; Chester, PA 19013. (215) 447-3865.

## **PROJECT**

### **MATTESON FOUR-DIMENSIONAL READING PROGRAM**

A multitext, individualized, comprehensive reading skills-developmental reading program for grades 4-8.

## **target audience**

Approved by JDRP for students of all abilities, grades 4-8.

## **description**

The program's goal is that students reach a level in the reading-skills sequence commensurate with their reading expectancy level. The four dimensions are: developing basic skills that students need in order to read critically, purposefully, and appreciatively; teaching students to use reading as a tool for learning; fostering an appreciation of literature; and developing permanent interests in reading for enjoyment. Students progress through a series of individualized learning packages covering 108 behavioral objectives, omitting the skills they have already mastered. Activities noted in the learning packages direct the student to selections in various reading texts appropriate to his/her independent reading level. Activities are varied and increase in level of readability and complexity following Bloom's taxonomy. Criterion-referenced tests include a placement test, pretest, posttests, and sub-skills tests for all 108 objectives. A management system consisting of class record sheets and individual pupil-progress charts shows the student's growth in reading. This skills-development portion of the program is expected to take from 40-60 percent of the total reading time. The remainder of the time is devoted to application of skills through a variety of reading-language activities to provide a well-integrated reading program.

Adopters are trained in the use of cloze procedure, readability formulas, application of behavioral objectives, writing of learning packages, diagnosis and placement of students, and program operation. (The Matteson Program is intended to be a basic skills-development reading program. It is not a supplement to a basal reader series.)

## **evidence of effectiveness**

After three years in the program, 80% of the project group met or exceeded their reading expectancy levels determined by a modification of the Bond-Tinker formula, while only 41% in the control group met this criterion. The program group exceeded the control group by .63 on the Stanford Reading Achievement Test. Attitude toward reading was significantly higher in the program group, as determined by a project-developed test.

## **implementation requirements**

Most likely adopter is a building unit, but the program can be implemented in a single classroom. No additional staffing is required. One or two staff from adopter district can be trained in two days; they train other teachers at their site. Sets of project-developed Learning Cards and Mastery Tests are required, along with one to three copies each of approximately 60 basal readers. These materials will accommodate a minimum of one classroom or maximum of eight, depending on school organization. A small shelving unit for texts and file containers for learning cards and tests are needed.

## **financial requirements**

A set of project-developed and commercial reading texts costs no more than \$600 and will accommodate up to 150 students, depending upon school organization. Annual maintenance is minimal. Project materials: \$20 for set of Learning Packages, \$10 for set of Mastery Tests, and \$5 for Guide. One set of record sheets, placement tests, and other materials for duplication are provided free to purchasers of these materials.

## **services available**

Awareness materials are available at no cost. Visitors are welcome by appointment. Awareness and training sessions are available on- or off-site by arrangement.

## **contact**

Allan Dornseif; Matteson School District 162; 21244 Illinois St.; Matteson, IL 60443.  
(312) 748-0100.

## **PROJECT**

McCORMICK COUNTY FOLLOW THROUGH: Mathemagenic Activities Program (MAP)

Comprehensive education and intellectual development, emphasizing math, for economically deprived children in grades 1-3.

### **target audience**

Approved by JDRP as a comprehensive approach for teaching mathematics to all children in grades 1 and 3.

### **description**

The McCormick County Follow Through program is based on the University of Georgia Mathemagenic Activities Program, which emphasizes learning in the context of classroom environments that stimulate cognitive growth through concrete activities and intellectual challenge for the children.

The desired classroom environment evolves from these principles and processes: after determining each child's developmental level, the teacher creates learning activities based on what children already know which at the same time stretch and challenge them; intellectual growth occurs as children become actively involved in constructing concepts and ideas for themselves as they manipulate and explore with physical materials; independence (self-regulation) is fostered as children have an opportunity to choose materials and subject matter that will meet their individual learning rates and styles. A combination of structured and non-structured individual and small group activities facilitates physical, mental, and social development.

A variety of guides prepared by the University of Georgia is used by the teachers to supplement and reinforce the state-adopted textbooks. Inservice training on teaching techniques and Piagetian assessment is conducted with guidance from the university sponsor.

Medical and dental health, nutrition, psychological and social services, and parent involvement are other essential elements of the University of Georgia model.

### **evidence of effectiveness**

Validation was granted on the basis of Metropolitan Achievement Test scores over a two-year period (1978-80). MAP children in McCormick County, South Carolina have continued each year since validation to demonstrate significantly higher yearly gains on the mathematics test than those of a comparable national norming group. The gains ranged from one-third standard deviation to better than one standard deviation. Similar gains have been documented in reading and language; however, these two areas of the MAP model have yet to be presented for validation.

### **implementation requirements**

MAP is implemented in existing regular classrooms with presently used textbooks and supplemented with numerous commercial and teacher-made materials and manuals developed by the sponsor. A trained instructional aide is recommended for each classroom and a person identified to serve as a Resource Teacher to work with classroom teachers is essential. A Parent Coordinator is highly recommended. Full implementation would require a health nurse and social worker. Staff development is required.

### **financial requirements**

A wide variety of commercially available materials found in most classrooms is used. Cuisenaire Rods, Logic Blocks and Multi-base Blocks are required (costs vary according to supplier). Sponsor-developed manuals needed are: Logic Blocks (75¢), Multi-Base Blocks (25¢), and Strategy Manual for Mathematics (\$2). Reassignment within the adopting unit can be made to provide classroom instructional aides and a Resource Teacher. The major implementation cost is the training of personnel.

### **services available**

A Follow Through Resource Center.

Awareness brochures are available at no cost. Visitors are welcome at the project site any time by appointment. Project staff are available to attend in-state and out-of-state awareness meetings (costs to be negotiated). Training services are available at the project site or adopter's site (costs to be negotiated). A full staff is available at the University of Georgia to offer assistance in program development, training, and evaluation of project effectiveness.

### **contact**

Mildred Knight, Project Director; McCormick County Follow Through Project; McCormick County Public Schools; P.O. Box 687; McCormick, SC 29835. (803) 465-2898.

**PROJECT** MOUNT VERNON TV READING AND COMMUNICATION

A program to improve student reading skills.

**target audience** Approved by JDRP for grades 4-8.

**description** The Mount Vernon TV Reading and Communication project uses popular commercial TV to teach academic and underlying psycholinguistic skills. Network videotapes with actors, authors, and diverse production elements are used in the classroom or communication studio to provide concrete visualization of sophisticated vocabulary and pronunciation.

Lesson plans are prepared from the actual scripts used by TV producers and include skills related to social studies, oral language, reading, writing, and skills that affect learning rate such as memory, grammar, and visual and auditory integration. By creating new characters, plot twists, and endings, students develop their writing skills. Teachers use rapidly paced oral response drills designed to increase accuracy in articulating, listening, handling complicated syntax, and master vocabulary meaning. Program techniques enable teachers to continuously assess lesson mastery, to correct responses, and to monitor student ability to transfer skills taught in the auditory-vocal channel to the visual-motor channel. Students move through increasingly difficult levels of reading material as they practice the previously taught strategies on supplemental material.

Teachers and students learn how to operate specialized equipment -- TV camera, videotape recorder, and TV monitor -- for use in learning, processing, and expressive activities. At videotape sessions, students become camera persons, directors, technicians, and actors as they confirm their ability to read at the end of each session by videotaping and playing back their dramatizations.

Students produce their own documentary on a topic related to the script. Choosing from a wide range of levels, students read and prepare "book" commercials to try to sell the idea of reading that book to their peers.

**evidence of effectiveness** Participants in the program improved their standing in reference to national norms consistently across grade level and site. Students increased their percentile ranking from a minimum of 3 to a maximum of 26. Disabled readers made most dramatic gains.

**implementation requirements** Teachers attend a three-day training workshop. During program implementation, two workshop days are given by the demonstration staff. After program implementation, three follow-up visits are made by demonstration staff. A communication studio can be set up in a corner of a classroom or in a separate room into which classes are scheduled.

**financial requirements** No new personnel need to be hired since the program uses existing staff. Installation costs are approximately \$2,500. Schools with existing video equipment and materials do not have minimal installation costs. Training and monitoring costs not exceeding \$2,500 (plus travel and lodging) can be shared with neighboring replicators. An additional \$100 fee per teacher provides training manuals, lesson plans, student scripts, and videotape copies. In subsequent years, \$2.50 per pupil should be set aside to duplicate worn out scripts and batteries, as well as money for equipment repairs.

**services available** Awareness materials are available at no charge. Staff can attend awareness conferences. Visitors are welcome by appointment. Training at replication sites is available under certain conditions. Three visitations by the demonstrator will be arranged the first year.

**contact** Mrs. Jacqueline Van Cott Barra; Mount Vernon TV Reading and Communication Project; Pennington-Grimes Center; 20 Fairway; Mount Vernon, NY 10552. (914) 668-8777 or -6580.

**PROJECT**

NICHOLS AVENUE FOLLOW THROUGH: A Direct Instruction Model

Basic reading, arithmetic, and language for low-income, nonwhite, inner-city children in grades K-3 and a program for their parents.

**target audience**

Approved by JDRP for grades K-3. Approved grade levels are based on claims for children in the program for four full years.

**description**

The goal of the program is to increase the skills that participating students have acquired in their preschool programs. These increased skills will enable the student to compete with more fortunate peers.

The Nichols Avenue Follow Through Program relies on highly structured DISTAR materials in reading and language, which carefully sequence tasks to ensure skill mastery. The content of each three-level sequence is as follows: reading I and II, decoding and comprehension; reading III, word attack skills, reading for and making use of information; language I and II, comprehension; language III, reasoning and rules of grammar and structure. Physical education, art, science, music, and additional reading and arithmetic are taught by school system resource teachers.

Lessons are presented to the students in small groups of six to ten for 30-35 minutes per day in each content area. Criterion-referenced tests are administered continuously to monitor reading and language instruction. The results are used to ensure skill mastery and to place students in the proper group.

A competency-based curriculum resource teacher operates a skill center for reading and arithmetic. She also conducts workshops for teachers and parents and provides individualized programs for students needing remediation. A full range of supportive services, preservice and inservice for teachers and aides, and a Parent Advisory Committee (PAC) are components of the program.

**evidence of effectiveness**

Using the Comprehensive Tests of Basic Skills (CTBS) to ascertain level of effectiveness, third-grade students have performed at or above the national norm 1979-82. The number of students promoted to higher instructional levels is another indicator of the effectiveness of the model. University of Oregon Technical Report 78-1, December 1978: Wesley C. Becker and Siegfried Englemann data show that more gains are made when the Direct Instructional Model is utilized as compared with other instructional models.

**implementation requirements**

Program may be implemented in a single class, grade level, or total primary unit. Two weeks of preservice training for staff is recommended with follow-up inservice. It is recommended that one content area be implemented the first year.

**financial requirements**

Cost of materials varies according to extent of implementation. Start-up cost at level I reading is \$15.25 per student plus \$200 for teacher materials; level I language is \$4.85 per student plus \$199.50 for teacher materials. Continuation costs can be absorbed in the school budget. Adopter costs include possible stipends for staff training.

**services available**

A Follow Through Resource Center.

Awareness materials available from the Direct Instruction Model at the University of Oregon. Visitors welcome at project site for observation. Project staff available to attend awareness meetings (cost to be negotiated). Contact the project about available training and other services.

**contact**

Dorothy J. Rice, Director; Nichols Avenue Follow Through; Martin Luther King Ave. and Sumner Rd., S.E.; Washington, DC 20020. (202) 767-7086.



**PROJECT** PEGASUS: Personalized Educational Growth and Achievement with Selective Utilization of Staff

A management program in reading personalized to meet students' needs.

**target audience**

Approved by JDRP for grades 2-9. This program has been used in other settings with grades 10-12, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description**

The PEGASUS curriculum structure consists of performance objectives and corresponding diagnostic instruments on 17 sequential reading levels at all ability levels in grades K-8. Students in grades 9-12 use PEGASUS as a specialized program. After diagnosis, students are grouped and subgrouped according to identified needs. A chart is used to track each student's progress. A resource file of learning materials for fast, average, and slower-achieving students is coded to PEGASUS objectives. Additional learning activities are developed, coded, and shared by PEGASUS adopters in inservice sessions. Instruction is personalized, motivation techniques are emphasized, and a variety of approaches to teaching reading skills is used. No single teaching approach is either recommended or required. Teachers continue to use any methods that they have found to be successful. PEGASUS utilizes materials found in adopters' classrooms.

The program is offered for diagnosing student needs, selecting appropriate materials to meet those needs, and assessing student gains. PEGASUS aids classroom teachers in organizing instruction for reading and other subject areas.

PEGASUS is an adoption site of PEGASUS-PACE, Tuscaloosa, Alabama.

**evidence of effectiveness**

Gates-MacGinitie Reading Tests were given in October and May 1976-77 and 1977-78 to a random group of students, grades 2-9, in PEGASUS schools and control schools. Students were selected from several districts, rural and urban, that had similar socioeconomic characteristics. For all grades, students in PEGASUS schools showed greater gains than students in control schools.

**implementation requirements**

The program may be implemented by classroom teachers as well as by special reading teachers. Two days of inservice training and personalized follow-up are offered to adopters. Some specialized support is needed. It can be provided by curriculum-oriented principals, supervisors, or key teachers already employed. No additional staffing is necessary. No special equipment is needed. PEGASUS can be adapted to any organizational arrangement of classes. PEGASUS may be adopted by one teacher, several teachers, or all teachers in a building or school district. Teachers should be involved in the decision to adopt.

**financial requirements**

PEGASUS Master Volume (Teacher's Guide and Key; Objectives and Skills Check Sheets; Diagnostic Instruments R-16; Separate Answer Sheets for Diagnostic Instruments 9-16), \$50. Reproduction costs, 50¢-\$1 per student per year. Resource file folders and labels, \$25.

**services available**

Awareness materials are available at no cost. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Two days of inservice training and personalized follow-up are available at project or adopter site (costs to be negotiated).

**contact**

Cheryl Hendress, Project Coordinator; Bureau County Educational Service Region; Courthouse; Princeton, IL 61356. (815) 875-1529 or 872-4181.

**PROJECT**

PHILADELPHIA FOLLOW THROUGH BEHAVIOR ANALYSIS RESOURCE CENTER (BARC)

A training center for administrators, teachers, paraprofessionals, and parents, with a fulltime commitment to demonstrating the entire Philadelphia Behavior Analysis program.

**target audience**

Approved by JDRP for grades K-3.

**description**

The Philadelphia Behavior Analysis program consists of a wide array of systematic techniques capable of creating an educational environment to accelerate the social and academic development of young children. Training for implementation, lasting two to five days, can be tailored to meet specific site requirements. Areas of concentration include: understanding human behavior; reinforcement strategies; learning styles; curriculum development; instructional strategies; room arrangement; and aide and parent involvement. Each Behavior Analysis classroom contains one teacher and at least one aide or parent, but ideally one aide and one parent. The aide and/or parent reinforce the teacher's instructional program by providing assistance in a program utilizing small-group strategies. Academic instructional time (the earn period) focuses on the basic skills -- reading, mathematics, spelling, and handwriting. Weekly targets are set for each child. Motivation and positive reinforcement permeate the classroom. A tangible motivational system, such as a token economy, tally system, or contracting, is used. The children are encouraged to engage in their learning tasks by "back-ups" -- games and activities -- based on their interests and needs. Points earned or contracts negotiated are exchanged for the back-ups (spend time) at intervals throughout the day, once a day, or at a delayed time. Punishment is de-emphasized. Curriculum materials have entry placement and diagnostic tests, are self-checking, require frequent response from the student, can be individualized, present skills in small steps, and enable child progress to be monitored and measured. Each child in the program is targeted for a year-end goal of at least grade-level achievement in reading, math, and spelling. Grade-level achievement is correlated to book and page placements in the materials.

**evidence of effectiveness**

Some Wide Range Achievement Test mean grade equivalents for project students, compared with a national non-Follow Through control group (shown in parentheses), follow. Reading: Kindergarten, 1.2 (.8); grade 1, 2.1 (1.8); grade 2, 3.0 (2.6); grade 3, 4.1 (3.3). Arithmetic: kindergarten, 1.0 (.7); grade 1, 2.1 (1.8); grade 2, 3.0 (2.4); grade 3, 3.6 (3.2).

**implementation requirements**

Adoption of the Philadelphia Follow Through Behavior Analysis Program should reflect a joint decision by administrators, teachers, and parents. Ideally, the principal as well as all classroom staff involved in implementation receive training. Training can be tailored to specific site requirements, but the complete training package is recommended for total K-3 application. All training is predicated on prior written agreement between project and adopter. Project assumes that adoptions will be ongoing for a minimum of two years.

**financial requirements**

Equipment and curriculum materials already found in most classrooms can be used. An adopter incurs additional costs only if the programmed materials for reading and mathematics are utilized. The staffing pattern is negotiable. Cost of aides and parents depends on local salary schedule.

**services available**

A Follow Through Resource Center.

Information brochures regarding BARC and general descriptive materials are available at no charge. Visitors are welcome by appointment. Project staff are available to attend out-of-state awareness meetings. Training is available free of charge at project site or adopter site.

**contact**

Leontine D. Scott, Director, or Roger Huyett, Coordinator; Follow Through Programs; Room 510, Administration Bldg.; School District of Philadelphia; 21st and Parkway; Philadelphia, PA 19103. (215) 299-7659 or 567-4161 or -2920.

**PROJECT**

PICKENS COUNTY FOLLOW THROUGH: Mathemagenic Activities Program (MAP)

Comprehensive education and intellectual development, emphasizing math, for economically and educationally deprived children.

**target audience**

Approved by JDRP for grades 1 and 3.

**description**

The Pickens County Follow Through program is based on the University of Georgia Mathemagenic Activities Program, which emphasizes mathematics in the context of classroom environments that stimulate cognitive growth and the acquisition of basic academic skills through concrete activities and intellectual challenge for the children.

The desired classroom environment evolves from these principles and processes: Learning activities must be based on what children already know and at the same time stretch and challenge them; the teacher must assess each child's developmental level. Intellectual growth occurs only through active involvement, so manipulation of objects is called for. Independent activity is necessary for learning, so children must exercise choice, and to experience such self-regulation, children select activities and work independently. In addition, many structured and small-group lessons involve the teacher or aides. A variety of guides prepared by the University of Georgia is used by the teachers, together with district-approved materials. A specially trained resource teacher provides regular inservice training, visits classrooms each day, and gives two demonstration lessons every month.

Medical and dental health, nutrition, psychological and social services, and parent involvement are other essential elements of the University of Georgia model.

**evidence of effectiveness**

Follow Through children showed educationally and statistically significant gains in mathematics achievement as measured by the 1978 Metropolitan Achievement Test. These achievement gains are greater than those predicted from fall test performance, and they replicate across two cohorts for which data were gathered.

**implementation requirements**

A training workshop for staff is required.

**financial requirements**

Contact the project for start-up costs.

**services available**

Awareness materials available at no cost. Visitors welcome at project site by appointment. Training available at project site (costs paid by adopter).

**contact**

Glenn Anderson, Superintendent; Pickens County Follow Through Project; 211 N. Main St.; Jasper, GA 30143. (404) 692-2532.

**PROJECT** PLATTSBURGH FOLLOW THROUGH PROGRAM

Reading, math, and language for children from low-income areas.

**target audience** Approved by JDRP for grades K-3.

**description** The goals of the Plattsburgh Follow Through program are to prevent economically disadvantaged children from failing in reading and math and to promote development of their language skill. Initial and ongoing assessment, weekly meetings of the entire staff, periodic reviews of each child's reading and math programs, and staff development in Bank Street College of Education theories and practices are the means used to attain the program's goals.

Rather than being directed by their teacher, the children help shape their own activities. They work independently, in small groups, or singly with the teacher or aide on such projects as sand and block construction, art activities, cooking, dictation, journal writing, measurement, and science experiments. The classroom setting is tightly organized, giving children the opportunity to express themselves in words and actions and to work with each other.

Home visits, trips for parents and children, and participation by parents in the classroom are fundamental to the program. Parents are also actively involved in decision making in all aspects of the program. In addition, parents are offered a variety of practical and academic courses and workshops with community agencies.

**evidence of effectiveness** When comparisons are made between Follow Through children and national norm groups on the Metropolitan Achievement Test and the Comprehensive Test of Basic Skills reading and math scores, all but one Follow Through cohort had a lower percentage of children one year or more below grade level in reading and math than did the comparable norm groups. Achievement in reading and math by Follow Through children is maintained throughout fourth and fifth grade, suggesting a sustained effect in preventing academic failure.

**implementation requirements** A one- to two-week preservice workshop is required for instructional staff. Area must be provided for establishment of a learning center. A philosophy of supportive interaction must be established and maintained between all involved personnel -- teachers, students, parents, aides. Ongoing staff development is an important aspect of this program. Bank Street College may provide training.

**financial requirements** Cost of adoption depends on program size. Released time must be provided for teachers to attend a preservice workshop.

**services available** A Follow Through Resource Center.

Awareness materials available at no cost. Visitors welcome at project site by appointment. Contact the project about training.

**contact** Robert Garrow, Director; Plattsburgh Follow Through Program; Monty Street School; Monty St.; Plattsburgh, NY 12901. (518) 563-1140.

## **PROJECT**

POCATELLO FOLLOW THROUGH: Mathemagenic Activities Program (MAP)

A comprehensive educational and intellectual model for developing cognitive and problem-solving skills.

### **target audience**

Approved by JDRP for grades 1 and 3.

### **description**

The Pocatello Follow Through program is based on the University of Georgia Mathemagenic Activities Program, which emphasizes mathematics in the context of classroom environments that stimulate intellectual growth through concrete activities and intellectual challenge for the children.

The desired classroom environment evolves from these principles and processes: learning activities must be based on what children already know and at the same time stretch and challenge them, so the teacher must assess each child's developmental level; intellectual growth occurs only through active involvement, so manipulation of objects is called for; independent activity is necessary for learning, so children must exercise choice, and to experience such self-regulation, select activities and work independently. A combination of structured and non-structured individual and small group activities facilitate physical, mental, and social development.

Teachers use a variety of guides prepared by the University of Georgia to supplement and reinforce the state-adopted textbooks. Inservice training on teaching techniques and Piagetian assessment is conducted with guidance from the university sponsor.

Medical and dental health, nutrition, psychological and social services, and parent involvement are other essential elements of the University of Georgia model.

### **evidence of effectiveness**

Validation was granted on the basis of Metropolitan Achievement Test scores over a two-year period (1978-80). MAP children in Pocatello, Idaho have continued each year since validation to demonstrate significantly higher yearly gains on the mathematics test than comparable gains in the national norming group. The gains ranged from one-third standard deviation to better than one standard deviation. Similar gains have been documented in reading and language; however, these two areas of the MAP model have yet to be presented for validation.

### **implementation requirements**

MAP is implemented in regular classrooms with presently used textbooks supplemented with numerous commercial and teacher-made materials and manuals developed by the sponsor. A trained instructional aide is recommended in each classroom and a person to serve as a resource teacher to work with classroom teachers is essential. MAP can be adopted by an individual teacher, by a grade level, a school, or an entire school district. A parent coordinator is highly recommended in order to get parents more involved in the education of their children. Full implementation as a comprehensive model would require a health nurse and social worker. Staff development is required.

### **financial requirements**

Major implementation cost is the training of personnel. Most necessary materials are already available in classrooms. A set of Cuisenaire Rods, Logic Blocks, and Multi-base Blocks are required. Costs vary according to supplier. Sponsor-developed manuals needed are Logic Blocks (75¢), Multi-base Blocks (25¢), Strategy Manual for Mathematics (\$2), and Developmental Assessment of Young Children (\$2). No new costs for personnel are required if reassignment within the adopting unit can be made to provide classroom instructional aides and resource teacher.

### **services available**

A Follow Through Resource Center.

Awareness brochures are available at no cost. Visitors are welcome at project sites anytime by appointment. Project staff are available to attend in-state and out-of-state awareness meetings (costs to be negotiated). Training services are available at project site or adopter site (costs are borne by adopter and are negotiable based on number of personnel involved and specific needs). A full staff is available at the University of Georgia to offer assistance in program development, training programs, and evaluation of project effectiveness.

### **contact**

Petrea Gould, Director; Pocatello Follow Through Project; Pocatello School District No. 25; 3115 Poleline Rd.; P.O. Box 1390; Pocatello, ID 83201. (208) 232-3563, ext. 269.

## **PROJECT**

PROJECT PRIDE: Professional Reading Instruction with Desirable Effects

A pull-out remedial reading program utilizing modality assessment and careful diagnosis of each learner's reading deficiencies in an eclectic approach to instruction.

### **target audience**

Approved by JDRP for educationally disadvantaged pupils, grades 2-6.

### **description**

The Project PRIDE diagnostic reading program has been designed to be compatible with existing commercial reading programs. Regular classroom teachers and Title I reading instructors use common diagnostic data to plan instruction skill sequences for deficient readers. Participants must be one year or more below grade level in reading. Standardized individual oral diagnostic reading tests are administered on a pre/post basis to all students selected for participation. Pretest information is used to determine each participant's weaknesses and proficiencies. Pupils with similar skill deficiencies are grouped together for reading instruction. Groups of five or fewer attend 25-minute reading sessions conducted by certified reading specialists five days per week. Individualized instruction can be provided to pupils with severe reading deficiencies. Title I teachers develop and maintain reading profiles for each program participant. These profiles identify weaknesses and strengths and help teachers to plan a program of remediation for students. Skills in need of remediation are sequenced. Modality assessment is conducted to identify each student's most effective mode of learning. Procedures for remediation of reading skill deficiencies are determined by each pupil's most receptive mode of learning. Teacher-directed instruction provides activities geared to the needs of each group. Individualized instruction provides appropriate independent assignments for every participant. An attempt is made to increase motivation by identifying each learner's interests and by providing learning experiences compatible with those interests whenever possible.

### **evidence of effectiveness**

Evaluation shows achievement, at every level, to be a minimum of 1.9 months of growth for each month of participation in the program. In 1978, Title I students increased reading performance by an average of 8.85 NCEs as measured by Metropolitan Achievement Test.

### **implementation requirements**

Potential adopters are encouraged to visit the program. Three days of inservice training are required for adopters prior to implementation. Additional planning is necessary if the adopter has not developed a written scope and sequence of continuous reading skills for each grade. The smallest adopting unit is one school building.

### **financial requirements**

A wide variety of commercially available materials already found in most classrooms is used. If materials must be purchased, start-up costs are approximately \$9 per pupil. Annual maintenance costs for replacement of consumables are approximately \$1.50 per student.

### **services available**

Awareness materials are available at no charge. Visitors are welcome by appointment. Project-developed materials are available for purchase. Training is conducted at the project site. Project staff are available to attend out-of-state awareness sessions and to provide training at adopter site if exemplary project staff costs are paid.

### **contact**

Horace F. Smith, Title I Director; William Penn School District; Bell Avenue Administration Building; P.O. Box 405; MacDade Blvd. and Bell Ave.; Yeadon, PA 19050. (215) 284-8039.

## **PROJECT**

PRIOR: PReschool and Improvement Of Reading

A coordinated approach to school experience through readiness in preschool and reading improvement in elementary school.

### **target audience**

Approved by JDRP for pre-kindergarten children with developmental delays, grade 1 pupils needing further readiness, and elementary students achieving in the lower three stanines in reading.

### **description**

PRIOR consists of two projects: Preschool offers early educational experiences necessary to later success in school and Reading Improvement provides remedial reading services to elementary students. PRIOR offers a management process for organizing and operating a Chapter I (formerly Title I) program as an integral part of a school system. Building principals are responsible for the day-to-day operation of both the Preschool and the Reading Improvement programs. Both projects are headquartered in a Central Resource Center which provides office space, materials centers, and facilities for staff inservice and parent activities. Strong emphasis is placed on parent involvement. Home-school liaison in both projects is accomplished by part-time Parent Coordinators and a Preschool Home Educator. One teacher in each project is designated Head Teacher (part-time) to coordinate staff and program activities with the Title I Director. This organization results in close cooperation and articulation between the two projects, although either one can exist singly if necessary. Project-developed handbooks guide prescriptive and diagnostic instruction, but teachers have appreciable autonomy in selection of materials and techniques. Development of language concepts is recognized as being essential at all levels of instruction. Regular inservice for staff enhances competencies and encourages involvement in planning, implementation, and program evaluation. A comprehensive yearly program evaluation is carried out with the assistance of outside agencies. PRIOR takes advantage of many district and community resources to provide support services to students. Children attend three hours per day for 160 days each year. The Reading Project operates as a pull-out program with each child participating 30 minutes per day. Instruction emphasizes application of reading skills rather than isolated drill.

### **evidence of effectiveness**

Pre/posttesting data from Stanford Achievement Test Reading subtest administered in 1977-78 to grades 1-5 show NCE gains ranging from 4.5 to 15.5. Pre/post data from Caldwell Preschool Inventory, 1975-78, show gains ranging from 4.9 to 9.2 NCEs for project preschool. The Reading program was evaluated by Title I Model A-1 in 1977-78. Later data are available.

### **implementation requirements**

Preschool and Reading programs can be adopted singly or together. Less than a district-level commitment is difficult except for certain elements of the Preschool program. Possible sources of funding for adoption include Chapter I, Title IV-C, Head Start (Preschool), and local funds, singly or combined. Key elements of PRIOR can be integrated into such already existing resources as staffing, materials, and facilities. Training is required. Length of training depends on programs adopted and degree of match with existing Chapter I program. Adopter must supply required data.

### **financial requirements**

Instructional handbooks for each program (one per classroom), \$8 each. Existing materials are used and a variety of supplemental reading books is recommended. Existing staffing can be used. One teacher should be designated part-time Head Teacher for each program adopted. One teacher per Reading classroom and one teacher and one aide per Preschool center are recommended. Existing facilities can be used. Installation costs per child: Reading, \$50; Preschool, \$26.

### **services available**

Awareness materials are available at no cost. Visitors are welcome at project site by appointment. Contact the project about available training and other services.

### **contact**

Melba Treaster, Head Teacher, or Buford Plemmons, Director of Federal Projects; PRIOR; Poudre School District R1; 2407 La Porte Ave.; Fort Collins, CO 80521. (303) 484-3462 or 482-7420.

**PROJECT** PROGRAMED TUTORIAL READING

An individualized, one-to-one tutoring program for slow learners or potential reading failures, regardless of economic or demographic background.

**target audience** Approved by JDRP for first-grade students in the lowest quartile who need help learning to read. This program has been used in other settings with grades 2-4, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** Programed Tutorial Reading (PTR) supplements but does not substitute for conventional classroom teaching. PTR uses specially trained, carefully supervised paraprofessional tutors who implement its highly structured content and operational programs. The teaching strategy, built on established learning principles, uses many elements of programmed instruction -- frequent and immediate feedback, specified format, and individualized pace -- but, unlike programmed instruction that uses the fading process, proceeding from many initial cues to the minimum needed for success, PTR uses the brightening process, in which minimal cues are followed by increased prompting until complete mastery of the reading task is achieved.

Children receive a tightly organized 15-minute daily tutoring session, during which they read from classroom basal readers supplemented with special texts dealing with comprehension and word coding and decoding. Tutors are trained to follow, verbatim, the content and operational programs contained in the Tutor's Guide. These specify in detail what, when, and how to teach the content material and also limit tutors' decisions about children's responses. Integral and essential to the PTR methodology are its special recording procedures, which not only indicate children's progress, but also prescribe exactly which separate items must be reviewed until mastery is achieved. Constant reinforcement or praise is also an essential part of the instructional technique, while overt attention to errors is minimized.

**evidence of effectiveness** Original objective tests and other indicators (1965-73, Indiana D/D) in inner-city, suburban, and rural schools showed gains at .01 confidence level on criterion and standardized tests and reduction of failures (retentions or assignments to special education classes) by 69%. On Gates-MacGinitie Reading Test A (Utah D/D, 1973-74), low-achieving, middle-income suburban pupils scored at 1.9 grade equivalent at the conclusion of grade 1, against nontutored pupils' score of 1.5.

**implementation requirements** Minimum staffing: part-time director/supervisor and tutors. Tutors may be teacher's aides, adult volunteers, or older students. Physical facilities: quiet, well-lighted tutoring site with side-by-side seating at desk or table for tutor and student. Materials: set of basal readers, preferably same as used in classroom; Tutorial Kit for each tutor; Supervisor's Manual for each supervisor. Training: approximately 30 hours total during school year. Initial training by D/Ds after start-up year. PTR can be implemented by single schools or entire school districts.

**financial requirements** Personnel: approximately 98% of budget, depending on project size and number of tutors, unless tutors are volunteers. If tutors are teacher's aides and supervisors are part-time Title I teachers or reading specialists, local wage scales will apply. Materials: PTR Kits (\$30 average, one kit per teacher with five-year use expectancy). Training: cost to adopter varies with number of days and trainers.

**services available** Awareness materials are available at no cost. Audiovisual materials are available on loan (return postage must be paid). Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is provided at project site or adopter site (costs to be negotiated). Implementation information in Supervisor's Manual is keyed to PTR component in basal series. Follow-up technical assistance is available (costs to be negotiated).

**contact** Phillip Harris, Director; Programed Tutorial Reading Research and Development Center; Indiana University; 2805 East 10th St.; Bloomington, IN 47405. (812) 337-6756. Susan Ward, Director; Programed Tutorial Reading; Davis School District; 45 E. State St.; Farmington, UT 84025. (801) 451-1117.



**PROJECT** PSYCHOMOTOR LEARNINGS FOR ACADEMIC YIELDS (Project PLAY)

Perceptual-motor and/or cognitive activities conducted by teachers and parents to increase children's reading readiness.

**target audience** Approved by JDRP for pre-kindergarten through grade 1.

**description** This program is based on the assumption that psychomotor deficiencies (which may be due to poor socioeconomic backgrounds) will interfere with learning, especially beginning reading, and must be either prevented or corrected. Pre-kindergarten, kindergarten, and grade 1 children participate in teacher-directed perceptual-motor and cognitive activities based on a project-developed diagnostic/prescriptive curriculum guide. Gross and fine motor activities combined with cognitive learnings such as shapes, colors, and letter and word recognition help the child transfer sensory experiences to conceptual meanings. Teachers are trained in diagnostic procedures, methods of combining perceptual-motor and cognitive instruction, and preparation of learning environments that encompass gross and fine motor and cognitive-related learnings. In addition, parents are given a training handbook and special activity packets intended to help them understand some basic principles of child development. These packets describe techniques that parents can use to teach their own children. Involvement of the local community is an important aspect of the program. Community agencies (the mental health department, the swimming staff at the YMCA, groups of elderly people, the local library, and a speech and hearing clinic) would be helpful at any adopting site. Project students have included special education children (15 percent) and children designated as low-achievement, high-risk, or as having motor problems (70 percent), with the remainder coming from the regular school population. The project has a similar program for preschoolers. Three- and four-year-olds spend two hours weekly on perceptual-motor/cognitive activities that are conducted in a mobile van. These activities are reinforced at home by parental instruction.

**evidence of effectiveness** In 1975-78, kindergarten pupils showed statistically significant gains (.05 level) over controls in pre/posttesting with the Boehm Test of Basic Concepts, and first-grade pupils mastered individually prescribed criterion-referenced objectives.

**implementation requirements** The program can be adopted in various ways involving regular classroom teachers and staff. Three days are recommended for inservice using the training manual. One manual for each trainee is desirable. A curriculum handbook, a criterion-referenced kit, and 22 perceptual-motor booklets (for kindergarten and grade 1, to be used according to needs in the classroom) are required. Such physical education equipment as is found in most schools -- balls, ropes, balance beams, climbers, and bouncers -- is necessary. A Parent Handbook and 30 pre-kindergarten, 7 kindergarten, and 7 first-grade packets for parents, as well as a community involvement packet, are also required.

**financial requirements** Curriculum guide, \$20; criterion-referenced kit, \$20; 22 K-1 perceptual motor booklets, \$13; training manual, \$10; parent handbook, \$4.50; 30 pre-kindergarten parent packets, \$24; 7 kindergarten parent packets, \$6; 7 first-grade parent packets, \$6; community involvement packet, \$5.

**services available** Awareness materials are available at no cost. Visitors are welcome at demonstration sites. Training is conducted at project site or adopter site (cost to be negotiated). Follow-up technical assistance is provided (cost to be negotiated).

**contact** Evelyn Murray; Bristol Virginia Schools; 222 Oak St.; Bristol, VA 24201. (703) 669-8181.

**PROJECT** PUBLIC SCHOOL 33 MANHATTAN FOLLOW THROUGH PROJECT: A Child Development Approach

A developmental reading and language arts program for children from a variety of ethnic backgrounds whose first language may not be English.

**target audience** Approved by JDRP for grades K-3.

**description** With the goals of increasing children's language competence and laying a foundation in reading, this Follow Through project bases instruction on a combination of traditional and open-classroom, experiential learning techniques that take the children's development and language levels into consideration. Language Experience in Reading and the Structural Reading Program are the basic textbook series, which are supplemented by other commercial texts and by teacher- and pupil-made materials. Classrooms are organized into science, math, cooking, art, writing, reading, and listening centers and are equipped with tape recorders and typewriters for the children to use.

Continuous regrouping and peer teaching are important aspects of the program. Each classroom is staffed by a teacher and an aide who receive workshop training in a Resource Workshop Center at the school. This training is also available to parents. Parent volunteers are encouraged to participate in many ways in the classroom, Parent Room, and community.

**evidence of effectiveness** The children's total reading scores are meeting those of the national norm group after completion of the Follow Through Program cumulatively at grade four and consistently by grade five. When compared to a local well matched comparison group Follow Through children are consistently scoring at or above grade level on tests in reading upon completion of the program in grade three and cumulatively in grades four and five. Thus, a program effect for prevention of reading failure and sustainment of reading competencies is achieved.

**implementation requirements** Minimum staffing requirements: a classroom teacher, teacher's aide (or volunteer), and person to act as a staff developer (assistant to principal, teacher trainer, etc.). This team, augmented by parents or a Parent Program developer is trained at the local site with additional training given at the adopter's site.

**financial requirements** Training for staff teams, variety of materials and equipment, commercially published tests and diagnostic tools, and a wide range of children's trade books.

**services available** A Follow Through Resource Center.

Awareness materials are available and awareness visitations and consultations are offered on site. Services available at project site: observation of demonstration classrooms, training program for staff and parents, consultation, resource room for workshops, and study of program materials.

**contact** Jean S. Burlingham; Public School 33 Manhattan Follow Through Program; 281 Ninth Ave.; New York, NY 10001. (212) 564-3733.

**PROJECT**

PUBLIC SCHOOL 92 MANHATTAN FOLLOW THROUGH

A cognitively oriented program for improving the reading and oral and written communication abilities of inner-city children.

**target audience** Approved by JDRP for grades K-3.

**description** The program approach integrates elements of traditional academic education with cognitively oriented methods, which facilitate active learning through teacher- and child-initiated activities that are open-ended, individualized, and carried out in small groups. Derived from the High/Scope Educational Research Foundation approach, the principal goals of this Follow Through program are improvement of reading and development of skills in oral and written communication. Mathematics and other subjects are also included in instruction. Teaching teams consisting of a teacher and a paraprofessional plan and conduct instructional activities. Children develop and apply basic skills as they plan and evaluate their own projects. Each classroom is organized into learning centers, where child-initiated activities are conducted daily. Child-initiated activities follow a four-step process: planning, work, representation, and evaluation. In planning, children dictate or write what they propose to do for the day. In the work step, they carry out their plans. In the representation step, they write a story or draw a picture to show what they have done, and in evaluation, they assess the day's activity and share in small groups.

**evidence of effectiveness** Evaluation data is based on annual achievement test supervised by the New York City Board of Education. Evaluation data collected from 1973-80 indicate that students' reading failures are lower than what would be expected given their socioeconomic background, and that reading failure continues to be prevented two years after the children leave the program.

**implementation requirements** Individual teachers or teaching teams can use the teacher's handbook and participate in training workshops. Workshops are highly recommended but not mandatory. Educational assistant or parent volunteer is essential in the classroom.

**financial requirements** A set of five training manuals for teachers costs \$15. Classroom materials can be acquired very inexpensively. The travel expense and consultant fees for the trainer can be major expenses depending on geographic location.

**services available** A Follow Through Resource Center.

Awareness materials are available at no cost. Visitors are welcome by appointment. Awareness presentations are available on site to interested sites for cost of travel expenses. Training is conducted on site and includes four workshops plus two and one-half days of observations/consultations in each classroom (transportation and consultation fees to be paid by adopter).-

**contact**

Margaret Butler, Director; Public School 92 Manhattan Follow Through, Community School District 5; 222 W. 134th Street; New York, NY 10030. (212) 283-3800 or -3801.

**PROJECT**

PUBLIC SCHOOL 137 BROOKLYN FOLLOW THROUGH: A Direct Instruction Model

Reading, writing, arithmetic, and language for economically disadvantaged children.

**target audience**

Approved by JDRP for grades K-3.

**description**

The goal of this Follow Through project is to provide economically disadvantaged children with sufficient basic skills in reading, arithmetic, and language to compete with their more fortunate peers for vocational and academic opportunities. To attain this goal, DISTAR materials are used for reading, language, and arithmetic. The regular school subjects of handwriting, spelling, science, social studies, and health are also taught. All three DISTAR reading levels encompass decoding and comprehension; they are supplemented by a linguistic reading series with comprehension questions in grades 1-3 and by a basal reading series in grades 2 and 3. Arithmetic covers addition, subtraction, multiplication, division, and measurement and includes many story problems. The three oral and written language sequences include logical operation, grammatical analysis, and questioning strategies. In small-group lessons of 35-40 minutes, the teacher and aides use the DISTAR techniques of positive reinforcement, group and individual response, appropriate correction procedures, and teaching to mastery. Student progress is monitored for both quantity and quality of instruction. Criterion-referenced tests that are administered periodically are the basis for regrouping and staff training.

**evidence of effectiveness**

CAT, SAT, and CTBS.

Statistically the D.I. Model has shown that all K-3 students can significantly improve their reading and arithmetic skills. Test utilized: MAR,

**implementation requirements**

Adopting site must provide consistent, ongoing staff development and training in the methods and procedures of the Direct Instruction Model by an experienced trainer/consultant. Initial training for each level is necessary, plus additional monthly on-site training in the classrooms. Program can be implemented in as few as one class per grade level from pre-school through grade 3.

**financial requirements**

Each class must have one teacher and one paraprofessional. An appropriate Reading Kit, Language Kit, and Arithmetic Kit is necessary for each class at an approximate cost of \$600. Students must have appropriate story books and workbooks for each area at a cost of approximately \$30 per child. Personnel is necessary to collect criterion test data on a regular basis. A coordinator needs to be identified to oversee the implementation of the program.

**services available**

Awareness materials are available at no cost. Visitors are welcome at project site by appointment. Training can be conducted at project site at the expense of the adopter. A consultant is available to attend out-of-state awareness meetings (costs to be negotiated).

**contact**

Ethel Bayley, Coordinator; P.S. 137 Brooklyn Follow Through; 121 Saratoga Ave.; Brooklyn, NY 11233. (212) 455-7302.

**PROJECT**

RANDOLPH COUNTY FOLLOW THROUGH PROGRAM

An individual, sequential program of instruction in reading skills and math for students.

**target audience** Approved by JDRP for grades 1-3, specially targeted toward low-income students.**description** The Randolph County Follow Through program provides a sequential program of individual instruction, with emphasis on student self-management skills and classroom management techniques. The instructional program is based on the Individualized Early Learning Program (IELP) sponsored by the Learning Research and Development Center (LRDC), University of Pittsburgh.

A readiness program entitled Primary Education Program (PEP) is utilized to develop basic skills in a hierarchical sequence, and includes classification, quantification, visual-motor, auditory-motor, and general motor, with numerals and letters. An individualized and adaptive reading program, entitled the New Reading System (NRS), for grades 1-3, follows PEP. Initially, students are introduced to letter sounds, then blending skills are stressed. After blending skills are nurtured to where students can work more independently, taped skills lessons are used along with small group activities. A skill program developed by LRDC is introduced to the students as they reach the highest levels of NRS reading. The goal of the skills program is to give the students an opportunity to develop structural analysis, interpretive comprehension, vocabulary development, evaluative comprehension, research, and organizational skills.

Individualized prescribed instruction in math (IPI) covers the basic math concepts in a structured spiraling curriculum. IPI uses a consumable, individual booklet format.

Randolph County has developed its own math maintenance program. This program drills the students on basic facts to increase pupils' speed and accuracy. Math maintenance is used in combination with IPI math. The IPI math program is used to teach basic problem-solving strategies. This combined with the rote drill and speed of math maintenance nurture the development of mature mathematical thinking skills.

**evidence of effectiveness** Results of the Comprehensive Test of Basic Skills (CTBS) Levels B, C, I, Form S, have been given from 1977 to the present. Follow Through students evidence statistically reliable and educationally relevant increases in reading and math achievement in grades 1-3. The West Virginia-administered CTBS test results indicate that in Randolph County, more disadvantaged Follow Through students were doing at least as well as other more advantaged non-Follow Through students. Detailed information is available on request.**implementation requirements** Program materials must be replicated by the implementing site. Clear copies for reproduction might be obtained from the sponsor (University of Pittsburgh, Learning Research and Development Center, 3939 O'Hara Street, Pittsburgh, PA 15260). Limited special classroom equipment is utilized. Construction of individualized learning areas is necessary. The PEP manual can be purchased through Mafex Associates, Inc., 90 Cherry Street, Box 519, Johnstown, PA 15907.**financial requirements** The cost of replicating materials and purchasing individualized learning centers may vary. The cost of teacher manuals and cassettes is available from the organizations listed above. Cost of program materials: Readiness, \$25 per child for start-up, \$10 per child for maintenance; individualized reading, \$75 per child for start-up, \$29 per child for maintenance. One or two education specialists are required to help supervise the curriculum.**services available** A Follow Through Resource Center.

Visitors are welcome by appointment for observation and demonstration. Sample material area available for inspection at program site.

**contact**

Jacqueline Bright, Director of Federal Programs; Randolph County Board of Education; 40 Eleventh St.; Elkins, WV 26241. (304) 636-4120.

## **PROJECT**

READING ACHIEVEMENT PROGRAM (RAP)

A pull-out remedial program to supplement reading instruction.

### **target audience**

Approved by JDRP for educationally disadvantaged students grades 2-5.

### **description**

To help students overcome difficulties in word analysis and vocabulary skills and to learn basic and special comprehension skills required in content area subjects, eligible students are scheduled into learning centers and provided instruction through a diagnostic/prescriptive system. Scheduling students is a cooperative effort of the Title I teacher and the regular classroom teacher that insures daily instructional sessions without interruption of classroom reading or supportive instructional electives, and no more than one interruption weekly of all other major subject areas. Classroom teachers provide Title I students with all classwork that will be missed when attending the learning center sessions. The Title I teacher incorporates pupil needs revealed in the classroom with needs diagnosed in the center to promote maximum learning transfer.

Using a composite analysis of several criterion-referenced achievement tests, an Individual Reading Profile is developed for each student. Behavioral objectives are used to formulate a prescription to meet the interest and needs of each pupil. A Crossreference Guide, developed by Title I teachers, supplies information on materials available in every center to be used in remediation of a stated skill. Each RAP Learning Center is staffed with a certified reading specialist and a teacher aide who serve about 62 pupils. Thirty-minute instructional sessions are conducted in small groups in which the teacher-pupil ratio does not exceed 6/1 per class period. Instructional methodology varies with pupil need and interest. The number of sessions ranges from three to five per week, for no less than 30 minutes per session.

Staff development provides for the planning, implementation, and evaluation of the instructional program. The Program Guide, developed by the Title I staff, directs the instructional and supportive procedures.

### **evidence of effectiveness**

Based on results from the California Achievement Test, students showed improvement from pre- to posttesting in grades 2-5 for both project years (1978-79 and 1980-81). The 1979-80 posttest performance in NCEs averaged 18.88 per grade.

### **implementation requirements**

Staff development is conducted during the school year for teachers and aides. The RAP program can be successfully adapted by an individual teacher, by a school, or by a district. The mode of implementation would be determined by the organization of the school or district, the space available, the certification of personnel, and the financial resources available. Preferably, the training of the program administrators and/or supervisors can be provided on site in the Chester Upland School District. However, it is possible that it could be provided in the adapting/adopting district.

### **financial requirements**

In 1979-80, 700 public school buildings were served by the project for an average cost of \$323 per pupil. Expenditures for salaries included 11 certified teachers, a prorated Director, a Reading Program Manager, 13 teacher aides, and prorated clerical services. The project utilizes three handbooks developed by teachers: The RAP Program Guide, a Reading Inventory Booklet, and the RAP Crossreference Guide. Contact project for availability and cost. In addition to teacher-prepared materials, a wide variety of commercially available materials already found in most classrooms is used.

### **services available**

Awareness materials are available at no cost. Visitations may be arranged at the discretion of the project director. The availability of the project staff to attend in-state and out-of-state awareness meetings and to conduct training services in state and out of state may be negotiated, with adopter bearing all costs.

### **contact**

Mrs. Evelyn F. Prattis; Reading Achievement Program; 500 West 9th Street; Chester, PA 19013.  
(215) 447-3860.

**PROJECT** PROJECT READING IMPROVEMENT

A laboratory and tutorial project attacking the problem of reading deficiencies of children in grades 1-8.

**target audience**

Approved by JDRP for grades 2-8. This program has been used in other settings with grades 1 and 9-12, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description**

One-to-one instruction is provided by six tutors for first-graders who are having the most difficulty. Reading improvement laboratory experiences are provided for eligible children, grades 2-8. Each of the 11.5 reading laboratories is staffed by a specially trained reading teacher and a para-professional assistant. Each professional is a certified reading teacher. Only children whose standardized reading test scores are well below norms established for their age levels are selected as participants. Children are drawn from the regular classroom for 45 minutes of laboratory instruction each day. Laboratory periods are scheduled so they do not conflict with the child's reading instruction in the regular classroom. Each lab consists of small groups of 10 or fewer so that much individual instruction can be given. The standard reading lab is divided into three parts: the first is usually for small-group work in word analysis, the second is for reading specific material listed on a student's folder, while the third is for individual work designed to meet individual needs. Children's reading skills in 277 separate areas are diagnosed, and prescriptive instruction is provided to correct deficiencies. Standardized diagnostic tests and informal reading inventories are administered to each child at intervals throughout the year. Primary emphasis is on comprehension, but vocabulary, speed, and accuracy are also stressed.

Efforts are made to use instructional techniques that differ from those of conventional classrooms in order to capture and maintain the participants' interest and to increase motivation. Project staff have learned that a principal cause of reading problems is lack of desire to learn to read. A variety of learning activities is provided to correct problems arising from lack of interest.

**evidence of effectiveness**

Laboratory participants are pretested in September and posttested in April. The project objective is that all participants will show a mean gain of seven Normal Curve Equivalent (NCE) points based on pre-post Gates-MacGinitie Reading Test data. For grade levels 2-8 mean gains for all participants 1977-1982 was 10 NCE points.

**implementation requirements**

Project requires a well trained, certified reading teacher and a para-professional assistant for every 50 students. Laboratories use teacher-made and commercial materials. Appropriate audiovisual materials are also used. A cross-indexed system of materials designed to develop particular skills is maintained. High-interest, low-difficulty materials see extensive use. Instructional games and materials are used to stimulate genuine interest and total involvement.

**financial requirements**

Set-up cost for equipment is approximately \$1,500, less the value of appropriate audiovisual equipment already on hand. Set-up costs for materials total approximately \$1,500 per 50 students. Upkeep material costs are approximately \$400 per year for each lab (50 students).

**services available**

Awareness materials are available at no cost. Visitors are welcome by appointment. Project staff members are available to attend out-of-state awareness meetings (expenses must be paid). Training is provided at project site (adopter pays only its own costs). Training is also conducted at adopter site (expenses must be paid).

**contact**

R. J. Claybrook, Assistant Superintendent-ECIA Chapter 1 Director; P.O. Box 1239; Burgaw, NC 28425. (919) 259-2187, -2188, or -2633.

## **PROJECT**

READING -- INDIVIDUALIZED REMEDIAL LABORATORIES  
MATH -- INDIVIDUALIZED REMEDIATION

A project designed to provide continuous diagnosis of student needs and daily prescriptions for learning improvement.

### **target audience**

Approved by JDRP as a reading program for children ages 6-18. This program has been used in other settings as a mathematics program, but no evidence of effectiveness has been submitted to or approved by the Panel.

### **description**

The reading laboratories have been developed for high concentration on the improvement of basic reading skills. A reading laboratory staffed by one special reading teacher and a paraprofessional accommodates 80-120 students daily for the entire school year. Each student's daily prescription includes two or more activities designed to meet his/her needs. Students' prescriptions include programmed and self-instructional materials purchased from a variety of vendors or developed by both consultants and project teachers. Emphasis is placed on inservice education, focusing on cognitive reading skills and on the management and use of individualized instruction in the classroom. Inservice education is provided through workshops, consultant classroom visits, and local supervisory services and support.

The mathematics program provides systematic remedial instruction in areas of individual student weaknesses. A teacher and a paraprofessional work with 80-120 students daily in a specially equipped classroom. The mathematics laboratories are characterized by a focus on carefully selected essential concepts, skills, and applications with number ideas and computation; an individualized approach to the instruction; a meaningful approach to the learning of content; careful monitoring of student achievement; and teacher guidance in a supportive atmosphere. The program is based on project-developed materials, reinforced by a variety of supplementary resources and activities. Daily work is guided by individual prescriptions consisting of two or three types of activities. Inservice education receives a strong emphasis through workshops, consultant visits, and local supervisory services and support. There is an ongoing evaluation of project content, materials, instructional procedures, and overall achievement pattern of students.

### **evidence of effectiveness**

Data collected 1977-78 following JDRP approval showed the following average gains over an eight-month period: Slosson Oral Reading Test, 1.28 years' average gain; Gray Oral Test, 1.51 years' average gain; California Reading Achievement Test, 1.15 years' average gain; California Math Test, 1.11 years' average gain. The individualized laboratory approach seems also to minimize student negative behavior through individual and positive reinforcement.

### **implementation requirements**

An extra teacher and paraprofessional are required to serve up to 120 students. A classroom facility for use as a laboratory is needed. Normal furnishings (tables and chairs that can be arranged in a flexible manner) are suitable. A filing cabinet for student record folders is needed. It is desirable to have an audio-active card reader and three or four cassette player-recorders. Start-up training takes eight hours; continuing training takes a minimum of two hours per month, but six to eight hours are preferable.

### **financial requirements**

Expenditures averaged approximately \$229 per student. This figure includes all administrative and backup support services. (Project staff noted that past experiences and thrust in the reading area made for easier organization and utilization of previous projects' materials, equipment, and staff.)

### **services available**

Awareness materials are available. Visitors are welcome by appointment. Training is conducted at the project site (adopting site must cover all trainer costs as well as own costs). Training is conducted out of state (exemplary project staff costs must be paid). Project staff can attend out-of-state conferences (coverage of expenses will depend on situation).

### **contact**

Virginia Morgan; Reading Laboratories; Dougherty County School System; P.O. Box 1470; Albany, GA 31702. (912) 436-6544.



**PROJECT** READING INSTRUCTION AND PUPIL PERSONNEL SERVICES (RIPPS)

A team-approach program to improve reading achievement and self-concept of reading-disabled students.

**target audience** Approved by JDRP for pupils grades 1-4 reading below grade level. This program has been used in other settings with pupils in grades K and 5-12, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** The RIPPS project is a team approach involving classroom teachers, reading specialists, guidance personnel, special services, and parents to improve reading achievement and self-concept of disadvantaged students. The thrust of the program is to identify the child in need of service, diagnose the child's problems, develop an individualized educational program to alleviate the problems, and continually evaluate the child and the program. Through a team effort, the child is made to function more effectively. The project's main component is a reading services program that serves students directly through individual and small-group remedial instruction and indirectly through a consultant service to their classroom teachers and parents. Each program participant is evaluated by a guidance/social worker team with output to remedial reading and classroom teachers. In cases where initial evaluation finds that an in-depth evaluation is necessary, the services of a consulting psychological/psychiatric team are employed.

Another important component is total parent involvement, including regularly scheduled parent-teacher conferences, formalized 10-week parent study groups, and parent counseling. The project attempts to identify educationally disadvantaged students as early as possible by providing, together with the school department, an early-identification program that involves health and developmental screening of pre-kindergarten students, parent information sessions, and a special readiness program once the child enters kindergarten. The highly successful secondary program emphasizes the teaching of reading through the content areas, with the reading specialist providing (for the most part) consultant services to teachers of identified students.

**evidence of effectiveness** Evaluation results, 1973-74: 80% of RIPPS students gained eight or more equivalency months (Gates-MacGinitie Vocabulary Test); 71% made similar gains on Gates-MacGinitie Comprehension Test; 78% increased their instructional reading level by one or more levels (Silvaroli Classroom Reading Inventory); locally devised affective surveys showed increases in attitude about self (to 88%), school (to 81%), and peers (to 82%). Similar results were achieved in succeeding years.

**implementation requirements** Most school departments already possess staff needed for implementation of RIPPS. Program can be adopted through reorganization of staff and commitment to the team approach for meeting learner needs. Reading and pupil personnel specialists must be willing to train and involve parents. Successful adoption depends on people: the more interaction the better. Site visitations and/or telephone conferences are essential. Training is tailored to adopter needs. A project-developed, 10-module multimedia training package is used at adopter site by local coordinator after training at project site. Smallest adoption unit is an entire school.

**financial requirements** Cost of implementation varies with availability of appropriate staff at adopter site. A variety of commercially available reading management materials already found at many schools is used. Some adaptations have been implemented at no local cost.

**services available** Awareness materials are available at no cost. Visitors are welcome during school year by appointment. Project staff are available to attend out-of-state awareness meetings (expenses must be paid). Training is provided at project site (adopter pays its own costs). Training is also conducted out of state (expenses must be paid).

**contact** Michael W. Mello, Director of Instruction; Portsmouth School Department; Portsmouth, RI 02871. (401) 683-1739.

## **PROJECT**

### PROJECT READ-WRITE

A program in reading and related language arts that uses writing techniques and prescriptions to improve reading comprehension and vocabulary.

### **target audience**

Approved by JDRP for grades 4-6. This program has also been used in grades 2-3 and 7-12 and in special education, ESL, and content-area classes, but no evidence of effectiveness has been submitted to or approved by the Panel.

### **description**

Project Read-Write is designed to be consistently applied by the classroom teacher to augment the basic reading program in order to develop vocabulary and promote total comprehension. The program involves the application of prescriptions -- specially developed strategies designed to teach one major skill and several ancillary skills simultaneously. Each prescription involves the use of one or more language-manipulation techniques. The prescriptions are structured writing and/or oral activities that can be used with materials already available in the classroom.

The prescriptions encourage students to react holistically to a reading selection and to incorporate within the activities their own ideas, experiences, perceptions, and feelings. The prescriptions cover a wide range of reading objectives, from phonics and structural analysis to inferential, critical and creative, as well as literal comprehension. The prescriptions are arranged within the Project Read-Write Resource and Instructional Manual according to major objective and level of difficulty.

The program also offers a checklist that can be used in conjunction with formal and informal diagnosis to list and establish a priority ranking of pupil needs on a class, group, and individual basis. This checklist becomes an ongoing record of pupil achievement and accompanies the student as he or she proceeds through the grades.

### **evidence of effectiveness**

The Metropolitan Achievement Test, a pre/post measure of word knowledge, reading comprehension, and total reading, revealed that project students in all three participating grades performed significantly better than matched control groups. Detailed test results are available.

### **implementation requirements**

Project Read-Write can be adopted within a single school or by an entire district. A variety of adoption patterns can be considered. Teachers and administrators attend a two-day intensive workshop, during which they receive instruction on how to conduct the Read-Write program. Each teacher and administrator must obtain a copy of the Project Read-Write Resource and Instructional Manual. In addition, each administrator must obtain a copy of the Project Read-Write Administrator's Manual. Adopters agree to evaluate the impact of the Read-Write program and furnish a copy of the evaluation report to the project.

### **financial requirements**

Adopter assumes (or shares with NDN Facilitator) the costs of releasing teachers and administrators for training workshops. Adopter assumes (or shares with NDN Facilitator) per diem, travel, and lodging costs for project staff if a training or awareness presentation is given out of state. Resource and Instructional manual: \$20 per copy. Administrator's manual: \$7.50 per copy.

### **services available**

Awareness materials are available free, and a filmstrip can be purchased. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (adopter pays only its own costs) and at adopter site (costs to be negotiated). Follow-up consultations and visits are available. Visitors are welcome at project site by appointment.

### **contact**

Ethel Uries, Director; Board of Education; 2 Cedar Street; Newark, NJ 07102. (201) 733-7116.

**PROJECT** THE RESPONSIVE EARLY CHILDHOOD EDUCATION PROGRAM (RECEP)

A program of language, mathematics, and problem solving for children in grades K-3.

**target audience** Approved by JDRP for children, grades K-3.

**description** The Responsive Early Childhood Education Program is currently serving 1,100 children, grades K-3, who meet Follow Through and/or Headstart eligibility. An additional 550 children receive Responsive Education instruction as a result of their placement in Follow Through classrooms. The goals are to increase children's learning of the basic skills of language and mathematics and of problem-solving abilities; to stimulate the development of positive attitudes toward learning; and to foster culturally pluralistic attitudes and behaviors.

Special attention to the improvement of basic skills has characterized the Goldsboro project since its inception. Distinctive features include a basic skills personalized instructional program using trained volunteers and comprehensive test results. Also unique is a Parent-Child Learning Center, developed at the request of parents, which provides material for use at home in helping their children learn basic skills.

RECEP is based on the belief that all children have an accumulated learning base upon which additional knowledge and skills can be developed. The evaluation component of this program provides the teacher with specific information for each child that describes his/her strengths and weaknesses. Individual student needs are assessed, and standardized test scores are regularly compared with those of children elsewhere in the country. Staff development features interpretation and use of test-score information. Inherent in this program is the belief that success builds success; therefore, the teacher uses all available information about each child in helping develop his/her learning plan.

A volunteer program provides each child with individual attention. Volunteers are trained and supervised. Assessment of volunteer needs and placement according to these needs have resulted in an instructional program which has provided a successful learning environment for children from varying backgrounds.

**evidence of effectiveness** Through appropriate research design techniques, RECEP has been shown to improve significantly young school children's attitudes toward academics as well as improving academic achievement in the basic skills. Additionally, longitudinal studies have indicated positive later effects as assessed by standardized achievement tests. Portions of the project have been successfully replicated on a state-wide basis.

**implementation requirements** The adopting site must provide teachers who implement the program with continuous training on program goals, principles, process, instructional objectives, innovative teaching skills, and other philosophies basic to evaluation effectiveness. An active parent component is essential in both advisory and involvement capacities. Psychological personnel must be available to assume the responsibilities for program evaluation. Support personnel must concentrate their services on target students. These requirements enable sites to assess the effectiveness of the program.

**financial requirements** To implement the four components of this Responsive Education project, personnel must be provided to coordinate services in instruction, training, parent involvement, and support services. Minimum personnel requirements to be considered: a project director, staff developer, support services coordinator, and parent involvement coordinator. Funds and personnel needed depend upon the level of implementation.

**services available** Materials on the Responsive Education Program are available at no cost and may be obtained by writing to the project officer at the address below. Visitors are welcome at project site by appointment. A slide presentation on The Responsive Education Program is available at project site. Implementation and follow-up services are available to adopters.

**contact** Winnie D. Brewington, Director; The Responsive Early Childhood Education Program; Goldsboro City Schools; P.O. Box 1797; Goldsboro, NC 27530-0038. (919) 734-0561.

**PROJECT** SAN DIEGO CITY SCHOOLS FOLLOW THROUGH: A Direct Instruction Model

Reading, mathematics, and oral and written language for economically disadvantaged children in grades K-3.

**target audience** Approved by JDRP for grades K-1.

**description** DISTAR instructional materials are used as the vehicle for attaining this program's goal of giving economically disadvantaged children a firm foundation in reading, math, and oral and written language. In the three-level reading sequences, decoding, comprehension, and reading for new information are the focus. Arithmetic covers addition, subtraction, multiplication, fractions, regrouping, column addition, and long division and includes story problems. The language of instruction, logical processes, sentence analysis, and usage are among the topics of the language sequences. When the children have mastered the DISTAR lessons, they move into the Ginn reading and Houghton-Mifflin math series. Small groups spend 30-40 minutes daily on each subject and additional time on social studies, spelling, science, and handwriting. Classrooms are staffed by a teacher and two aides trained in the DISTAR techniques of positive reinforcement, group and individual response, appropriate correction, and teaching to mastery. Criterion-referenced tests and careful monitoring are integral to the program.

Regular staff development, support services, and a parent program of special activities including school volunteer work are other features of this program.

**evidence of effectiveness** The reading, math, and language mean for second-grade students who have participated in the program since kindergarten was at the 50th percentile as measured by Form S of the Comprehensive Test of Basic Skills.

**implementation requirements** In addition to providing instructional materials, the minimum requirement is that each classroom has a four-hour paraprofessional. A minimum of eight hours preservice training should be held for classroom personnel with monthly inservice activity as needed. Ideally, a trained resource teacher should be available to provide technical assistance for every 10-15 classrooms.

**financial requirements** Major costs are the purchase of appropriate DISTAR materials from Science Research Associates, Inc., and staffing costs for the paraprofessional and resource teachers. First-year costs are higher because of the non-consumables required. Total outlay based on 1982 prices for reading, math, and language is approximately \$1,126 for 30 students, \$640 of that being a one-time purchase.

**services available** Visitors with an appointment are welcome to tour at project sites. They will be provided with locally developed materials describing the basic instructional program.

**contact** Ralph Green, Coordinator; San Diego City Schools Follow Through; Bandini Center; 3550 Logan Ave.; San Diego, CA 92113. (714) 234-3357.

**PROJECT**

SEAPORT: Student Education Assuring Positive Organized Reading Techniques

A program applying school-based and home/school liaison approaches to remedial reading problems.

**target audience**

Approved by the JDRP as a remedial reading program for students in grades 2-3 and 6-12 who are most in need and at least one year below the appropriate grade level. This program has been used in other settings with grades 1, 4, and 5 and with preschool students in a home/school liaison program, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description**

Project SEAPORT is a remedial reading program that provides Chapter I (formerly Title I) students, grades 1-12, with individualized prescriptive instruction in the classroom setting and in a pull-out resource learning laboratory. A skilled reading specialist works with students who have been identified as most in need of remedial services. The program places a strong emphasis on reading activities within content areas. Project success is enhanced by cooperation between the reading specialist and classroom teachers. The specialist provides regular consultant services to teachers. Staff development is a major component of the program. Inservice training is provided for the reading specialist and classroom teachers. Student progress is assessed each year using pre- and posttest scores on standardized achievement tests. Quarterly monitoring and annual needs assessment are integral parts of the annual evaluation.

Project SEAPORT activities enjoy a high level of parent/community involvement. Involvement is enhanced by frequent parent-teacher conferences, frequent dissemination of information on project activities to the community, and an annual needs assessment.

Subsequent to receiving JDRP approval, Project SEAPORT instituted educational interventions for children prior to entering school. Pre-kindergarten youngsters, identified by home/school liaison staff as having developmental lags, receive instruction and remediation in specific skills.

**evidence of effectiveness**

Data from testing of project students with the Gates-MacGinitie Reading Test at the time of JDRP approval in 1973 indicate an average grade equivalent gain of 1.5 in vocabulary and 1.6 in comprehension. Project evaluation statistics for 1979 show an average NCE gain of 10.

**implementation requirements**

One remedial reading specialist is required for every 30-40 students. A reading specialist must work both in laboratory and classroom settings. Classroom teachers must set aside time for weekly consultations with the reading specialists. A reading lab with a variety of commercially available auditory and visual materials is necessary. A professional home/school liaison specialist is needed when implementing the parent/community involvement component and to set up screening and programming for the preschool component. Start-up training for a reading specialist and classroom teachers takes between two and three days depending on components adopted.

**financial requirements**

Cost of implementation varies with site requirements. Costs include staffing and training (release time, travel, and per diem). Training manual for each workshop participant, \$10. Management manual, \$50.

**services available**

Awareness materials are available free. On-site visits are encouraged. Training is conducted at project site or adopter site. Follow-up assistance is available for adopters.

**contact**

Mary C. Macioci, Project Director; Project SEAPORT; Newport School Department Administration Center; Grant Programs Office; Mary St.; Newport, RI 02840. (401) 847-2100, ext. 40.

**PROJECT** STRATEGIES IN EARLY CHILDHOOD EDUCATION

A continuous-growth program with sequential program materials that bridges the gap between preschool, kindergarten, and first grade.

**target audience** Approved by JDRP for all students, ages 4-8.

**description** The concepts of the project are: A child must have basic processes developed to a certain level before terminal objectives such as reading and math can be taught effectively and meaningfully, because failure to take development issues into account results in failure and/or meaningless rote learning. There must be an assessment of where the child is developmentally in terms of learning processes and structural analysis. Once an assessment is made, an educational program based upon the pupil's strengths must be outlined in each skill area, and this program must utilize the child's mode and rate of learning so that continuous progress is possible.

Based upon these concepts, the project includes the following components: a model including the structural, functional, behavioral, and environmental components of children as they develop from age 4 to about age 8; a chart of learning objectives as related to the model; a screening manual and a pupil edition; a class record chart to record each student's starting point as indicated by the screening and to map his or her continuous progress; a prescription guide, which includes each educational objective stated on the scope and sequence chart; and a list of activities for each objective to assist the teacher in providing appropriate learning experiences for each pupil.

Program objectives are developmentally outlined, and activities and learning centers are established to enhance auditory, visual, motor, and verbal language skills leading to reading, math, and language growth.

**evidence of effectiveness** The Metropolitan Readiness Test indicates that project students scored significantly higher ( $p < .05$ ) than non-project students. Comparison within the project, using the Metropolitan Readiness scores and comparing  $t$  values, shows that project children did significantly better as teachers more fully implemented the project.

**implementation requirements** Steps for adoption include an awareness session and training sessions for philosophical issues, screening, instructional methodology, monitoring, and evaluation. The program may be implemented by a classroom or a district. Training usually begins with a two-day workshop, with periodic follow-up sessions at varying intervals. The training sequence is flexible in order to fit needs of adopters. Regular and classroom instruction equipment is adapted to project objectives. The project does not require additional staff, though it is helpful to have a teacher's aide or parent volunteer to assist during the initial stages.

**financial requirements** Materials: project overview booklet, no charge; criterion-referenced screening instrument, \$3; pupil edition, \$1.15; chart of sequenced objectives, 35¢; class record chart, 35¢; prescription guide, \$6. When funding is available through NDN, cost to adopting district will be that incurred while project staff is on site.

**services available** Awareness and training materials are available. Visitors are welcome by appointment. Consultations for awareness and training sessions are available.

**contact** Robert Schramm, Project Director; P.O. Box 208; Juneau, WI 53039. (414) 386-2955.

**PROJECT** STUDENT TEAM LEARNING: Intergroup Relations

A set of instructional techniques placing students in four- or five-member multiethnic learning teams to master basic skills.

**target audience** Approved by JDRP for students grades 5-12. It is now used in grades 2-4, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** Student Team Learning (STL) consists of three major techniques: Student Teams-Achievement Divisions (STAD), Teams-Games-Tournament (TGT), and Jigsaw. All three require students to work in learning teams that are heterogeneous in terms of sex, race, and past performance. In STAD, students study worksheets in their teams following a teacher presentation. Then they take quizzes individually to demonstrate how much they have learned. The students' quiz scores are summed to form a team score, which later is printed in a weekly newsletter. TGT is similar to STAD, except that students display their learning by playing academic games instead of taking quizzes. In Jigsaw, students become "experts" on topics relating to narrative material they have read and teach these topics to their teammates. STL is the umbrella term for these three programs. Two STL programs have JDRP approval of their own. STAD is approved for language arts and TGT for language arts and math. Any district that adopts STL also adopts STAD and TGT.

Student Team Learning can be used with the teacher's manual and teacher-made curriculum materials alone. Inexpensive materials in mathematics, language arts, and nutrition are available (see below). The techniques are very practical. They are in use in hundreds of schools across the U.S.

The effects of Student Team Learning on intergroup relations are strong and consistent, because the team goal and team interactions allow students to view one another positively. There is no specific mention of race or ethnicity in the program. Because the program is inexpensive, takes no more class or teacher time than traditional methods, and increases achievement as well as improving intergroup relations, it can be used as a regular part of class instruction in any subject.

**evidence of effectiveness** Six studies have shown that Student Team Learning techniques increase intergroup friendships significantly more than control methods. The studies were conducted in integrated inner-city, rural, and suburban schools, and involved white, black, and Mexican-American students. Student Team Learning techniques have had positive effects on learning in the areas of mathematics, language arts, social studies, and reading, as well as on self-esteem, mutual concern, and liking for school.

**implementation requirements** Individual teachers can use Student Team Learning with the manual alone or with the available training filmstrip/tape. Participation in a two-day workshop is recommended.

**financial requirements** Manual and materials for Student Team Learning with teacher-made materials, \$3. Manuals with single copies of worksheets and quizzes for 20 one-week units (language arts 3-6, language arts 7-8, mathematics 3-8, consumer math, nutrition 4-6 and 10-12), \$20 each; language arts 3-6 (100 units), \$40.

**services available** Awareness materials are available at no cost. Visitors are welcome by appointment at project site and additional demonstration sites out of state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (adopter pays only its own costs). Training is also available at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** Ruth H. Carter, Dissemination Coordinator; Center for Social Organization of Schools; 3505 N. Charles St.; Baltimore, MD 21218. (301) 338-8249.

**PROJECT** STUDENT TEAMS-ACHIEVEMENT DIVISIONS (STAD): Language Arts

An instructional technique placing students in four- or five-member heterogeneous learning teams to master basic language skills.

**target audience** Approved by JDRP for students of all abilities, grades 4-9. This program has been used with students in grades 2-3 and 10-12, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** STAD is one of three Student Team Learning instructional processes. In STAD, students are assigned to four- or five-member teams. Each team is composed of a relatively high-achieving student, a low achiever, and two or three average achievers. Teams are composed of both minority and nonminority students, boys and girls.

The teacher using STAD follows a regular pattern of activities, the first day teaching a lesson on the class objective. The next day, students go into teams to study the material the teacher has presented. The students use worksheets and answer sheets to help each other study the material and to assess their mastery of it. During this time, students typically quiz each other, explain problems, and mutually help each other become proficient in the skill. Finally, students take a 15-minute quiz on the material with no help from their teammates. Each student earns quiz points determined by comparing his/her score with scores of students on other teams who have about the same past academic performance. Individuals' points are compiled into team scores, and team scores are recognized in a class newsletter at the end of the week.

Students using STAD in language arts typically learn more than students in traditional control classes, especially as measured by standardized tests. STAD students also gain more than control students in liking for school, self-esteem, positive relationships with students of different races, and other outcomes. STAD can be used with teacher-made materials or with inexpensive materials available from the project. It is easy to learn and use, and there are project trainers all over the United States able to help teachers learn to use STAD in the classroom.

**evidence of effectiveness** Six studies have shown that STAD students achieve two or three times more than would be expected based on standardized test norms. Studies were conducted in urban, rural, and suburban schools with students in grades 4-6. Tests used were Hoyum-Sanders English Test, Comprehensive Test of Basic Skills Language Mechanics, and Language Expression Subscales.

**implementation requirements** Individual teachers can use STAD with the teacher's manual alone or with the manual plus the training filmstrip-tape. Available curriculum materials save teachers the task of making worksheets and quizzes. A two-hour workshop is recommended but not essential. Part of the Student Team Learning program, STAD can be implemented along with the other Student Team Learning methods or by itself.

**financial requirements** Teacher's manual (all Student Team Learning techniques), \$3. Manual set (manual, forms, and other Student Team Learning materials), \$5. Awareness/training filmstrip-tape, \$15 (refundable). Curriculum materials for language arts: grades 3-6 (20 one-week units), \$20; grades 3-6 (100 one-week units), \$40; grades 7-8 (20 one-week units), \$20. No special equipment or staff needed.

**services available** Awareness materials are available at no cost. Visitors are welcome by appointment at project site and additional demonstration sites out of state. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (adopter pays only its own costs). Training is also available at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** Ruth H. Carter, Dissemination Coordinator; Center for Social Organization of Schools; 3505 N. Charles St.; Baltimore, MD 21218. (301) 338-8249.



**PROJECT** A SYSTEMS APPROACH TO INDIVIDUALIZED INSTRUCTION (SAII)

A systematic instructional program in the basic skill areas of reading and mathematics.

**target audience** Approved by JDRP for students of all abilities, grades 1-6. It has been used in other settings with grades 7 and 8, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** SAII has developed criterion-referenced tests and learning modules for 155 reading skills (e.g., readiness, phonics, syllabification, and structural analysis) plus 200 criterion-referenced tests and learning modules for the computational skills of mathematics.

The project has also developed sets of teacher questions and student worksheets to accompany over 400 paperback books (e.g., Profiles in Courage, Henry Huggins, Little Red Hen). Each set of questions has been divided into lessons, with each lesson having questions on five levels of comprehension: recall, interpretation, extrapolation, analysis, and evaluation. A set of two handbooks is available to help the teacher manage the component parts. The program can be adapted to the areas of diagnosis (criterion-referenced tests -- math and reading) or basic skill development (learning modules in reading and math or comprehension components of reading).

**evidence of effectiveness** After implementation of the project, there was a dramatic reversal of a declining trend in academic ability at the project school. Evaluation data also showed a positive impact on academic progress of project students. Copies of the evaluation report are available from Northwest Regional Educational Laboratory.

**implementation requirements** A one- to three-day preadoption workshop is required. Consultant help is available at cost. SAII is implemented by the regular classroom teacher. The reading component requires two teachers, the math component, one. Master tapes -- available for reproduction -- are required for the reading component.

**financial requirements** Print-ready set of project materials is available at cost. Diagnostic tests: reading, \$20; math, \$24. Learning modules: reading, \$70; math \$120; comprehension questions, \$165; games to accompany reading learning modules, \$20.

**services available** Awareness materials are available. Visitors are welcome October through March. Training is conducted at the project site (adopting site must cover all trainer costs as well as covering own costs). Training is conducted out of state (exemplary project staff costs must be paid). Project staff can attend out-of-state conferences (expenses must be paid).

**contact** Charles L. Barker; Josephine County School District; 706 N.W. "A" St.; Grants Pass, OR 97526. (503) 476-1484.

**PROJECT** TEAM ORIENTED CORRECTIVE READING (TOCR)

A referral corrective reading program for grades 2-6.

**target audience** Approved by JDRP for grades 2-6. This program has been used with grades 1 and 7-8, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** Wichita's Team Oriented Corrective Reading program is a large-scale supplemental remedial reading program operating in the city's Chapter I (formerly Title I) target public elementary schools and available to eligible parochial schools. Instruction is diagnostic, individualized within ad hoc groups of pupils, and correlated with the classroom reading program. Correlation is achieved through use of the Wichita Management System for Reading (including Behavioral Objectives, Student Reading Record Card, and Class Criterion Test Record).

Long-range program goals are to improve basic reading skills, use of library media, and pupil attitudes and work habits. The six phases of the program (identification, screening, diagnosis, scheduling, instruction, and evaluation) and its team-oriented philosophy is delineated in the handbook *Team Approach to Reading Success*. The handbook and the Process and Performance Objectives are integral parts of the program; they describe the roles of the different team members and suggest timetables for program activities. Based on research results over a number of years, an eclectic approach, using multilevel, multimedia materials, is emphasized; however, four systems (EDL's Listen, Look and Learn, Hoffman, Psychotechnics, and Random House High Intensity Learning) are operational and may be observed in this urban setting.

Instructors are specialized teachers certified in reading with the dual responsibility of providing student instruction and resource services to building staff and parents. Instructional paraprofessionals are utilized when caseloads exceed 50 pupils.

Parent Advisory Councils play an important role in program planning and operation. The Reading Task Force provides input to administrators, program personnel, and teachers. Through the Chapter I Parent Education Aide Program, parents tutor students individually or in small groups. Reading teachers and parents plan parent workshops on reading skills and reinforcement.

**evidence of effectiveness** The program has been evaluated annually since its inception in 1966 by the Research Division of Wichita Public Schools, using a comparison of pre- and posttest scores on the California Achievement Test. The goal is an average mean gain of 1.0 in grade equivalent or a positive NCE gain per year of instruction. Monthly gains ranged from 1.0 to 1.7.

**implementation requirements** Adopters may implement the program in a single school or at the district level. The key to successful adoption is qualified teachers who have the training and expertise necessary to teach corrective reading students diagnostically and to serve as resource persons for staff and parents. Space and furnishings adequate for small-group instruction of students and storage of materials are necessary. TOCR guides will be provided to adopters at printer's cost; other materials are dictated by students' needs and may be determined by the reading teacher.

**financial requirements** Start-up costs of hiring one special reading teacher and purchasing a wide variety of commercially available materials and equipment run approximately \$450 per pupil, based on a caseload of 50 pupils. Installation costs may be as low as the price of the teacher training kit provided a certified teacher and instructional materials are already available. Materials and equipment maintenance costs average about \$9.50 per pupil at the Wichita site.

**services available** Awareness materials are available at no cost. An awareness filmstrip is available for loan or purchase. Visitors are welcome by appointment. Project staff are available to attend out-of-state awareness meetings (expenses must be paid). Training is conducted at adopter site (expenses must be paid). Follow-up technical assistance is available to adopters (expenses must be paid).

**contact** James G. Howell, Director; 1847 N. Chautauqua; Wichita Public Schools USD 259; Wichita, KS 67214. (316) 268-7871 or -7764.

**PROJECT** TITLE I COMPENSATORY MATHEMATICS PROGRAM

A remedial math program using manipulatives rather than rote drill.

**target audience** Approved by JDRP for grades 2-6.

**description** The goal of this program is to increase the mathematics achievement of students identified by mathematics curriculum tests as achieving at a level lower than expected for children of their age. Students identified each year as in need of remedial instruction receive 25-30 minutes of daily supplementary math instruction in the classroom or a resource room. Discovery techniques and use of manipulatives rather than traditional rote drill are basic to the Title I program. Use of this method of compensatory instruction relies on Jean Piaget's research, which found that elementary school children unable yet to reason hypothetically can nevertheless work logically with concrete materials.

The Title I compensatory curriculum consists of behavioral objectives, a hierarchy of skills, and criterion-referenced tests. Instruction takes place in small groups. The materials -- manipulatives -- are different from those used for regular math instruction -- the major commercial texts. Most program materials have been prepared by Title I teachers. Teaching strategies are described in program publications. Regular inservice workshops help participating teachers to perfect their skills. Consultation and cooperative weekly planning by Title I and regular classroom teachers ensure that instruction in both the regular and Title I compensatory programs is consistent across the different techniques and materials that each teacher uses. Personal contact with parents is considered important. Title I teachers are released one-half day per week to make home visits, hold conferences, and assist parents with materials for use at home.

**evidence of effectiveness** Mathematics achievement gains of urban students in schools located in areas with high concentration of low-income families was measured by a nationally normed standardized achievement test, the Mathematics Battery of the Metropolitan Achievement Test. Data from pre- and posttest results for 1978-79 showed Normal Curve Equivalency (NCE) mean gains of 9.6 and 13.0.

**implementation requirements** Adopting schools are given permission to replicate the program model using the five components of the program: (1) the management system guide which includes objectives and test items for the objectives, (2) the student record folders, (3) the resource books which give details about teaching strategies and teaching materials, (4) the parent communication handbook, and (5) inservice materials. Teachers who implement the program should be willing to learn and use the teaching strategies and should be receptive to team planning. The program may be adopted in a range of instructional organizations ranging from one mathematics teacher to all arithmetic teachers in a school district. A district-wide implementation requires the assignment of a program coordinator.

**financial requirements** Costs per pupil are dependent on a district salary schedule. Total costs per student in Des Moines were \$443 in 1978 and \$406 in 1979. Necessary materials already found in most classrooms are also used. Nationally normed standardized tests for program evaluation for 40 students cost approximately \$140 per year.

**services available** Awareness materials are available at no cost. Visitors are welcome anytime by appointment at project site. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted in Des Moines; adopter pays only its own costs. Training is also available at adopter site; all expenses must be paid. Implementation and follow-up services are available to adopters; travel and per diem must be paid by adopter.

**contact** Kathleen Bullington, Director; Title I Compensatory Mathematics Program; Des Moines Public Schools; 1800 Grand Ave.; Des Moines, IA 50307. (515) 265-4554.

**PROJECT** TITLE I COMPENSATORY READING PROGRAM

A small-group remedial program for children reading below the norm.

**target audience** Approved by JDRP for grades 2-6.

**description** The goal of this program is to increase the reading achievement of children who read below the norm. The program uses a management system developed by local Title I teachers to complement the Systematic Approach to Reading Improvement (SARI) management system developed by Phi Delta Kappan and used by the district to manage the many reading series used in district schools. The Title I management system provides sequential objectives and criterion-referenced tests of listening-language, vocabulary, word analysis, comprehension, and study skills. Students are selected for the program according to the level of achievement in the SARI management system. Individual diagnostic reading tests and supplementary instruction are provided by the Title I teacher using materials that correlate with the basal materials used by the classroom teacher. Daily instruction in groups no larger than five lasts 25-30 minutes and takes place in the classroom or a resource room. Children are released from the program once they have passed 80% of the classroom SARI tests at the level appropriate for their age and grade. The required close cooperation and weekly planning by Title I and classroom teachers result in a consistent reading program for remedial students. Three project-developed publications -- one with behavioral objectives, pre/posttests, and basal reader placement tests; one with teaching strategies; and one with a record-keeping system for tracking individual student progress -- are used in planning students' individual programs. Regular inservice workshops help participating teachers to perfect their skills. Personal contact with Title I parents is an important feature of the program. Title I teachers are released one-half day a week to conduct home visits, make telephone calls, and hold school conferences and coffees.

**evidence of effectiveness** In areas of high concentrations of low-income families, reading achievement gains of urban students were measured by a nationally normed standardized achievement test, the Reading Comprehension subtest of the Metropolitan Achievement Test. Data from pre- and posttest results for 1978 and 1979 showed Normal Curve Equivalency (NCE) mean gains of 8.9 and 9.0.

**implementation requirements** Adopting schools may replicate the program model using the four components: Educational Plan-Title I Reading, Student Record Folders, Strategies and Materials, and parent communications handbooks. Teachers who implement the program should be willing to use the diagnostic/prescriptive approach to individualized instruction and be receptive to team planning. The program may be implemented by one teacher in one school or by a school district. District-wide implementation requires the assignment of a program coordinator.

**financial requirements** Costs per pupil are contingent on district salary schedule. Costs per student for 1978 and 1979 were \$521 and \$447. Approximate costs for the four basic components of the program for 40 students for the first year are \$57 and \$44 for subsequent years. A list of supplementary commercial materials used in the program is available at no cost. Nationally normed standardized tests for program evaluation for 40 students are approximately \$140 per year.

**services available** Awareness materials are available at no cost. Visitors are welcome anytime by appointment at project site. Project staff are available to attend out-of-state awareness meetings (cost to be negotiated). Training is conducted at project site (adopter pays only its own costs). Training is also available at adopter site (all expenses must be paid by adopter). Implementation and follow-up services are available to adopters (travel and per diem must be paid by adopter).

**contact** Marilyn Miller, Director; Title I Compensatory Reading Program; Des Moines Public Schools; 1800 Grand Ave.; Des Moines, IA 50307. (515) 265-4554.

**PROJECT** TITLE I MATHEMATICS COMPUTER ASSISTED INSTRUCTION (CAI)

A diagnostic/prescriptive pull-out mathematics program with students receiving 10 minutes of daily concentrated drill on CAI.

**target audience** Approved by JDRP as a mathematics program for Title I students in grades 3-6.

**description** Lafayette Parish had an effective diagnostic-prescriptive mathematics ESEA Title I pull-out program. In order to increase growth in mathematics, computer-assisted instruction was added to an already effective math program. The program is operated with close coordination of math-lab instruction and daily CAI drill. The CAI program adjusts instructions to the level of the students and provides immediate feedback to the student. The CAI program provides daily, weekly, and monthly descriptions of progress and areas of difficulty which the classroom teacher can use to correct specific conceptual misunderstandings. Classroom instruction is imperative in providing conceptual understanding and remediation. Daily CAI drill provides the practice which Title I students especially need. This particular program was operated with 40 minutes a day of mathematics laboratory time and 10 minutes of CAI. The particular program used was devised by Computer Curriculum Corporation of Palo Alto, California.

The addition of CAI instruction produces significantly superior achievement when compared to standard mathematics laboratory instruction.

**evidence of effectiveness** A matched group comparison design was used in which both groups received 40 minutes of mathematics laboratory instruction, and the treatment group received 10 minutes of CAI while the comparison group received 10 minutes of standard instruction. CTBS scores were collected, pre and post, and analysis of covariance was performed on the posttest standard scores with pretest scores as covariables. The treatment group was significantly superior at the .01 level. The computer-assisted instruction component enabled students to achieve one year's gain in six months.

**implementation requirements** Math Lab - CAI can be adopted to supplement any regular program, if 200 students are enrolled. Two to three days of inservice training are necessary. The project used Computer Curriculum Corporation Programs from Palo Alto, California. Correlation between your project and CAI must be established.

**financial requirements** In addition to your regular program, the added dimension of Computer Assisted Instruction costs approximately \$200 per student if at least 200 students are enrolled. As the number of students in the program increases the cost decreases proportionately. Since installation costs occur only in the first year, subsequent per student cost of CAI is reduced. If you use the computer for other courses or purposes, the number of students can be reduced.

**services available** Awareness materials are available. Visitors are welcome at project site anytime by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (costs to be negotiated). Training is also available at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

**contact** Mr. Marion J. Cortez, Supervisor; Federally Supported Programs; Lafayette Parish School Board; P.O. Drawer 2158; Lafayette, LA 70502. (318) 232-2620, ext. 307.

**PROJECT** PROJECT UNDERSTAND: Arlington's Title I Program

A program to help strengthen reading, language, and math skills in children in grades K-6 who need a supplementary learning experience.

**target audience** Approved by JDRP as a K-6 program for students scoring at or below the 40th percentile in reading and language arts for whom a supplementary learning experience best meets their academic needs. This program has been used in other settings to include 7-8 math skill development as well, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** A fundamental aim of this program is to help strengthen reading, language, and math skill development in K-6 target children. A weighted student checklist is used to identify those students who will participate in the program. Participating students come to a center for 150 minutes of instruction per week. Students are seen on a one-to-one basis if their needs require it, but the majority are seen in small groups (up to five) to encourage collaborative learning and interaction. Although the evaluation design for the project is tightly structured, the staff is humanistic in its approach, working from students' strengths rather than weaknesses. Centers appear informal and are run on a workshop basis enabling individual progress and small-group activity to flourish simultaneously. Staff are allowed great latitude in the decision-making process, not only when writing the project, but also when ordering instructional materials for the individualized needs of their students and schools. A two-week planning and brainstorming session precedes each regular school-year program. Regular staff meetings (where staff exchange instructional strategies) and inservice sessions are held two afternoons per month, when all students are released early. The program works to increase parental involvement, thus fostering collaboration and understanding between school and home life. The district-wide Parent Advisory Council received training in organizational development and communications skills which resulted in the development of an Action Plan for the implementation of Parent Advisory Councils at each school. These local Parent Advisory Councils now meet with the Title I staff on a monthly basis and are actively involved in their children's learning process. A strong parent-involvement foundation has been laid and built upon by a part-time parent coordinator.

**evidence of effectiveness** The California Achievement Test in reading, language arts, and math is used as a screening instrument to identify eligible students. The CAT is also used on a pre/post basis, and in 1978-79 it indicated that Title I students in reading and language arts showed an average gain rate of 1.7 months for each month of instruction.

**implementation requirements** Additional staff to supplement the regular classroom teacher are necessary. Because of the heavy involvement of this staff with parents, inservice training, planning and implementing the project, meeting with each Title I student for supplementary service of 150 minutes per week, and active participation in the decision-making process, a reasonable teacher-pupil ratio for full-time teachers is 1:29, and for part-time teachers, 1:14. Inservice training (\$500-\$1,000) in group dynamics for both parents and staff is desirable.

**financial requirements** Costs for salary vary according to local salary schedules and depend upon the number of students served. Provision should be made for an administrator to coordinate total efforts, for a part-time parent coordinator, and a secretary. Commercially available materials already found in most classrooms are used, together with a wide variety of teacher-made materials.

**services available** Visitors are welcome by appointment, but awareness materials generally are not available. Project staff can attend out-of-state conferences if expenses are fully subsidized.

**contact** Raymond A. Brodeur, Jr., Title I Director; Arlington Public Schools; 23 Maple St.; Arlington, MA 02174. (617) 646-1000, ext. 359.

**PROJECT** UPSTAIRS SCHOOL

A program intended to improve the reading, math, and English ability of educationally disadvantaged students.

**target audience** Approved by JDRP as a reading program for students, grades 9-11, two or more years below grade level. This program has been used in other settings with high school students two or more years below grade level in math and basic English skills, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** The Upstairs School is designed to take the student from "where he/she is" to grade level in reading comprehension, vocabulary, and basic math skills. Improving student self-concept and self-confidence is another important goal. The philosophy of the program is that students would learn if they could and if teachers were willing to commit themselves to providing the necessary structure and love. An atmosphere of work, trust, concern, and loving care is unique to the program. All students are working. All are enrolled for one 50-minute period in the area of their needs. Students enter, leave, and return as necessary. Reading is taught in an open-space classroom divided into four teaching stations plus a central lounge area for individualized-interest reading. Reading students study phonics, letter formation, creative writing, dictation of phrases, vocabulary, and oral reading; they master lists of words from stories; they learn to read for information through one-minute reading exercises followed by 10-question tests. Math class emphasizes the basic skills of addition, subtraction, multiplication, and division, using timed drills and worksheets. Teaching aids include calculators, digitizers, and "thinking" exercises. Topics covered include decimals, fractions, percents, averages, and algebra. The English basic skills lab covers such skills as listening, following directions, dictionary usage, writing, library and map skills, spelling, and grammar -- some of the 19 basic competencies that students must meet before enrollment in a regular English class. Individual records keep the student constantly aware of competencies met. The Upstairs School is a highly structured "school within a school" and an alternative school in every sense.

**evidence of effectiveness** Through the end of the 1977-78 school year, the Comprehensive Test of Basic Skills, given each spring to all program participants, demonstrated gains in reading, language arts, and mathematics exceeding goals set by program. Beginning in 1978-79, in a development following JDRP approval, the project used the Portland Achievement Test in pre- and posttesting and Rasch Units and NCE scores to evaluate evidenced gains.

**implementation requirements** Mastery teaching method is successfully used with a variety of reading materials, including linguistic materials, basic reading series, magazines, and newspapers. All textbooks are phonetics-oriented. Special-interest books are low-vocabulary. In addition, many teacher-developed materials are used. No special staffing or facilities are required. Training is required. Inservice for teaching staff is held for the entire nine-month period. A single teacher or an entire district may adopt.

**financial requirements** Funding averages \$250 per student, with the district providing the usual support services.

**services available** Awareness materials are available. Visitors are welcome by appointment. Training may be conducted at the project site (adopting site must cover all trainer costs as well as own costs). Training may be conducted out of state (exemplary project staff costs must be paid). Project staff can attend out-of-state conferences (expenses must be paid).

**contact** George A. Galati, Project Director; 6941 N. Central; Portland, OR 97203. (503) 286-1260.

## **PROJECT**

UVALDE FOLLOW THROUGH: A Direct Instruction Model

Language, math, reading, and spelling for disadvantaged children and children requiring structured instruction.

### **target audience**

Approved by JDRP for grades K-3. The program is now used only in grades 1-3.

### **description**

This Direct Instruction program strives to teach essential skills and problem-solving strategies to disadvantaged students so that at the end of three years they can function at or near the level of their more fortunate peers. The program also accommodates children who already possess many language skills, because its built-in mastery tests and skipping schedules allow these children to move ahead as soon as they are able. A classroom teacher and a paraprofessional teach with the Direct Instruction materials, which include DISTAR language, reading, math, and spelling mastery skills. Children are placed in homogeneous groups of five to ten, where they are paced in accordance with ability and reinforced for their successes. The small-group setting enables teacher and aide to monitor individual needs and use systematic reinforcement and management principles to ensure success for each child. Children who need extra help are tutored by adults and peers. Criterion-referenced progress tests are administered to children every two weeks by a trained tester. To ensure quality teaching, local supervisors conduct classroom observations and provide inservice throughout the year. A parent coordinator promotes an active parent involvement program.

Since approximately 70% of the children in Uvalde public schools are Hispanic, DISTAR materials are supplemented in grades 1 and 2 with the Spanish version of DISTAR language and in grade 3 with the McGraw-Hill Steps to English. The bilingual portion of the program is designed to help students function successfully in English as soon as possible.

### **evidence of effectiveness**

Follow Through Students performed at or slightly above the national median level as measured by the Metropolitan Achievement Test; this is significantly higher than one would predict on the basis of the entry scores on pretests. Follow Through students consistently made significant gains against the standardization sample of the Wide Range Achievement Test in Decoding -- the average gain was 47 percentile points. Each cohort's gain was at least six times as large as the 1/3 standard deviation unit (educationally significant). These effects were replicated over ten cohorts of children over a 12-year period.

### **implementation requirements**

Ideally, Direct Instruction personnel includes one supervisor per 200 children, one tester, one tutor, and one parent worker per 150 children, and one teacher and one aide per classroom. The program functions successfully with part-time personnel other than classroom aides. Portions of the program may be implemented without additional staff. Training in Direct Instruction techniques is essential.

### **financial requirements**

Teachers' Kits with manuals for one subject area can be purchased from SRA for under \$200. Student's workbooks for each subject area average \$6 per child.

### **services available**

A Follow Through Resource Center.

Project site provides informational pamphlets and schedules classroom visitations upon request. Direct Instruction Resource Center offers free staff training. Awareness materials are available from the University of Oregon Follow Through Program, University of Oregon, Eugene, OR 97403.

### **contact**

Kathy Knippa, Director; Uvalde Follow Through; P.O. Box 1909; Uvalde, TX 78801. (512) 278-6812.



**PROJECT** WEST HILLS FOLLOW THROUGH PROJECT

Comprehensive services for low-income families and children with preschool experience.

**target audience** Approved by JDRP for grades K-3.

**description** The goal of this program is to help children become confident, inventive, responsive, and productive people. To achieve this goal, it uses a multidimensional learning process for adults and children that features assessment of each child and an individualized program based on consultations among the entire teaching team. This team consists of the classroom teacher, teaching assistant, staff developer, psychologist, social worker, parents, nurse, speech therapist, community worker, and Bank Street College of Education advisor. Social studies, emphasizing the children's environment and the people in it, supplies the framework for the curriculum. Children ask questions and find their own answers through first-hand experiences on field trips and by conducting interviews. Recording information and ideas helps children practice language and math skills. Classroom life and discussions help to develop problem-solving skills. Instruction in reading follows the language experience approach and is supplemented by basal readers and trade books. Math concepts and logical thinking are taught by means of manipulative materials, charts, graphs, computation, and problem-solving stories.

Parents are actively involved in their children's school life in a variety of ways. They volunteer in the classroom; they are members of the Policy Advisory Committee, which gives them an active voice in school program policy decisions; and they participate in activities that develop their own interests, skills, and careers and in activities that help them understand how their children grow and learn.

**evidence of effectiveness** A larger percentage of West Hills Follow Through children have scored better on standardized reading and math tests than similar low-income children. (New Haven and national norms of Metropolitan Achievement Tests, Iowa Test of Basic Skills, 1973-1979). Active membership in the Policy Advisory Committee and parent volunteer work hours have increased yearly from 1969-1978 as evidenced by New Haven Parent Involvement Files.

**implementation requirements** Options are available to adopting districts. A district may plan to adopt all, some, or one of the program components: parent involvement, staff teaming, and individualizing learning utilizing social studies as a curriculum framework.

**financial requirements** Depending on the degree of adoption, the costs would vary. They could range from the price of a set of awareness materials to the price of hiring and training staff people such as a parent worker, a staff developer, and paraprofessional teaching assistants for each classroom.

**services available** Awareness materials are available. (Print materials at cost and audio-visual materials at rental fees which cover cost and insurance postage.) Visitors and visiting groups are welcome at site anytime by making a prior appointment. Tours and orientation sessions are free. Project staff are available to attend a limited number of out-of-state awareness meetings. Training workshops can be conducted at project site or at adopter site. Implementation and follow-up services are available to adopters. All expenses for these services must be paid by adopters.

**contact** Audrey P. Tiani, Director; West Hills Follow Through Project; c/o West Hills School; 311 Valley St.; New Haven, CT 06511. (203) 787-6456.

**PROJECT**

WILLIAMSBURG COUNTY FOLLOW THROUGH: A Direct Instruction Model

Basic reading, arithmetic, and oral and written language for economically disadvantaged rural children.

**target audience**

Approved by JDRP for grades K-3. Approved grade levels are based on claims for children in the program for four full years.

**description**

This Follow Through project has set itself the goal of providing rural Williamsburg County's economically disadvantaged children with skills in reading, arithmetic, and oral and written language. The principal means of attaining this goal is the three-level programmed DISTAR Instructional System in reading, language, and arithmetic. The full curriculum also includes science, social studies, spelling, art, and health education. The three reading levels teach word attack, comprehension, inference, fluency, and accuracy. In grade 3, the school-selected reading curriculum is introduced. The arithmetic sequence begins with basic addition and subtraction concepts and continues through subtraction with regrouping, column multiplication, and long division. There are many story problems throughout the sequence. School language, vocabulary, and logical processes are taught in the first levels of the language program. Level III language expands vocabulary development and logical processes and teaches grammar, punctuation, and creative writing. Two special features of this program are daily individual reading rate and accuracy practice and a goal projection system by which teachers assign and evaluate monthly progress and mastery goals for each child. Children spend 35 minutes daily in each instructional area. One teacher and one aide in each classroom instruct children in small groups of five to twelve. Teaching to mastery, systematic correction procedures, group response, individual turns, and positive reinforcement are prescribed teaching techniques. Children are given criterion-referenced tests every six weeks in reading, arithmetic, and language. Based on the results, children are accelerated, given remedial practice, or regrouped. Inservice training includes weekly classroom observation and comment, modeling, and role playing.

**evidence of effectiveness**

Data collected over a period of eight years revealed that low-income children who participated in the Williamsburg County Direct Instruction Programs for three full years performed significantly higher than the local comparison group in all academic areas (reading, math, language, and spelling) at the end of the third grade. The tests used to measure achievement were: The Metropolitan Achievement Test and the Comprehensive Test of Basic Skills, supplemented by the Wide Range Achievement Test.

**implementation requirements**

The program may be implemented in a single classroom, an individual school, or a complete school district. An adopter wishing to implement the program and management system must provide for training in implementation procedures. Facilities required are those generally found in elementary schools.

**financial requirements**

Based on a full nine-month school year, total cost for materials, training, and monitoring is approximately \$675 per pupil per year.

**services available**

Visitors are welcome at project site by appointment. Project staff are available for orientation and conferences with potential adopters.

**contact**

Eddie Allen Woods, Sr., Director; Williamsburg County Schools; 417 School St.; Kingstree, SC 29556. (803) 354-9926.

SECTION B-10: SPECIAL EDUCATION/LEARNING DISABILITIES\*

the COMMUNICATIONS WORKSHOP (CWS) -- New Jersey . . . . .	.B-10.3
DEBT (Developmental Education Birth Through Two) -- Texas . . . . .	.B-10.4
ENGINEERED CLASSROOM FOR STUDENTS WHO ARE BOTH EDUCABLY MENTALLY RETARDED AND BEHAVIORALLY MALADJUSTED -- Nebraska . . . . .	.B-10.5
FASTT, Family and School Teaching Together -- Florida . . . . .	.B-10.6
GOOD SAMARITAN DIAGNOSTIC/PRESCRIPTIVE CLASSROOM FOR HANDICAPPED PRESCHOOL CHILDREN -- Oregon . . . . .	.B-10.7
I CAN INSTRUCTIONAL PHYSICAL EDUCATION SYSTEM -- Michigan . . . . .	.B-10.8
INDIVIDUAL EDUCATION PROGRAM IN PHYSICAL EDUCATION (IEP/PE) -- South Carolina . . .	.B-10.9
INTERACTIVE CURRICULAR EXPERIENCE -- Florida . . . . .	B-10.10
MACOMB 0-3 REGIONAL PROJECT: A Rural Child/Parent Service -- Illinois . . . . .	B-10.11
MAPPs: Multi-Agency Project for Pre-Schoolers -- Utah . . . . .	B-10.12
NORTHWEST SPECIAL EDUCATION (NWSE) -- North Dakota . . . . .	B-10.13
PACKETS TO ASSIST LITERACY (PALS) -- Florida . . . . .	B-10.14
PEECH: Precise Early Education for Children with Handicaps -- Illinois . . . . .	B-10.15
PEORIA 0-3 PROJECT -- Replication of an Interdisciplinary Approach to the Early Education of Handicapped Children Ages 0-3 -- Illinois . . . . .	B-10.16
a PROGRAM FOR EARLY EDUCATION OF CHILDREN WITH HANDICAPS -- Texas . . . . .	B-10.17
a REGIONAL DEMONSTRATION PROGRAM FOR PRESCHOOL HANDICAPPED CHILDREN -- New York . .	B-10.18
ROSE F. KENNEDY CENTER - COMMUNITY SCHOOL DISTRICT 8 DIAGNOSTIC INTERVENTION PROGRAM -- New York . . . . .	B-10.19
SCORE: Success Controlled Optimal Reading Experience -- A Tutorial Reading Program -- California . . . . .	B-10.20
project SHARE: Sharing High Yield Accountability with Resource Educators -- Minnesota . . . . .	B-10.21
SPECIAL EDUCATION PRESCHOOL PROGRAM -- Minnesota . . . . .	B-10.22
project SUCCESS FOR THE SLD CHILD -- Nebraska . . . . .	B-10.23
project SUCCESS: Handicapped -- Washington . . . . .	B-10.24

\*See Sectional Cross-Reference Index, p. D-9, for related programs.

**PROJECT** THE COMMUNICATIONS WORKSHOP (CWS)

An alternative reading program for adolescents with learning disabilities. Offers a classroom management and monitoring system, motivation and intervention strategies, and teacher-student accountability.

**target audience** Approved by JDRP for learning-disabled readers, grades 7-12, with remedial reading needs. This program has been used in other settings for resource rooms and in classrooms for perceptually and neurologically impaired students and has been adapted to improve the organization of supplemental instruction, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** Five essential elements support the Communications Workshop model: a personal, humanistic philosophy, an activities monitoring system, a program monitoring system, student motivation strategies, and intervention strategies. The humanistic philosophy is based upon respect for the student as an individual and on the teacher's role as a facilitator of learning in a family-like atmosphere that fosters pride and a positive response to the academic setting. Student responsibility for his or her own academic program nurtures self-motivation and self-discipline. The student activities monitoring system relies on systematic observations to yield data on time spent in over 100 possible classroom activities, patterns of time usage, materials used, instructional grouping, and sequences of activity selection. The program monitoring system permits rapid collection and succinct posting of a wide range of data on each student's program, providing information on quantity and level of work completed. The system signals the need for teacher intervention and permits early detection and correction of imbalances in students' individualized programs. The student motivation strategies enable the team to create and sustain student interest and are used to modify negative or inconsistent behavior through personally planned interactions. The intervention strategies enable the team to encourage active student involvement in personal academic programs and to discourage unproductive "nonacademic" activities by fostering more positive, personal teacher-student relationships. These strategies may be used to restructure the classroom environment to achieve desired academic results and provide for teacher-student accountability.

**evidence of effectiveness** Testing reading comprehension with Gates-MacGinitie indicates that the average participant learned 5.52 times faster than prior to entering CWS. In vocabulary knowledge, the average student learned 5.66 times faster. CWS students showed significant improvement in attitude toward school and self as measured by Piers-Harris Children's Self Concept Scale and I.O.X. School Sentiment Index.

**implementation requirements** One full-time teacher, skillful in reading instruction, should be capable of individualizing instruction and demonstrating a humanistic attitude toward teaching. A part-time supplemental teacher or aide who complements this style of teaching is also recommended. The program may be implemented in individual classrooms, a single school, or a district.

**financial requirements** One set of teacher's manuals per trainee @ \$40. Each set includes teacher's guide and student activity/program monitoring manuals. A wide variety of commercially available materials and AV equipment already found in most classrooms is used.

**services available** Awareness materials are available at no cost. Project staff available for awareness presentations at out-of-state conferences and requesting sites. Training, implementation, consultation, and evaluation services offered at project or adopter site. The recipient state or LEA pays all or part of D/D expenses. Visitors are welcome at project site by appointment.

**contact** John E. Cowen, or Joseph A. Bukovec; Communications Workshop (CWS); Teaneck School System; 1 W. Forest Ave.; Teaneck, NJ 07666. (201) 837-2232.

**PROJECT** DEBT (Developmental Education Birth Through Two)

A home-based program for handicapped children and their families.

**target audience** Approved by JDRP for handicapped children from birth through age 2.

**description** The program has three main objectives: to improve the development of handicapped infants, to increase parental interest and involvement, and to integrate the project into the community's human service delivery network. Several assumptions underlie the program: early identification and intervention is critical to handicapped children; parents are potentially the child's best teachers; a warm and nurturing home creates the best atmosphere for learning; and parents of handicapped children need help to locate community agencies that serve handicapped children.

Referrals are sought through a community awareness campaign. An initial home visit is made to explain the program, collect developmental and medical history, and administer developmental tests. If it appears that a referred child will be eligible, further assessment is conducted, and a program teacher begins informal home visits. Sixty-seven percent of all referrals are enrolled in the program. An individualized educational program (IEP) for each child is developed based on the Koontz Child Developmental Program, which provides training activities in gross and fine motor skills, social skills, and receptive and expressive language development. Program teachers visit each home weekly and work directly with the parent and child. A water and gym play program provides educational and recreational experiences for parents and children. Other direct services to the children include physical, occupational, and speech therapy, as needed. The project also presents workshops for medical personnel, social workers, and university and high school students.

**evidence of effectiveness** Statistically DEBT has shown improvement of developmental progress by handicapped infants beyond that expected from maturation alone, improvement of parent interest and involvement, and improvement of coordination within the community human service network.

**implementation requirements** The adopting site (ideally a local school district) must provide one full-time certified special education teacher and/or early childhood specialist to work with approximately 15 young handicapped children and their families. The child with assistance from parents will receive one to one-and-a-half hours of individual educational intervention in the home each week. The DEBT Project can be adapted totally or in part by a district committed to early education for very young handicapped children. Staff time may vary from one hour to as many as are needed to serve the adopting site's handicapped population. Following training and implementation, the adopting site will receive follow-up assistance and participate in DEBT's research component.

**financial requirements** Each adopting site will be asked to provide released time for the infant teachers to participate in approximately 36 hours of intensive training. Training materials will be provided by the DEBT Project. Additional expenses will be negotiated.

**services available** Awareness materials are provided to interested parties at no cost. Project site visits are scheduled by appointment. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site at no cost. Training provided at adopter site is available upon request (costs to be negotiated). All follow-up services are available to adopters (costs to be negotiated).

**contact** Gloria Galey, Coordinator; Project DEBT; Lubbock Independent School District; 1628 19th St.; Lubbock, TX 79401. (806) 747-2641, ext. 455.

**PROJECT** ENGINEERED CLASSROOM FOR STUDENTS WHO ARE BOTH EDUCABLY MENTALLY HANDICAPPED AND BEHAVIORALLY MALADJUSTED

A diagnostic teaching program that provides individualized instruction and engineering of time and behavior for handicapped students.

**target audience** Approved by JDRP for mildly handicapped (educable mentally handicapped, learning-disabled, emotionally disturbed) students grades 1-6. This program has been used in other settings at the secondary level, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** The Learning Center instructor, through daily prescriptions or lesson plans, provides each student with a highly structured program in the cognitive and affective domains. Behavioral management skills are emphasized as well as academic growth. The design of the program requires a basic commitment to a least-restrictive alternative program for handicapped students. The design provides direct service to both student and teacher; it is flexible and adaptable, enabling a staffing team to plan a program to meet each student's educational needs. Project results demonstrate marked improvement, and teacher, student, and parent attitudes are positive. As a result of the project, the degree of integration of the special education students into the regular classroom is so high that it is difficult to tell the handicapped from the non-special education students. One of the concepts making the program unique is the degree of input the regular classroom teacher has in the program. The teacher is involved in every phase of referral and staffing. He or she continues to be the youngster's homeroom teacher, even though the youngster spends time in the Learning Center. For each child in the program there is a two-way responsibility; Learning Center teachers and regular classroom teachers must communicate. Regular teachers are responsible for meeting each student's educational needs, and if the student is staffed in the Learning Center, the Learning Center teacher has a responsibility to monitor the student's total program. Parental communication is guaranteed by four required home contacts during the year. Through their role in the program, the regular classroom teachers have become more knowledgeable about handicapping characteristics and more competent in working with handicapped students.

**evidence of effectiveness** Some student outcomes (class averages) -- behavioral rating (five-point scale): pretest 2.70; posttest 3.61. Self-concept (preferred responses on 25-question scale): pre 13.64, post 14.97. WRAT, reading: pre 2.73, post 3.38; spelling: pre 1.97; post 2.85; arithmetic: pre 2.10, post 2.90. Parent questionnaire: 100% positive on all questions (91% return).

**implementation requirements** At least three people -- an administrator, a regular classroom teacher, and a special education teacher -- attend a three-day workshop (location and cost to be arranged). Adopter agrees to use same student evaluation scale as project and to furnish results for comparison. D/D agrees to three days' consultation during first year of adoption at site. Project requires district commitment and recommends operating in one building the first year. A classroom, a qualified teacher, an aide, and a variety of materials are required.

**financial requirements** District must employ teacher and aide. Other costs depend on what adopter has available, such as furniture for room of 15, audiovisual equipment, materials, supplies, etc.

**services available** Initial awareness material (brochures, videotapes, live presentations) are available at no charge as long as supply lasts. Awareness manual and one-day conference (at project or adopter site) are also available (costs to be arranged). Visitors are welcome by appointment at several sites. After signing of adoption agreement, a three-day workshop is offered at project or adopter site (cost to be reimbursed to district). Consultation available on a cost-reimbursed basis to district.

**contact** Robert H. Ostdiek, Federal Programs Coordinator; Papillion-LaVista Public Schools; 420 S. Washington St.; Papillion, NB 68046-9990. (402) 339-3411.

**PROJECT** FASTT, Family and School Teaching Together

A coordinated instructional program for parents and teachers of handicapped children in the curriculum areas of self-help and language skills.

**target audience**

Approved by JDRP for trainable mentally handicapped (TMH) students with approximate chronological ages of 5-14.

**description**

To maximize learning of cognitive and independent living skills during the first 11 years of public education, FASTT offers 244 behavioral objectives in self-help and language skills, such as eating, dressing, safety, telephoning, writing, and basic numbers. This program is designed to improve the mastery rate of these skills prior to beginning traditional vocational preparation for post-school employment. Project FASTT provides instruction in very small increments appropriate for the learning capacity of TMH students and alternative instructional strategies that increase skill repetition.

Each curriculum objective has a corresponding teacher module that provides the objective statement, possible instructional strategies, and suggested teaching techniques. Using the FASTT materials, the teacher identifies the appropriate module for a student, teaches the objectives, and involves the parents in home teaching.

Parents are also trained in the use of the instructional modules. After the parent(s) receive six group training sessions the teacher makes the first home visit to deliver the module, help with basic instructional skills, and counsel the parents on other pertinent needs. Modules include materials needed, typical setting, how to teach using small steps and various levels of assistance, and reminders of rewards for successful behavior. Home visits by the teacher continue throughout the school year on a monthly basis or as needed. Over the total nine-year curriculum, students should master all of the skills in self-help and language. Coordinating instruction with parental support reinforces learning and facilitates faster acquisition of skills.

**evidence of effectiveness**

Trainable mentally handicapped students that participated in project FASTT achieved statistically significant increases in self-help and language skills over comparison students not exposed to the program, as measured by the Individualized Diagnostic Teacher's Guide (IDTG) and the Diagnostic and Teaching Assessment (DATA).

**implementation requirements**

The adopting district usually utilizes existing personnel to implement the program. These are TMH classroom teachers, consulting or resource teachers, parent specialists, and/or school social workers. The FASTT program can be adopted by even one motivated classroom teacher in a school district. One TMH resource specialist trained in program methods and procedures can train other personnel in the local district.

**financial requirements**

FASTT program materials are approximately \$800 for six teachers and 30 students. All other costs are dependent on the implementation plan.

**services available**

Awareness materials are available at no cost. Project consultants are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site or adopter site (costs to be negotiated). Implementation and follow-up services are also available to adopters (costs to be negotiated).

**contact**

Candi-Taylor Augustine, Project Director; 2757 West Pensacola; Tallahassee, FL 32304.  
(904) 488-3378.

**PROJECT**

GOOD SAMARITAN DIAGNOSTIC/PRESCRIPTIVE CLASSROOM FOR HANDICAPPED PRESCHOOL CHILDREN

A multidisciplinary team approach to the education of handicapped preschool children, including treatment.

**target audience**

Approved by JDRP for handicapped preschool children.

**description**

One classroom for moderately to profoundly handicapped children (18 months to 3 years) has been established in the Good Samaritan program. Before enrollment in the program, children are given a thorough diagnosis and evaluation, then placed in a specific teaching sequence by means of the program's prescriptive placement test. The curriculum, which is organized by developmental sequences, covers self-help, motor skills, expressive and receptive language, cognitive skills, and social skills. In addition, physical therapy, occupational therapy, speech therapy, and monitoring of each child's medical treatment are incorporated into the classroom activities.

Each classroom is staffed by a teacher and an assistant teacher. Parents, volunteers, and college practicum students help with individual instruction, and parents are encouraged to continue instruction at home as well.

Psychological services for the children and their families, as well as medical consultation on site for the children and training in skill development and behavior management for parents are all provided by the program.

**evidence of effectiveness**

Group and single subject design procedures were employed to demonstrate that: (1) preschool children who participated in the model made significant progress in 14 subtest areas; and (2) individual preschool children showed more rapid skill acquisition after the introduction of instructional sequences than upon enrollment in the model.

**implementation requirements**

The completion of a needs assessment survey which indicates the existence of the essential components prior to on-site training. Negotiation of a contract between trainee and model site regarding desired competencies are required. Five days of on-site training are needed. Follow-up visits occur at trainee site four to six months following training.

**financial requirements**

Cost of training and follow-up visit covered by 1982-83 outreach grant. Adopter responsible for travel expenses.

**services available**

Awareness materials available. Additional training in multidisciplinary team evaluation, parent conferencing, school consultation, and role and use of classroom consultants is available (costs to be negotiated).

**contact**

David N. Grove, Director of Children's Programs; Good Samaritan Hospital and Medical Center; 2215 N.W. Northrup St.; Portland, OR 97210. (503) 229-7220.



**PROJECT** I CAN INSTRUCTIONAL PHYSICAL EDUCATION SYSTEM

Improving instruction in physical education, preschool through secondary.

**target audience** Approved by JDRP for handicapped children, regular and/or special education classes.

**description** I CAN is a physical education program that has four major characteristics: it offers diagnostic/prescriptive teaching for students of near zero competence to functional competence in many physical performance skills, can serve as either a complete or supplemental program, requires no fancy equipment or facilities, and aids in compliance with PL 94-142.

An Implementation Guide describes program planning, assessment of student status, prescription, teaching/learning activities for the prescriptions, and evaluation of instruction.

The Instructional Resource Material describes primary and secondary program content. Primary content describes 71 performance objectives for ages 5 through 14 in fundamental motor skills, body management, health and fitness, and aquatics. Secondary content, for ages 15 through 25, has a total of 79 performance objectives in backyard/neighborhood activities, team sports, outdoor activities, and dance and individual sports. Prescription and teaching follow assessment of student performance. Daily lessons can include one or more performance objectives. Reassessment determines how fast achievement occurs, helps to plan subsequent instruction, and serves as a basis for reporting progress and evaluating program effectiveness.

**evidence of effectiveness** The I CAN Training Model and materials were effective in that physical education specialists and classroom teachers achieved implementation mastery as measured by the I CAN observational instrument designed to record teacher behaviors in assessing, prescribing/teaching, evaluating, and planning. Statistically significant meaningful student performance gains supported I CAN's effectiveness in promoting student achievement of essential physical education objectives.

**implementation requirements** Project I CAN Training Model is 2-4-1: two days intensive workshop, followed by four implementation/follow-up visits, concluding with one day Planning/Evaluation Workshop conducted by regionally certified I CAN trainers at school/class adoption sites. Designated local personnel can be trained to provide implementation/follow-up if desired.

**financial requirements** The adopter site must provide substitute teachers and/or released time for workshops. Necessary materials: Manual and Preview Packet (\$20/teacher). Cost of I CAN instructional materials (available commercially) dependent upon teacher, school, or district selection of essential physical education objectives to be taught at different program levels, preschool-secondary.

**services available** Awareness materials are available at cost; free sample available upon request. Visitors are welcome at designated demonstration sites during the school year by appointment. Project staff and regionally located certified I CAN trainers are available for awareness meetings, training workshops, implementation/follow-up services, and Leadership Training Institutes in and out of state (costs to be negotiated). Staff are available to assist potential adoption site in writing adoption grants (costs to be negotiated).

**contact** Janet A. Wessel, Professor and Director; Michigan State University; Room 134 IM Sports-Circle; East Lansing, MI 48824. (517) 355-4740.

**PROJECT** INDIVIDUAL EDUCATION PROGRAM IN PHYSICAL EDUCATION (IEP/PE)

A program to aid in the development of physical education components for handicapped children.

**target audience** Approved by JDRP for special and physical education teachers of handicapped children of any age, level, or degree of handicap who require an adaptive or specially designed physical education program.

**description** In order to fulfill the requirements of P.L. 94-142, physical education components must be included in the education programs of handicapped children, when applicable. The IEP/PE Program trains special and physical education teachers to increase their proficiency levels in developing physical education components pertaining to the five basic motor movements.

The intervention process requires six to eight months to implement. Adopters are provided a two-day workshop which incorporates not only familiarization with the program, but also active participation in using the model curriculum design to assess student abilities, remediate inefficient movements, and develop IEP's in physical education.

A Teacher Training Package, including expansion and modification of activities and games as related to the IEP/PE Program are also incorporated into the training session. Training films of efficient and inefficient movements are utilized to further enhance teacher proficiency. Telephone and written communications are maintained between adopter and project throughout the school year.

**evidence of effectiveness** The IEP/PE project shows substantial increases in teachers' abilities to assess students, develop remediation techniques, and write IEP's. Test utilized: Teacher Proficiency Scale (In Designing Adaptive Physical Education Programs for Handicapped Students). A pre-post, non-equivalent control group design was used, demonstrating a gain of 6.40 times greater for those teachers who received the intervention than those who did not (13.45 vs. 2.10).

**implementation requirements** The IEP/PE Program may be adopted by as few as one or a maximum of 50 special and physical education teachers. Each school district represented must designate a "contact" person to act as a liaison between the adopter and the project.

**financial requirements** A minimum of two days' release time must be provided for each teacher trainee. Each teacher trained and utilizing the program must have a Model Program curriculum manual, \$35, and a Teacher Training Package, \$10. Training films and adapted equipment are optional.

**services available** Awareness materials are available at no cost. Interested individuals are welcome at the project site at any time by appointment. Project staff are available to attend out-of-state awareness meetings, regional or national conferences, or training sessions (costs to be negotiated). Training is also available at the project site (costs to be negotiated). Follow-up visits are available (costs to be negotiated).

**contact** Mrs. Gay Clement, IEP/PE Program Coordinator; UAF/USC; Benson Building; Columbia, SC 29208. (803) 777-4465.

## **PROJECT**

### INTERACTIVE CURRICULAR EXPERIENCE

A process approach to developing individualized programs for the handicapped student using home, school, and community resources.

### **target audience**

Approved by JDRP for the trainable mentally handicapped, ages 3-21. The program has been used in other settings with hearing-impaired, physically impaired, learning-disabled, emotionally disturbed, and Title I students, but no evidence of effectiveness has been submitted to or approved by the Panel.

### **description**

Home, school, and community resources are tapped in developing the individualized educational program for each student. Teachers specially trained in curriculum, behavior management, family involvement, community interaction, and process management train families in instructional and behavior management techniques, help parents understand what their children can be expected to achieve, maintain liaison between school and home, coordinate home and school instruction, help parents in using community resources, and train school aides and volunteers.

Each student's objectives focus on the acquisition of skills necessary for functioning in the community. For example, the student completes an application form (for a Social Security card, a job, a driver's license, etc.). Students receive 15-75 minutes of instruction per week on selected objectives in school and an average of 10 minutes per week at home on the same objectives.

Parents and community members take part in the processes of setting student goals and of adapting existing curricular materials to assist students in reaching these independence goals. Community members are also oriented toward involvement in the school advisory committee, student job placement, fund raising, and volunteer activities.

### **evidence of effectiveness**

The multiple time-series, multiple baseline evaluation design incorporated pre/post criterion-referenced tests of the objectives sequenced for each student. Overall, students mastered 84.9% of the objectives prescribed and taught.

### **implementation requirements**

The process can be used school-wide or for a program within a school. Teachers and staff receive 36 hours of inservice prior to implementation, usually in two three-day sessions. New staff can be trained by experienced teachers with project-developed materials. Parents receive three to five hours of training from teachers. Each classroom needs the five project-produced training modules, and each school needs a complete ICE Box and Trainer Pack, containing filmstrips, cassettes, transparencies, and inservice training suggestions. The student curriculum is adapted or developed to adopter needs, using the interactive process and teacher-made or commercially available materials.

### **financial requirements**

Costs for a school with 10 teachers and 90 students are \$730 the first year for materials and equipment, \$515 in subsequent years; \$1,750 for first-year training, \$700 in subsequent years; \$500 yearly for travel in conducting family and community awareness activities.

### **services available**

Various awareness materials are available. A filmstrip-cassette describing the program, its development, and training materials is available for rent. Visitors are welcome at the demonstration site by appointment. All training costs must be paid by the adopter. Project staff are available to provide orientations, inservice training, and technical assistance and to attend out-of-state conferences at adopter expense.

### **contact**

Susan C. Goodall, Project Director; Margaret K. Lewis Center; 1527 Lincoln Avenue; Panama City, FL 32405. (904) 785-7608 or 763-0036.

**PROJECT** MACOMB 0-3 REGIONAL PROJECT: A Rural Child/Parent Service

A project that provides home-based remedial and educational services to handicapped children and their parents in rural areas.

**target audience** Approved by JDRP for children from birth to age 3 and their parents.

**description** The program has two main goals: to provide an effective educational and remedial program for the optimal development of handicapped infants and children in rural areas, and to help parents who live in rural areas acquire skills and knowledge that will make them more effective in dealing with their handicapped children. The assumption on which development of the project was based is that parental involvement and cooperation, and enthusiasm and coordination among the persons who work with the child and family are all essential. The project uses a number of materials and services to attain its goals, including referrals, screening, diagnosis, and assessment; home visits; sharing centers for parents and children; and a simple-to-use core curriculum that provides appropriate developmental goals in cognitive, language, self-help, gross motor, social, and sensory areas. Staff include full-time Child Development Specialists (CDSs), who act as case managers and perform other functions. A CDS works closely with children and parents and is trained to recognize the need for specialists, such as speech therapists and physicians, and to obtain their services. Project staff also work to make the best use of the limited medical and support services available in rural areas. By participating in interagency community councils, providing service to community groups, and working closely with public school personnel, they help to foster cooperation among agencies. Parents are involved in a variety of ways. During weekly project visits to the homes of project children, the CDS and the parent work as a team with the child. Parents also participate in the planning and conducting of biweekly meetings at sharing centers, which are located in community buildings or homes and which function much like cooperative nursery schools, providing a transition between home and center-based activities.

**evidence of effectiveness** Pre- and posttesting was administered to project children using the Alpern-Boll Developmental Profile and the Bzoch-League Receptive and Expressive Emergent Language (REEL) Scale. The mean for the Alpern-Boll was 13.1 months; over an average of 10.7 months, the mean exit was 23.8 months. For the REEL testings, the mean entrance was 14.3 months; over 10.0 months, the mean exit was 24.3 months. When data was controlled statistically for the passage of time or maturation, posttest scores for both Alpern-Boll and REEL were significant -- between 1.2 and 4.4 months' gain due to project intervention.

**implementation requirements** The adopter site must participate in initial training; host on-site follow-up training as needed, host follow-up evaluation at two and four months after completion of training; complete other follow-up questionnaires; and document the number of children and parents participating in the program. The adopter site must provide local staff at the rate of 1.5 per 15 children and local financial support. Testing of children must be done by site staff.

**financial requirements** Cost of the Macomb 0-3 Model depends on local salary scales and travel distances. Approximately \$36,158 for installation and \$33,558 for subsequent years is the major outlay for personnel. Cost per child: initial start-up cost, \$2,411 per year per child; recurring cost, \$2,237 per year per child. Project materials (training manual, Baby Buggy papers and books, and Sharing Center kits) are provided free of charge to adopter sites.

**services available** Awareness materials available at no cost. Visitors are welcome to visit project continuation sites anytime by appointment. Project staff are available to attend in-state and out-of-state awareness meetings (costs to be negotiated). Training in the Model is conducted at either project or adopter site (costs to be negotiated). Implementation and follow-up services are provided to adopters. Consultation and technical assistance services are offered by the Macomb 0-3 Project staff on various content areas to interested programs (costs to be negotiated).

**contact** Patricia Hutinger, Director; Macomb 0-3 Regional Project; Room 27, Horrabin Hall; Western Illinois University; Macomb, IL 61455. (309) 298-1634.

**PROJECT**

MAPPS: Multi-Agency Project for Pre-Schoolers

An intervention program for handicapped children and their parents in remote areas.

**target audience**

Approved by JDRP for handicapped children, birth to age 5.

**description**

The Multi-Agency Project for Pre-Schoolers is a home- and community-based intervention program for handicapped children in rural and remote areas, where professionals trained to work with handicapped children are often lacking. The program makes it possible for parents to act as intervention agents for their own handicapped children from birth to age 3 by providing them with a detailed and specific curriculum, training in its use, and weekly monitoring. The program makes the use of existing preschool and community day-care services practical by providing curriculum materials and training for parents and teachers of children 3-5.

The heart of the program is the Curriculum and Monitoring System (CAMS), which covers five curriculum areas: receptive language, expressive language, motor development, self-help development, and social-emotional development. The system includes five sequenced curriculum programs with detailed teaching instructions appropriate for use by persons of various backgrounds, a manual providing an overview of the CAMS model and explaining the procedures for use of the curriculum programs, tests to determine where each child should be placed in each program, and an introductory slide-tape presentation. Behavioral principles, particularly those related to programmed instruction, were the basis for the design and development of these materials.

**evidence of effectiveness**

The efficacy of the program has been documented using both norm-referenced and criterion-referenced tests. The program improved children's performances in their areas of greatest delay as evidenced by scores on the Bayley Scales of Infant Development, Peabody Picture Vocabulary Test, Visual Motor Integration Scale, and Assessment of Children's Language Comprehension.

**implementation requirements**

The adopter should have available a person with an early intervention background to implement the program. The MAPPS program can be implemented using presently existing personnel (center-based) or with a home visitor (home-based). The project coordinator will be trained by MAPPS personnel, and this person can train other personnel participating in the program. The MAPPS Project will furnish personnel to assist in assessment and programming for the children. The adopter is required to collect pre- and posttest data on the children served.

**financial requirements**

six manuals cost \$77.50.

One home visitor can monitor and serve 20 children. Material requirements include one complete set of the CAMS materials and a training manual. These

**services available**

Awareness materials are available upon request. Visitors are welcome at project site. Project staff are available to attend awareness sessions. Training can be done either at project site or at adopter site (costs to be negotiated).

**contact**

Glendon Casto; University Affiliated Exceptional Child Center; Utah State University; Logan, UT 84322. (801) 750-2000.

**PROJECT** NORTHWEST SPECIAL EDUCATION (NWSE)

A systematic way of training classroom teachers to focus on specific learning disability (SLD) students.

**target audience**

Approved by JDRP for students with specific learning disabilities, grades 1-8. This program has been used in other settings with grades K and 9, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description**

Northwest Special Education is designed to offer classroom teachers a way to focus on individual students who have specific learning disabilities. Teachers are provided with new ways of observing children, interacting with students, parents, specialists, and each other. This project is effective for use as inservice for classroom teachers to comply with the "Bill of Rights for the Handicapped," P.L. 94-142. The central emphasis of the experience is on team planning in order to develop individualized educational programs. Specialized learning disabilities personnel are required to serve as team coordinators and in consultative and resource capacities for this special service. Regular staffings and monitoring of the teacher during the initiation of this clinical teaching approach are required. Project NWSE provides a framework for personalizing instruction. The critical elements are assessment, programming, and evaluation. The skills learned by the teacher are informal individualized testing, observation, planning objectives, developing curriculum, reporting, evaluating, and teaming. The teacher approaches the child in a systematic way to determine how to teach him/her effectively. The requirement of specificity in planning, reporting, and evaluating enables the teacher to be trained while providing services to the student. The teaching effort culminates in the development of a unique instructional material and method which is named for the student. An SLD student's success or failure in school is a function of the interaction between the student's strengths, weaknesses, limitations, and the specific classroom situational factors that the student encounters. The project format enables the learning specialist to help teachers develop the ability to conceptualize a child's problem.

**evidence of effectiveness**

Pre/post data on criterion-referenced and selected standardized tests demonstrate that achievement referenced to the type of instruction moved the group average (using the pretest mean as a baseline) from the 50th to the 69th percentile. This represents a sizable gain for students not expected to learn incidentally. Tests used: Screening Test to Be Used by Classroom Teacher, Wold; Classroom Reading Inventory, Silvaroli; Wide Range Achievement Test; Key Math, Dolch Word Lists, and NWSE instruments.

**implementation requirements**

Project staff are interested in locating educators willing to assume an in-depth teaching responsibility for SLD students. Administrative commitment to be demonstrated by provision of a completed needs assessment, release time for staff development, and budgeting of funds for materials and travel. The program may be implemented by classroom teachers with specialized support from special education personnel. Facilities and space found in schools are adequate. Technical assistance and staff training are necessary both prior to and during implementation and with follow-up and monitoring activities. Requires no reassignment of personnel.

**financial requirements**

Start-up costs for training and testing materials: approximately \$50 per teacher. Maintenance cost: approximately \$3 per pupil. Permission to reproduce project-developed materials is given. Other costs: staff release time and substitutes; space for training and follow-up activities; trainer's time, travel, and per diem for trainer (at adopter site) or for adopter (at project site).

**services available**

Awareness, training, and follow-up materials and services are available on a limited basis (costs to be negotiated).

**contact**

Joan Bonsness, Project Director; Northwest Special Education; R.R. #1; Columbus, ND 58727. (701) 939-6501.

**PROJECT** PACKETS TO ASSIST LITERACY (PALS)

A program to increase reading comprehension in four literacy need areas -- employability skills, health, money management, and food preparation.

**target audience** Approved by JDRP for educable mentally handicapped students in grades 7-12. The program also has been used for SLD, Chapter I, remediation classes, adult basic and bilingual classes, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** PALS materials are designed to provide a multi-level system for improving functional literacy in four specific content areas. Entry level into the PALS system is determined by placement test results. Within each need area, comprehension skills are addressed by three exercise types. These exercises were constructed at each of six reading difficulty levels for each content area. Thus, student materials are made up of three kinds of exercise packets at six reading levels in each of four literacy need areas.

Entry level into the PALS system is determined by placement test results. Within each need area, comprehension skills are addressed by three exercise types. Word recognition/meaning exercises use several strategies for teaching 100 special vocabulary words at each level in each content area. Sentence/section meaning exercises teach and give practice in understanding syntactic relationships using the learned specialized vocabulary. Reading exercises give specific practice in using context cues to increase comprehension; 10 specialized vocabulary words appear in each of the 20 passages at each level. Normal language patterns have been maintained, and cartoon illustrations enhance the attractiveness of the materials. Exit to the next level is achieved when a student exhibits 90% literal comprehension on three consecutive reading exercises. Students work in only one content area at a time and, depending on entry level and rate of progress, can continue work in PALS for several continuous months without repeating an assignment.

Two delivery systems are applicable to PALS materials. Exit and entry criteria are the same for both systems.

**evidence of effectiveness** Evaluation results showed that EMH treatment students always had significantly higher adjusted posttest means on literal comprehension tests and a general comprehension measure. Treatment effect sizes far exceeded those usually specified as indicating educational significance. Results for secondary remediation students generally showed significantly higher mean adjusted posttest scores for treatment subjects.

**implementation requirements** No special staff or materials are needed for classroom implementation of PALS. A User's Guide and a Teacher Training Manual contain information and instruction pertinent to effective classroom implementation of the reading program. Project staff can provide additional information, awareness, and training sessions.

**financial requirements** All PALS materials are available from PAEC (see Contact for address). Individual booklet prices vary from 90¢ to \$2.50. Approximate cost of materials for one year would be \$17 per student and \$27 per teacher. Each item is available individually. Contact PAEC for a price list and order form.

**services available** Awareness materials are available at no cost. Visitors may observe PALS programs at area schools by appointment. Training is available at project site (cost to be negotiated). Implementation and technical assistance are available to adopters (costs to be negotiated).

**contact** Kay Crawford; Panhandle Area Educational Cooperative; 411 West Boulevard; Chipley, FL 32428. (904) 638-4131.

**PROJECT** PEECH: Precise Early Education for Children with Handicaps

An individualized educational program designed to enhance the development of preschool handicapped children while involving family members in the educational process.

**target audience** Approved by JDRP for handicapped children ages 3-6 and their families.

**description** The PEECH Project serves handicapped children ages 3-6 functioning in a wide intellectual range with a multiplicity of cognitive, language, speech, social, emotional, and/or motor problems. The majority of children are identified through community-based screenings for all young children. Children identified as high-risk receive an in-depth psychoeducational assessment to determine eligibility. Also integrated into the program are children who have no special educational needs. These children serve as models for language, cognitive, motor, and social skills.

Children are enrolled in a classroom program for a half-day five days a week. Educational needs are determined by systematic observations. This procedure provides information on each child's level of functioning in the fine motor, gross motor, language, math, social, and self-help areas. Program features include a low student/teacher ratio, a positive approach to behavior management, extensive training and involvement of paraprofessionals as teachers, a carefully structured learning environment, and precise planning and evaluation of daily individualized teaching sessions.

Families are involved through an extensive individualized program. Parent conferences, home visits, group meetings, classroom observation, and other activities are employed to help family members. A resource room serves as a lending library for parents and their children.

One staff member should be assigned the responsibility (and time) for coordinating screening, child assessment, classroom programming, staff training, and evaluation, and for acting as liaison with the PEECH demonstration site. Optimal staffing consists of one head teacher and one paraprofessional, with ancillary services from a speech and language therapist, psychologist, social worker, and occupational therapist, but a basic program can be implemented by a trained teacher and paraprofessional only.

**evidence of effectiveness** The mean I.Q. of all children (handicapped and model) enrolled in one PEECH classroom was 87, with a range from 35-125. Posttests revealed a gain of 9.1 points (for a posttest range of 47-136). Of these children, 86% entered a regular educational program, with only 14% being placed in a special program.

**implementation requirements** Adopters must independently identify a source of funding and administrative support for the hiring and training of staff, for screening and identifying children, for providing classrooms for the program, and for administering a battery of pre/post-tests to all participating children.

**financial requirements** Project-developed materials are provided to adopters at a minimal charge. A wide variety of commercially available instructional materials already found in most preschool classrooms is used.

**services available** Awareness materials are available at a minimal cost. Visitors are welcome by appointment. Project staff are available to attend out-of-state awareness meetings (cost to be negotiated). Training is conducted by means of 12-14, two- or three-hour workshops/site visits.

**contact** Merle B. Karnes, Director; PEECH; Institute for Child Behavior and Development; University of Illinois; Colonel Wolfe School; 403 East Healey; Champaign, IL 61820-5598. (217) 333-4890.



**PROJECT** PEORIA 0-3 PROJECT -- Replication of an Interdisciplinary Approach to the Early Education of Handicapped Children Ages 0-3

A medical/educational model based on a developmental task analysis approach to individualized prescriptive teaching, delivered in the home by parents with assistance from professionals.

**target audience** Approved by JDRP for handicapped infants ages 0-3, and persons dealing with this population (occupational/physical/speech therapists, parents, home trainers, teachers, social workers, psychologists/administrators, and volunteers).

**description** The ongoing direct service program serves children ages 0-3 at risk, mentally retarded, and/or orthopedically handicapped. The service program includes a diagnostic and evaluation service, Individual Educational Program (IEP) planning, direct service home-based programming (including occupational, physical, and speech therapy when appropriate), parent support systems, and a class for 18- to 36-month-old handicapped infants. Based on results of the Functional Profile, a project-designed tool assessing a child's functioning levels in six basic areas, the child's developmental program is designed by the parent and an interdisciplinary team composed of a social worker, a child development specialist, and occupational, physical, and speech therapists. This plan is reviewed weekly. Each discipline contributes activities, called targets, to the home program plan. The child development specialist takes weekly target lessons into the home, presents the lesson to the child, models it for the parent, records the child's baseline performance, and explains procedures for recording the child's response on an activity chart. Continuous monitoring of the activity chart, coupled with information from parents, permits appropriate changes in instructional strategies. Since many children in the program are multiply and/or physically involved, ongoing medical supervision is provided, and outpatient physical and occupational therapy services are available. Individual parent counseling sessions are available, and ongoing parent discussion groups are maintained. Modeled on the direct service program, the training program assists agencies serving children ages 0-3 to develop or upgrade services to handicapped infants and toddlers. Individually designed to meet the needs of the local agency or community, training involves an intensive two- or three-day initial workshop and four to six days of follow-up training at adopter site.

**evidence of effectiveness** Over a one-year period, 99 children from a variety of socioeconomic backgrounds were measured with the Functional Profile (a project-designed instrument; reliability and concurrent validities established in an independent study) and the Denver Developmental Screening Test. Study design compared actual growth with estimated growth. Significant gains were found in personal, social, cognitive-linguistic-verbal, eating, toileting, and dressing. Gains for fine and gross motor were not as great; half of the test population was orthopedically handicapped.

**implementation requirements** Adopters must currently be serving an infant/toddler population. Staffing required for a 20-child program: a child development specialist (full-time), a speech therapist (part-time), and an occupational and/or physical therapist (part-time). Access to a diagnostic and evaluation clinic is required. Adopters must be willing to work with parents. Project focus is to provide comprehensive services. Individual components can be adopted, subject to needs assessment of the individual community. Two or more components must be adopted/adapted to be considered an implementation. A minimum one-year commitment is required.

**financial requirements** Start-up cost of the direct services program for 20 children: \$1,200-\$2,000; this figure includes books, materials, and equipment. Approximate cost of the home-based component per child per year, including therapy, is \$2,000. Cost of training for LEAs depends on the amount of federal funding available to support the effort.

**services available** Awareness materials are available at no cost. Visitors are welcome by appointment. Project staff are available for out-of-state awareness meetings (costs to be negotiated). Training is conducted at project site (adopter pays only its own costs). Training is also available at adopter site (cost to be negotiated).

**contact** Project Director; Peoria 0-3 Project; United Cerebral Palsy of Northwestern Illinois and Peoria Association for Retarded Citizens; 320 E. Armstrong; Peoria, IL 61603. (309) 672-6358.

**PROJECT**

A PROGRAM FOR EARLY EDUCATION OF CHILDREN WITH HANDICAPS

A home intervention program involving parents in the teaching of their handicapped children.

**target audience** Approved by JDRP for handicapped children five months to six years of age.**description** This program, a home intervention model, is based on the premise that parents can be actively involved on a daily basis in teaching their handicapped children, and that through the teaching experience, by observing and recording changes in behavior, they can discover the areas in which their children need help. The program's ultimate goal is for the parent to assume chief teaching responsibilities until the child can attend school.

Home teachers make weekly home visits of approximately one and one-half hours to show parents how to use behavior modification techniques -- when to reward, what to reward, and how to chart behavior. By observing this modeling process, parents become equipped to continue the work for a week, progressively achieving the short- and long-term goals for their children.

Training emphasizes administrative guidance and teacher training in the areas of assessment, behavior management, precision teaching, individualized educational programs, and parent training.

**evidence of effectiveness** The average effect of pre- and posttesting with the Alpern Boll Developmental Profile (which measures self-help, socialization, physical, communication, and academic skills), and the Cattell Infant Intelligence Test was significant.**implementation requirements** Adoption agreement is required. Adopter provides one professional or paraprofessional teacher for every 12-15 children and support personnel for assessment, curriculum planning, and ancillary services. Instruction is conducted in the child's home. Only office space for staff meetings and storage is needed. Three to five days of training are required for teachers and support staff. Three or four follow-up visits to assess program effectiveness and to evaluate curriculum planning, data collection, and the home teaching process are scheduled during the year.**financial requirements** Teacher's Handbook, \$5. Parent's Handbook (optional), \$2. One-time start-up cost: approximately \$1,890 per child. Per-pupil cost for a nine-and-a-half-month school year: approximately \$1,580. (Data secured from special education cooperatives in Texas Region IX.)**services available** Awareness materials are available at no cost. Visitors are welcome by appointment. Project staff are available to attend out-of-state awareness meetings (expenses must be paid). Training is provided at project site (adopter pays only its own costs). Training is also conducted at adopter site (expenses must be paid). Follow-up technical assistance is available to adopters (expenses must be paid).**contact** Lois A. Cadman; 2006 Kell Blvd. S.; Wichita Falls, TX 76309. (817) 723-6902.

**PROJECT**

A REGIONAL DEMONSTRATION PROGRAM FOR PRESCHOOL HANDICAPPED CHILDREN

Early intervention for handicapped children ages 3 to 5.

**target audience** Approved by JDRP for preschool handicapped children.**description** This is a comprehensive program of educational services intended to increase the verbal, perceptual, motor, and general cognitive skills of children with the following handicaps as defined by the New York State: severe speech or language impairment, emotional disturbances, physical handicaps, specific learning disabilities, deafness or hearing loss, partial or total blindness, educable mental retardation, trainable mental retardation, and autism. Children are placed in the program after referral by a parent or professional and after screening, which consists of parent interviews, behavioral observations, and formal and informal tests including the Denver Developmental Screening Test.

Diagnostic/prescriptive teaching, language intervention, and positive reinforcement used simultaneously in an interactive teaching process is a unique feature of this program. Other unique aspects are the team involvement and classroom-focused approaches to screening, planning, coordination, and delivery, in which parents as well as a psychologist, social worker, speech and language pathologist, classroom teacher, and teacher aide are active participants. The team members share each other's roles, working in the classroom on social-emotional growth, cognitive development, language production, and self-concept.

The children are bused to the closest of several regional sites throughout two counties.

**evidence of effectiveness** As compared to national norms on the McCarthy Scales of Children's Abilities, a widely known standardized test, children made educationally and statistically significant gains from pre- to posttest in verbal, perceptual-performance, motor, and general cognitive skills.**implementation requirements** Any preschool program for the handicapped may adopt the program regardless of size of program or type of handicap. All staff should be involved including teachers, clinical team members, and paraprofessionals. Total days for complete adoption include six days for training and two days for follow-up. Two days of training address the interactive teaching process, and the other four days focus on the parent-team involvement model, which includes workshops in trans-disciplinary team approaches, parent involvement, and the Parent Volunteer System. Follow-up visitation allows for consultation and training of an on-site program monitor.**financial requirements** A staff training manual is available for each part of the training. The five manuals range in price from \$6.50 to \$11. Traditional equipment and supplies used in preschool programs are appropriate. A speech therapist must be available to work with the teacher on a part-time basis, and other professionals should be available as appropriate to that program.**services available** Awareness, training, and follow-up services are available at no cost. Travel, lodging, daily expenses, and costs of training manuals are the only costs to the adopter.**contact** Amy L. Toole, Supervisor; Preschool Programs; Special Education Department; Putnam-Northern Westchester Board of Cooperative Educational Services; Yorktown Heights, NY 10598. (914) 962-2377.

**PROJECT**

ROSE F. KENNEDY CENTER - COMMUNITY SCHOOL DISTRICT 8 DIAGNOSTIC INTERVENTION PROGRAM

Identification, evaluation, and diagnostic instruction of learning-disabled children.

**target audience** Approved by JDRP for students with school learning problems, grades 2 through 4. This program has been used with primary and elementary children up to grade 6, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** The primary objective of the program was to develop a model of educational intervention in which urban children with learning problems can be identified by the beginning of second grade, and helped to make meaningful improvement in reading through diagnostic testing and prescriptive teaching.

The model consists of five coordinated components: (1) identification of students with school learning problems through a formula utilizing standard reading scores and teacher recommendations; (2) diagnostic psychoeducational evaluation; (3) trial lessons which are designed to incorporate findings about a child's overall ability and his specific strengths and weaknesses into a program of instruction (visual and auditory modalities of learning are explored by presenting a phonic approach emphasizing the sounds of individual letters, and a sight approach stressing the learning of total word configurations); (4) establishment and monitoring of individual educational programs utilizing the results of the trial lessons as a starting point to insure successful reading experiences, supplemented by other methods of reading instruction; and (5) ongoing teacher and parent training and support through teacher and parent workshops.

**evidence of effectiveness** During each year of the three-year program students obtained posttest scores on standardized reading tests administered by the school district that were significantly higher than predicted by the pretest. Moreover, data from individually administered reading tests at the beginning and end of each school year show patterns of achievement similar to those on the standardized reading tests. Finally, analysis of the data reveals that children enrolled in the model program made greater reading gains than a comparable group of poor readers who were not in the program.

**implementation requirements** Adaption of the Diagnostic Intervention Program will necessitate commitment to the program on the part of district administrators, supervisory personnel, and the targeted classroom teachers. It will also require a three-day workshop conducted by the program staff for the target classroom teachers primarily, and for administrative and supervisory personnel secondarily. Monthly consultations with program staff in the schools to review a teacher's approach with individual children and other issues pertinent to children's learning are needed as well.

**financial requirements** Cost of three-day workshop for teachers, supervisors, and administrators, \$1800. Cost of 18 additional consultation days for school visits, \$3,600. Cost of two-day workshop to evaluate and plan, \$600. Materials for teachers, \$20 per teacher; for target children, \$30 per child. Cost for travel (including per diem) for trainers. Other costs include stipend for substitute teachers and salary for paraprofessionals or classroom aides.

**services available** Awareness materials are available at no cost. Visitors are welcome by appointment. Project staff are available to attend consultation workshops (costs to be negotiated).

**contact**

Dr. Ruth L. Gottesman, Chief of Psychoeducational Services; Children's Evaluation and Rehabilitation Center; Rose F. Kennedy Center; Albert Einstein College of Medicine of Yeshiva University; Bronx, NY 10461. (212) 430-2434.

## **PROJECT**

SCORE: Success Controlled Optimal Reading Experience -- A Tutorial Reading Program

A tutorial phonics program for learning-disabled students who read below the fourth-grade level.

### **target audience**

Approved by JDRP for learning-disabled students of any age. The program has been used in other settings with bilingual students, disadvantaged students, and regular students in grades 1-12 who are reading below the fourth-grade level, but no evidence of effectiveness has been submitted to or approved by the Panel.

### **description**

SCORE uses a mastery teaching model that arranges skills in a hierarchical sequence of well-outlined learning units. This supplementary tutorial reading program uses six student books, which are divided into 51 teaching units. Each unit contains a Challenge Page, Teaching Pages, and a Review/Recycle Page. The student reads aloud to the tutor for 15 minutes a day. The Challenge Page tests elements to be taught in the unit. If the student reads all Challenge Page words correctly, the student skips to the next unit. Each Teaching Page presents between three and eight new elements or words arranged in five 20-word lists. The tutor models the correct pronunciation from the first list, and the student practices with the remaining four lists. As soon as the student reads one list at 100% accuracy, the student proceeds to the next page. The Review/Recycle Page provides for long-term review and testing of words mastered on a short-term basis. If a student falls below 100% mastery here, the student recycles back through the unit. The SCORE Record Book contains all lesson pages, continuous tutor instructions, and forms for recording students' progress and the tutor's adherence to procedure. To provide reinforcement, the tutor clicks a tally counter to indicate a correct response and point earned. Points may be exchanged for rewards. A timer controls the length of the tutoring session and keeps track of the daily reading rate. The program is cross-referenced to 60 primary phonics readers. After mastering a given SCORE unit, students branch into the corresponding reader. Diagnostic criterion-referenced tests determine both students' need for SCORE and phonetic elements mastered as a result of using the program. A daily report card informs each student's parents of the number of words read correctly and of the effort demonstrated.

### **evidence of effectiveness**

Data from pre- and posttesting of SCORE-tutored students and matched controls in regular classes with traditional group instruction and in special education classes with the Wide Range Achievement Test Word Recognition Subtest and the Gilmore Oral Reading Test show that SCORE significantly improves reading proficiency. Testing with a criterion-referenced instrument shows that SCORE-tutored students master phonetics and decoding skills introduced by the program. SCORE-tutored pupils produced gains on both normal and criterion-referenced measures that are significantly greater than non-SCORE-tutored comparison groups.

### **implementation requirements**

The program can be used in a variety of classroom organizational structures. Tutors teach students individually in a mainstreamed classroom setting or a separate tutorial center. Tutors receive two to three hours of training and work with individual students for 15 minutes a day. Tutor's Kit contains nonconsumables for one tutor and consumables for one student. A part-time tutor coordinator (resource teacher or instructional aide) is recommended for large-scale adoption. Three to four hours of training are recommended for tutor coordinator, although program can be implemented without training as tutor-training script is included in program implementation manual.

### **financial requirements**

Per-pupil start-up cost for 30 students and eight tutors: \$18.60. This figure includes costs of four-hour training for tutor coordinator, tutor nonconsumables, student consumables, implementation manual, and supplemental materials. Tutor's Kit: \$50; Record Book: \$3.50. Estimated per-pupil cost for every 30 additional students is \$3-\$5, depending on supplemental materials obtained. Continuation cost for 30 students: \$86-\$116 for consumables and supplemental materials. Information on materials may be obtained from Learning Guidance Systems, (415) 344-7046.

### **services available**

Awareness materials are available at no cost. Visitors are welcome by appointment at project site and additional demonstration sites in home state. Project staff are available to attend out-of-state awareness meetings (all expenses must be paid). Training is conducted at project site (adopter pays its own costs and \$75-\$100 consultant fee). Training is also available at adopter site (all expenses must be paid).

### **contact**

John Cradler, Coordinator of Special Projects and Research; South San Francisco Unified School District; Administration Bldg.; 398 B St.; South San Francisco, CA 94080. (415) 877-8835.

**PROJECT**

PROJECT SHARE: Sharing High Yield Accountability with Resource Educators

An instructional process for remediation of basic skills in learning-disabled students in mainstream education.

**target audience**

Approved by JDRP for administrators, teachers, and tutors responsible for education of students with specific or multiple learning disabilities in grades K-8.

**description**

Project SHARE is a process. Its special-education systems design meets needs for individualized instruction, mainstreaming, and accountability. The basic format for serving students in reading, spelling, and math is behavioral. Diagnosis, prescription, monitoring, and evaluation employ precision teaching techniques. Project designed task ladder guides pinpoint a student's instructional starting point. A student's best learning mode and most handicapping learning mode are quickly identified. Skill efficiency and accuracy are determined -- a key Project SHARE difference. One-to-one tutoring is used primarily. Each session is highly structured, but the tutor operates freely within the planned structure.

Field-determined minimum basic skill rates have been established. Daily performance measures by the teacher or student provide an ongoing diagnostic/prescriptive process. The SHARE process speeds remediation of basic skill learning and produces data on cost-effectiveness. Computerized evaluation is available.

**evidence of effectiveness**

Evaluation was conducted on an average number of 1,200 students annually in a rural special education cooperative in Minnesota, 1970-75. Average gains for learning-disabled students: 1.3 grade levels in reading in 26 hours of teaching and 1.3 grade levels in math in 31 hours. (Evaluation computerized by International Management Systems, Kansas City, Kansas.)

**implementation requirements**

Three-day training sessions, with practice between them, are most effective, with one three-day session the absolute minimum, and no more than ten trainees per session. Training highlights diagnosing skill deficiencies and best learning modes, pinpointing the beginning instruction objective, selecting and adapting appropriate materials, and interpreting effectiveness from behavior charts. Various follow-up options are possible.

**financial requirements**

Costs will vary with available staff, and are minimal -- no more than \$5 per teacher.

**services available**

Awareness materials are available at no charge. Visitors are welcome by appointment. No training is conducted at the project site. Training is conducted out of state (project staff expenses must be paid). Project staff can attend out-of-state conferences (expenses must be paid).

**contact**

Marvin Hammarback, Director, or Fay Hammarback, Coordinator; Project SHARE; R. R. 1; Hendrum, MN 56550. (218) 784-4826.

**PROJECT** SPECIAL EDUCATION PRESCHOOL PROGRAM

A program serving moderately, severely, and profoundly hearing-impaired preschoolers (ages 0-5), a mixed population of moderately and severely handicapped preschoolers (ages 4 and 5) with other handicapping conditions, and their families.

**target audience** Approved by JDRP for preschool children with developmental and communication disorders -- including all types of handicapping conditions except autism and severe/profound physical impairment -- and their parents.

**description** This project now operates solely as a Minneapolis Public Schools special education program funded through the combined resources of local, state, and P.L. 94-142 monies. The program is family-oriented and noncategorical, assuming individually prescriptive programs for children and families. Child assessment by a multidisciplinary team offers a developmental profile of communication, psychomotor, cognitive, and social/adaptive behaviors. Program options change as the needs of the population served change.

Counseling, education, and guidance of parents ensure active family participation in the program. Service options for families include individual parent guidance and parent-teaching sessions, weekly parent meetings, monthly parent meetings, single-parent groups, and "topical" meetings.

**evidence of effectiveness** Written objectives are developed in each of the following areas to assess program effect: individual child, family, clinical assessment, and program management. More than 76% of the program's "graduates" are integrated into elementary schools.

**implementation requirements** Beginning programs are encouraged to implement only portions of the program. The use of a multidisciplinary staff depends on available resources. Facility requirements depend on the extent to which the programs are being implemented. Anyone interested in specifics regarding staff qualifications, staff inservice training, facility requirements, or other implementation concerns should contact the program coordinator.

**financial requirements** Per-pupil cost (1978-79 rates) estimated at \$10.86 per day.

**services available** Awareness materials are available. Visitors are welcome by appointment.

**contact** Janet Proehl, Coordinator; Special Education Preschool Program; 3017 E. 31st St; Minneapolis, MN 55406-2093. (612) 721-5007.

**PROJECT** PROJECT SUCCESS FOR THE SLD CHILD

A prescriptive program and classroom delivery system for pupils in grades 1-4 with specific language disabilities.

**target audience** Approved by JDRP for pupils grades 1-4 with specific language disabilities. This program has been used in other settings with grades K and 5-9, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** Project Success for the SLD Child provides a prescriptive program and classroom delivery system operating in three areas: a structural linguistic language program with a multisensory approach integrates all aspects of language -- reading, writing, speaking, and listening; motor perception training and adaptive physical education emphasize the relation of movement to learning in areas of muscular strength, dynamic balance, body awareness, spatial awareness, and temporal awareness to develop the capacity to make efficient and effective use of the body; and technique modification in other curriculum areas allows SLD students to capitalize on strong modalities. This individualized learning program keeps the child functioning in an adequate manner within the educational mainstream.

**evidence of effectiveness** A copy of our validation report is available upon request. Project Success was evaluated for five years. Each project objective was tested.

**implementation requirements** Implementation varies depending upon the needs of the adopting school and the outcomes desired. As a mainstream approach, no additional staff are needed. Training of teachers using the project takes approximately 25 hours. Project Success Adoption Manual defines the adoption process for different kinds of adoptions.

**financial requirements** Cost varies with kind of adoption desired, level of adoption, number of students included, and materials already owned by the school.

**services available** Awareness materials are available at no cost. Visitors are welcome at project site during school year by appointment. Project staff are available to attend out-of-state awareness meetings (expenses must be paid). Training is provided at project site (adopter pays only its own costs). Training is also conducted at adopter site (expenses must be paid).

**contact** Richard Metteer, Director; Project Success; Wayne Middle School; 312 Douglas; Wayne, NB 68787. (402) 375-2230.



**PROJECT**

PROJECT SUCCESS: Handicapped

Low-cost phonics program for handicapped elementary school students.

**target audience**

Approved by JDRP for children with reading difficulties, grades K-6.

**description**

Project Success: Handicapped provides instructional service to handicapped students within a fully integrated educational program. A learning specialist works as a staff member in each of the home district's four elementary schools, assisting regular program staff in identifying and serving handicapped students. Handicapped students are given instructional and/or motivational assistance by peers, high school tutors, aides, or parents using specially designed phonics instructional packets.

The intensive use of nonprofessional personnel for service delivery requires a systematic approach to training. Each volunteer participant must demonstrate competency in the use of assistance program training packets. Direct instruction training procedures include modeling for these personnel during training and direct observation in the classroom.

**evidence of effectiveness**

Standardized test evaluation (Wide Range Achievement Test) in each of three years of operation indicated that participating students made statistically significant gains beyond expected normal grade equivalent growth per month during treatment period.

**implementation requirements**

One hour per day per group of 10 tutors.

**financial requirements**

Start-up cost averaged \$30 per pupil. Replacement costs for consumable items are approximately \$37.50 for 10 students per year.

**services available**

Awareness materials are available. Visitors are welcome by appointment. Training may be conducted at the project site (adopting site must cover all trainer costs as well as its own costs). Training may be conducted out of state (exemplary project staff costs must be paid). Project staff may be able to attend out-of-state conferences (expenses must be paid).

**contact**

Ronald Smith, Director of Special Services; North Kitsap School District No. 400; 150 High School Road South; Poulsbo, WA 98370. (206) 779-3971.

SECTION B-11: ARTS/COMMUNICATION/TECHNOLOGY\*

C.A.R.E. (CORRELATING ART AND READING ESSENTIALS) -- Florida . . . . .B-11.3  
COMMUNICATION ARTS AND SCIENCE TRAINING (Project CAST) -- New Jersey . . . . .B-11.4

See Sectional Cross-Reference Index, p. D-9, for related programs.

**PROJECT** C.A.R.E. (CORRELATING ART AND READING ESSENTIALS)

A curriculum that combines various art skills with a language experience approach to pre-reading instruction.

**target audience** Approved by JDRP for all students in kindergarten.

**description** CARE is a systematic preservice and inservice program that develops teacher competencies to improve art and language skills for their students and a coordinated art and language development program for kindergarten children. The CARE units combine multi-media art activities with the pre-reading concepts of color, shape, line, texture, form, and facial expression. By producing original art, and observing and describing art, children develop concept formation, oral language facility, and comprehension skills. The skills and materials unit which is taught first introduces the art tools and materials that will be used throughout the year and provides the opportunity for children to develop the manipulative art skills required for successful completion of the remaining units. The other six units are Texture, Shape, Color, Line, Facial Expression, and Form. They can be taught in any order, making the program flexible enough to integrate with on-going classroom curricula. Each unit provides an overview, step-by-step instructions for unit use, a list of necessary materials and supplies, a variety of methods for introducing the unit concept, a set of sequenced lessons, and a resource list. The teacher's manual contains guidelines for questioning and discussion techniques that are incorporated into each lesson. Art prints, illustrated story books, slides, and posters also accompany each unit. A unit assessment test is administered upon completion of a sequenced lesson plan. Alternative lessons are then given to those students who fail to master the concepts as indicated by unit assessment.

**evidence of effectiveness** Statistically, CARE has shown that all kindergarten children can significantly improve their knowledge of basic art and pre-reasoning concepts and the expression of these concepts in oral language. The test utilized was the CARE Kindergarten Test of Basic Concepts and Language Facility (KTBCLF) which is a locally developed criterion-referenced test.

**implementation requirements** The CARE program requires no additional staffing. It is constructed for the regular classroom teacher. Since each CARE lesson has been tested and re-tested to ensure feasibility and ease of use, no special art expertise is needed. Under a teacher's supervision, the CARE materials may be implemented by an aide, assistant, or parent volunteer. No district level staffing is necessary, and minimum school level supervision is required. The program can be performed successfully by the teacher with no outside assistance after the initial inservice training. One- to two-day inservice training is required that is designed to acquaint the teacher with the CARE program and to develop those skills which are needed to implement the program.

**financial requirements** Provisions must be made for all CARE teachers to participate in the inservice training. This might be accomplished through paid summer workshops or during the preservice or inservice days. The on-site program manager must have one copy of the Manager Handbook (\$3). If local personnel conduct the inservice training, the Workshop Guide (\$92) will be required. All program teachers will require the CARE Kindergarten Curriculum components (\$75) as well as the eight color art reproductions (\$26.40). An optional component is the pre-post assessment, the CARE Kindergarten Test of Basic Concepts and Language Facility (\$4).

**services available** Awareness materials are available at no cost. Project-trained certified trainers are available on a contracted basis to provide inservice on-site training (adopter pays all costs).

**contact** Diane Johnson, Disseminator; Project CARE; c/o Leon County School Board; 2757 W. Pensacola St.; Tallahassee, FL 32304. (904) 487-2630.

**PROJECT** COMMUNICATION ARTS AND SCIENCE TRAINING (Project CAST)

A two-year program combining English instruction with television production techniques.

**target audience** Approved by JDRP for students in grades 9-12.

**description** As a comprehensive interdisciplinary program that gives high school students an opportunity to learn skills in television communication, CAST offers both formal classroom instruction in language arts and practical television studio production.

The Communication Sciences, or technological component of the CAST curriculum, provides students with extensive television experience. This includes "hands on" activities covering overall television productions. Skills development areas include utilization and operation of the television camera and the production switcher as well as audio components, videotape recording, lighting, editing of both audio and video, set design and construction, and other related television production operations. The Communications Arts portion is devoted to formal English instruction designed to enhance and reinforce Language Arts skills as used in the communications field. Areas of specialization include script writing techniques for producing news, documentary programs, interview programming, advertising, and marketing. In addition, various works of poetry, short stories, novels, and plays are read, interpreted, and evaluated as concerns their potential integration into television advertising, program ratings, multimedia productions, communications history, FCC license preparation, and film use in television. CAST students also participate in various school projects associated with telecommunications including Cable Television.

Indicative of its interdisciplinary characteristics, the CAST program encourages students and teachers to work closely with students and teachers in the Music, Art, Vocational, Business Education, Foreign Language, Social Studies, and English department in the mutual development of educationally oriented telecommunications projects.

**evidence of effectiveness** As a result of involvement in CAST, students developed extensive technical skills in TV communications. Seventy-eight percent were accepted into two- or four-year postsecondary schools where they will major in communications. CAST students showed a significant better record than the general high school population in terms of fewer suspensions, fewer dropouts, increased attendance, and improved grade-point average in academic studies.

**implementation requirements** The steps involved in implementing CAST are: Staff training in CAST Language Arts and Sciences Curriculum geared for telecommunications. Staff training in the technical skills and studio operations associated with television production and associated telecommunications projects. Selection of CAST students with the assistance of the guidance department and CAST staff, based on student interest and motivation in the program. Selection of CAST teachers to implement the program. Utilization of TV studio/laboratory and operation of instructional equipment recommended for the program. Use of prescribed print and non-print curriculum materials designed for the CAST program.

**financial requirements** The starting packet of instructional print materials can be purchased for \$150 with permission given to the adopting district to duplicate consumables. Instructional media units can be purchased for \$37 to \$72 per sound/slide set and \$47 per videotape. A "loan" arrangement covering all media materials can be established with adopting districts for cost of postage, handling, and insurance.

**services available** Extensive teacher training in curriculum implementation is available, as well as assistance in planning, developing, and utilizing cable television systems and TV program production. Orientation sessions are provided. Assessment of facilities, instructional equipment, equipment compatibility, and design. TV studio facility designing and equipment specification writing. Continuous follow-up in program implementation. Assistance in writing adoption grants for districts interested in adopting the CAST project.

**contact** Robert M. Petracco, Director; Project CAST; Union Township Board of Education; 2369 Morris Ave.; Union, NJ 07083. (201) 688-1200.

SECTION B-12: GIFTED AND TALENTED/HEALTH/PHYSICAL EDUCATION/SPECIAL INTERESTS\*

ATHLETIC HEALTH CARE AND TRAINING PROGRAM -- Washington. . . . .B-12.3

CHILD STUDY CENTER (CSC): A Validated Pupil Personnel Services Demonstration  
Project -- Florida . . . . .B-12.4

CURRICULUM FOR MEETING MODERN PROBLEMS (The New Model Me) -- Ohio. . . . .B-12.5

ETHICAL ISSUES IN DECISION MAKING -- New York. . . . .B-12.6

LEARNING FOR LIFE -- Massachusetts . . . . .B-12.7

the ME-ME DRUG PREVENTION EDUCATION PROGRAM -- Wisconsin . . . . .B-12.8

PHYSICAL EFFICIENCY AND CORRECTIVE PHYSICAL EDUCATION (PECPE) -- West Virginia . . .B-12.9

POSITIVE ALTERNATIVES TO STUDENT SUSPENSIONS (PASS): A Validated Pupil Personnel  
Services Demonstration Project -- Florida. . . . . B-12.10

PRIMARY GRADES HEALTH CURRICULUM PROJECT (PGHCP) -- California . . . . . B-12.11

project SCAT: Skills for Consumers Applied Today -- Florida. . . . . B-12.12

\*See Sectional Cross-Reference Index, p. D-9, for related programs.

**PROJECT** ATHLETIC HEALTH CARE AND TRAINING PROGRAM

A comprehensive health care system for athletic participants and staff.

**target audience** Approved by JDRP for high school athletics -- coaches, school nurses, and student trainers.

**description** Students, parents, and coaches who must initially cope with most of the injuries which occur in interscholastic sports have no training in athletic health care, injury prevention, and treatment. This program has adapted state-of-the-art sports medicine methods used at major universities to the high school level. The goal of the program is to enhance the health benefits of athletic interscholastic activities through reduction of risk and morbidity of injuries. Coaches will demonstrate a greater ability to recognize injuries and follow appropriate post-injury procedures, and participating schools will be knowledgeable in emergency preparedness and organized to manage health-related problems of athletics.

Several program-developed manuals accompany the program. The educational curriculum, part of a 27-hour training course, contains text, lectures, slides, charts, demonstrations, and videotapes for coaches and student trainers. The Student Trainer Supervisor's Manual provides guidelines for selecting, utilizing, and evaluating student trainers. The Assessment Manual provides standards and guidelines regarding staff training and athletic facilities. After an adopter completes a self-assessment, the project staff conducts a site visit and develops a corrective action plan for noted deficiencies. The Communications Manual explains the use of several forms which integrate and streamline record keeping to provide for coordinated communication between the health care team and parents and personal physician. These forms include Daily Injury Report, Athlete Injury Report, Training Room Treatment Log, Doctor's Sports Injury Report, and Master Daily Red Cross List. The Continuing Education Committee of the American College of Sports Medicine has endorsed this program's efforts.

**evidence of effectiveness** A 72-item cognitive test was developed for pre- and posttesting of coaches and student trainers. Checklists for equipment and supplies were developed as measurement instruments, and observations were made of pre-game warm-up and sideline activities. Daily Injury Report Forms and Case Study Profiles were also studied at experimental and control schools. The eight groups of coaches participating in the program had a percentage increase of 17.58% on the cognitive test, and the student trainers had an increase in test scoring of 21.51%. Using case study profiles participating schools demonstrated appropriate management of athletic injuries 95% of the time compared to 14% in control schools.

**implementation requirements** Written support from school administration and local medical community. Assessment of athletic program. Appointment of student trainer supervisor. A 27-hour training session for all coaches and seven to ten student trainers is required. Formation of a centralized training room. Institution of daily program procedures. Accurate record keeping.

**financial requirements** Adoption expenses within state are approximately \$8750; outside Washington state, \$10,000 per school. A training course is required for head and assistant coaches and student trainers, who serve 300-400 athletes for a start-up cost of \$25-30 per pupil. Consultation costs include assessment of current program, regular meetings to initiate functioning of daily procedures, recruitment of student trainers in a career day, and site visits for data collection for evaluation. Recurring-year costs are between \$1825-\$2500.

**services available** Awareness materials are available at no cost. Visitors are welcome by appointment at project site and additional demonstration sites in home state. Project staff are available to attend out-of-state awareness meetings (all expenses must be paid). Training is conducted at adoption site (travel, lodging, and consultation fee must be paid). Implementation and follow-up services are available (travel, lodging, and consultation fee must be paid). The figures quoted above include all costs (except travel and lodging costs) for training, implementation, follow-up, and evaluative services.

**contact** Dr. Stephen G. Rice; Athletic Health Care and Training Program; Division of Sports Medicine 6B-15; University of Washington; Seattle, WA 98195. (206) 543-1550 or 324-5116.

**PROJECT**

CHILD STUDY CENTER (CSC): A Validated Pupil Personnel Services Demonstration Project

A pupil services delivery system to assist children with learning problems to achieve gains in intellectual performance, basic skill acquisition, and personal/social functioning.

**target audience**

Approved by JDRP for children kindergarten through middle school who exhibit multiple symptoms associated with learning and/or social behavior problems.

**description**

Learning problems are often caused by a complex of factors. The CSC concept presumes that the solution to such problems lies in an interdisciplinary team approach that focuses on the whole child in a single referral setting. Such troubled children need to receive comprehensive, in-depth diagnostic and remedial services to become more effective and efficient learners. CSC embraces the disciplines of education, psychology, social work, and speech pathology and consults with medical and other community professions. The purpose is to provide the diagnostic, prescriptive, and consultative intervention necessary for these children to experience success. The diagnostic study encompasses intellectual, physical, social, familial, emotional, and communication factors affecting learning. The key ingredients for implementing this program are the exchange of information and the active cooperation among Center, school, home, and community resources.

Major activities of the Center include conducting an in-depth study of each child and developing composite diagnoses and prescriptions for remediation. The interdisciplinary Child Study Team has served as a model for staffing teams who develop Individualized Educational Plans (IEPs) for students with special needs.

(Child Study Center [CSC], Positive Alternatives to Suspensions [PASS], and Developmental Play [DP], all described in this catalog, are affiliate projects of the Pupil Personnel Services Demonstration Project, St. Petersburg, Florida.)

**evidence of effectiveness**

On posttest scores, participating children gained in intellectual functioning as measured by the Wechsler Intelligence Scale for Children; learning abilities as measured by the Detroit Tests of Learning Aptitude; reading achievement as measured by the Gilmore Oral Reading Test; and productive social/emotional behavior as measured by teacher and parent rating scales.

**implementation requirements**

The adopting district must have a minimum of four pupil services and exceptional student education personnel from different disciplines with a motivation to become an effective team for children with multifaceted learning problems. This potential Child Study Team must become familiar with the Child Study Manual.

**financial requirements**

The per-learner start-up costs of \$22.86 are one-time expenses computed on the projected number of students to be served during the first three years of operation. The per-learner monthly operational costs of \$42.21 include the salaries of all Center personnel. Adopters are encouraged to consider reallocating human resources to minimize financial expenditures.

**services available**

Awareness materials are available at no cost. Visitors are welcome by appointment. Project staff are available to attend out-of-state awareness meetings (expenses must be paid). Training is also conducted at adopter site (expenses must be paid).

**contact**

Ralph E. Bailey, Director; Pupil Personnel Services Demonstration Project; Euclid Center; 1015 Tenth Avenue North; St. Petersburg, FL 33705. (813) 822-0158 or 442-1171.

## **PROJECT**

CURRICULUM FOR MEETING MODERN PROBLEMS (The New Model Me)

A curriculum to help students understand the causes and consequences of behavior.

### **target audience**

Approved by JDRP for students of all ability levels in grades 9-12. This program has been used as a course in itself, to supplement existing courses, and with units selected as minicourses, but no evidence of effectiveness has been submitted to or approved by the Panel.

### **description**

The New Model Me is designed to help high school students deal with available alternative actions for solving personal problems and the short- and long-range consequences of these alternatives. It is a positive, preventive approach to the study of human behavior and aggression. The curriculum is flexible, appropriate for all students, and adaptable to student needs in a variety of school settings. It incorporates the "causal" approach to understanding human behavior, which requires that a person look beyond the surface manifestations of an event to consider its possible cause. Affective materials and activities constitute a substantial part of the program.

The curriculum includes a wide variety of activities and seeks to promote much student/teacher interaction. A reasonably nonjudgmental and flexible teacher who maintains an attitude of acceptance of young peoples' ideas and a willingness to listen to their opinions will be most effective with the curriculum.

The New Model Me basic texts are: a student book and a teacher manual that incorporates the student book. Units in the books are: Human Behavior, Controls, Real Self, Values, Response, and Change. The bibliography in the teacher manual suggests appropriate supplementary audiovisual materials and books.

Key Elements: a nonjudgmental, experiential classroom for discussing topics in the affective domain; incorporation of the causal approach to human behavior in the classroom; attainment of curriculum goals; and the following minimal instruction: initial in-depth instruction in Unit 1, subsequent instruction in portions of Units 2-6, and 45 classroom sessions per year (35-45 minutes per session).

### **evidence of effectiveness**

Evaluation data obtained in 1972-73 from experimental and control classrooms in a variety of socioeconomic settings showed student growth at the .05 level of significance on a project-developed cognitive test and on an attitude measure (Personal Orientation Inventory). Teacher growth was shown with the Minnesota Teacher Attitude Inventory. Analyses of student-teacher feedback forms indicated strong support of curriculum.

### **implementation requirements**

The program can be implemented by one or more teachers and/or counselors in a school. However, it is recommended that a corps of personnel (teachers, counselors, administrative decision makers) be involved in initial awareness, two-day training workshops, and follow-up activities. A typical classroom in which chairs can be moved for various activities is adequate. No special equipment is needed beyond that usually available in a secondary school.

### **financial requirements**

Cost per pupil the first year is approximately \$12 based on a student population of 300. This includes the cost of texts and inservice training. Continuation costs are minimal if student texts are reused.

### **services available**

Awareness materials are available at no cost. Visitors are welcome by appointment at project site. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is available at adopter site (costs to be negotiated). Implementation and follow-up services are available to adopters (costs to be negotiated).

### **contact**

John R. Rowe, Project Director; Lakewood Board of Education; 1470 Warren Rd.; Lakewood, OH 44107. (216) 529-4267 or (216) 521-6463.



**PROJECT** ETHICAL ISSUES IN DECISION MAKING

A program that uses Kohlberg's theory of cognitive moral development to promote the moral growth of high school students.

**target audience** Approved by JDRP for students in grades 10-12.

**description** This project has used Kohlberg's theory of cognitive moral development to design a high school Ethical Issues course and a governance model for alternative high schools. Kohlberg's theory identifies six stages of moral development, which are defined and measured by an individual's ability to reason about moral issues in conflict. Designed as a traditional semester elective, the Ethical Issues course can fit into any high school schedule. Cognitive moral development theory provides the structure and some content of the curriculum. Each unit centers on a set of moral issues. Each activity requires class discussion of a moral dilemma involving conflicting rights and duties in a given situation. To expose students to increasingly higher states of moral reasoning, units present increasingly complex dilemmas. Students read plays, novels, short stories, essays, and legal opinions; writing skills are emphasized. Kohlberg's theory is also the basis of the Just Community model for alternative schools, which uses a weekly community meeting to promote cognitive moral development. At these meetings, community and individual issues are discussed, their moral components are explored, rules are voted, and agreements are made on issues of fairness that affect the whole community. Leadership rotates through the community. Decisions of the community meeting are processed and issues are clarified at small-group advisee meetings. The Fairness Committee is another important structure of the model. Any teacher or student can bring someone before the committee to settle a grievance or solve the issues of fairness that inevitably arise in a high school. The committee identifies areas and issues within the school where teachers and students can mediate solutions to problems together, and it teaches skills necessary for that process.

**evidence of effectiveness** Students in the course increased their ability to differentiate more complex reasoning from simpler reasoning by more than one third of a standard deviation. The increase in moral reasoning ability of students at the alternative school was significantly greater than that of control group students in traditional classes.

**implementation requirements** For the Ethical Issues course minimal requirements would be for one teacher (preferably English or social studies) to be trained at Harvard University in the Institute for Moral Development during July. A thorough introduction to the theory and practice of cognitive moral development would enable this person to then return to their school and teach as many sections of the course as might be scheduled. A team of persons is preferable but one individual would suffice. Due to the complex nature of the Just Community School, it would be necessary to send a team of teachers and/or administrators to Harvard to be trained. Typical costs are approximately \$1,000 for tuition and \$500 for room and board and \$100 for books and materials.

**financial requirements** For the Ethical Issues Course, replicators would need the following: two Teacher's Guides @ \$50 each; 30 Student Handbooks @ \$10 each; films to accompany the course @ \$300 per semester (note that not all of these are required and some may be locally owned). Staffing costs can be met by reassignment of personnel.

**services available** Awareness materials are available free to potential replicators, and visitations may be arranged on an appointment basis. Availability of project staff to attend awareness sessions and to provide training services other than at Harvard may be arranged (costs are negotiable).

**contact** Judy B. Coddling; Scarsdale Public Schools; 45 Wayside Ln.; Scarsdale, NY 10583. (914) 723-5500, ext. 144 or 147.

**PROJECT** LEARNING FOR LIFE

Motivational, inventive nutrition/fitness curricula, with original materials for classroom, health, and physical education teachers.

**target audience** Approved by JDRP for students in grades 2 and 5.

**description** This imaginative and challenging elementary health program is designed to help children learn how to make informed, healthy choices about food and fitness. It is built on the conviction that early positive experience with good food and physical activity will lead to a life-long commitment to good health. There are two courses: an early elementary curriculum, *The Doofus Stories*, and an upper elementary curriculum, *From the Inside Out*. *The Doofus Stories* is a 10-week daily classroom program designed and tested for second grade but used for grades 1 and 3 as well. Its core is a whimsical and informative story read aloud by the teacher. The storybook is accompanied by 52 worksheets and numerous nutrition and fitness activities that take place in class, at home, and in physical education classes. *From the Inside Out* is a 16-week daily classroom program designed and tested for fifth grade but appropriate for sixth grade as well. Its core is a student book that presents up-to-date nutrition and fitness information interwoven with challenging and fun activities, interesting and unusual facts, and lively illustrations. The two courses complement each other without duplication. Each curriculum includes a teacher's guide and resource manual with more than 200 pages of activities, concepts, background information, worksheets, and annotated bibliographies. In addition to the student books and teacher's guides, each program also includes student worksheets, illustrated vocabulary cards, and posters.

**evidence of effectiveness** Project-developed knowledge tests were administered pre and post. The average increase in score for the project students was significantly larger than that of the control group. These gains were maintained over the next six months. Differences between the mean scores of boys and girls within each treatment group were not significant, implying that the curriculum was equally effective with both sexes. Controlling for reading ability still produced significant gains for project students in both grades; thus, students at all levels of reading ability can absorb and understand the material.

**implementation requirements** Both programs are designed to be implemented by individual classroom teachers, working together with physical education teachers where possible. The curricula are flexible and may be implemented in a variety of ways. They can be taught intensively in daily classes, spread throughout the year, or split between two grade levels. Training is not required but is useful for introducing the program. No special facilities are required.

**financial requirements** *The Doofus Stories* complete classroom set costs \$32.50 (large unit orders reduce the cost). Additional required, nonproject materials are \$7.50. The *From the Inside Out* student books range from \$5.95-\$7.50 depending on the number of students. The *Inside Out Teacher's Guide and Resource Manual* range from \$12.50-\$13.95 depending on the number of units purchased. Sample worksheets, word cards, and posters are also available at \$11.90-\$15.90 per classroom, depending on order size. A detailed price list of all curricula materials is available on request (prices are subject to change).

**services available** Awareness materials are available at no cost. Training, implementation, and follow-up services are available at adopter sites (costs to be negotiated).

**contact** Carol Bershad, Director of Dissemination; Learning for Life/MSH; 165 Allandale Rd.; Boston, MA 02130. (617) 524-7799.

**PROJECT** THE ME-ME DRUG PREVENTION EDUCATION PROGRAM

A drug prevention education program aimed at improving self-concepts.

**target audience** Approved by JDRP for public and nonpublic elementary school personnel (teachers, counselors, and administrators) who work with children in grades 1-6. This program has been adapted for use with children in kindergarten, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** The ME-ME Program was developed to improve those conditions that seemed to be common to most teenagers who abuse drugs and alcohol. These conditions were determined by talking with teenagers who had abused or who were still abusing drugs and alcohol. Common to most young people who abuse drugs are low feelings of self-worth and an inability to make decisions. The ME-ME Program is based on the premise that if these conditions can be improved, children will have less need to turn to drugs later on in life. A prevention program must start before the problem exists.

Elementary-level teachers are provided with strategies that encourage positive feelings between students and teacher. Drug information is taught in conjunction with children learning about themselves and how to make decisions. Children in the lower grades learn about Mr. Yuk and about who is qualified to give them medicines. In the upper grades, children learn about the difference between prescription and over-the-counter medicines. The materials are student-oriented and are compatible with all areas of the curriculum. The program contains activities that are unique to each grade level.

Training consists of a one-day training session conducted by project staff or designated trainers. Training not only provides teachers with the skills necessary to implement the program, but also makes them aware that their own feelings affect how they respond to students.

**evidence of effectiveness** Project evaluation completed June, 1975. Pre- and posttests were administered to students in experimental and control groups that had similar socioeconomic and geographic backgrounds and ability levels. If used as prescribed, the project has proven that it increases students' feelings of self-worth, decision-making ability, and factual knowledge about drugs. Discipline problems are fewer in classrooms where the program is being used.

**implementation requirements** Adopters must participate in training, use program activities weekly, and agree to the monitoring of activities used by teachers. Administrators must allow teachers time in their daily schedules for program activities. It is recommended that all grade-level teachers (1-6) from the adopting school implement the program.

**financial requirements** Cost of materials for adopters is \$31 per set.

**services available** Awareness materials are available at no cost. Sample packets are available at \$5 per packet. Visitors are welcome anytime by appointment at demonstration sites. Project staff are available to attend out-of-state awareness meetings (costs to be negotiated). Training is conducted only at adopter site (all expenses must be paid, including travel, lodging, meals, and material costs). Monitoring of program implementation is done throughout the first year.

**contact** Artie Kearney, Ph.D., Executive Director; ME-ME Inc.; 400 S. Linwood Ave; Appleton, WI 54911. (414) 735-0114.

**PROJECT**

PHYSICAL EFFICIENCY AND CORRECTIVE PHYSICAL EDUCATION (PECPE)

A program teaching the effects of proper exercise on the total functional capacity of the human organism.

**target audience**

Approved by JDRP for grade 7. This program has been used in other settings with grades 5-6 and 8-12, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description**

The importance of good physical health and its positive contribution to mental and emotional well-being is widely recognized and well documented by research. The philosophy underlying PECPE is that a scientifically planned program is more likely to improve physical health and conditioning than less-structured, traditional physical education programs.

PECPE seeks to add to an otherwise comprehensive physical education program components that will meet three important objectives: increased physical strength; an expanded range of motion for arms, legs, and hips; and improved cardiorespiratory efficiency.

All children, including mainstreamed special education students, are involved. During the initial orientation period, individual strength and endurance are assessed. Prescriptions are made to permit every student to perform at the optimal level.

Students spend three one-hour periods a week in exercises prescribed to meet program objectives. Each period begins with 15 stretching exercises, which aid in increasing the motion range of body joints and result in total muscle warm-up prior to performance of physical activity. Second, neuromuscular integration activities, which reveal the physical nature of students with respect to dynamic energy, flexibility, balance, and general body control, develop a high level of general motor educability. Next, to promote the simultaneous development of muscular strength and endurance, students complete an 11-station circuit on a multistation weight machine. Last, activities enhancing cardiovascular efficiency (running, jumping rope, rowing) are engaged in for five one-minute periods, with 30 seconds of rest between periods. Each student strives for a pulse rate of 180 beats per minute, considered optimal for the age group. An individual record card showing daily progress on these activities is maintained for each student.

**evidence of effectiveness**

In four and one-half months, treatment students showed greater gains in physical strength, physical range of motion, and cardiorespiratory efficiency than a control group. Gains were statistically significant.

**implementation requirements**

A multistation weight machine and an exercise room large enough to house it are required. Adopters must complete one day of training.

**financial requirements**

Equipment required costs roughly \$5,000 and can serve as many as 600 students. Training costs are reimbursed.

**services available**

Awareness materials are available at no cost. Visitors are welcome by appointment. Project staff are available to attend out-of-state awareness conferences (expenses must be paid). Training is conducted at project site. Training is also conducted at adopter site (project staff costs and expenses must be paid).

**contact**

Marvin R. Rexroad, Project Director; Jackson Junior High School; 34th St.; Vienna, WV 26105. (304) 295-4555.

**PROJECT**

POSITIVE ALTERNATIVES TO STUDENT SUSPENSIONS (PASS): A Validated Pupil Personnel Services Demonstration Project

A program that provides intervention strategies designed to prevent or minimize nonproductive social behavior in secondary students.

**target audience**

Approved by JDRP for students and personnel in secondary schools. Since many of the intervention strategies have a preventive focus, a cross section of students and personnel in project secondary schools are target participants.

**description**

Major activities of the PASS program include individual and group consultations that assist school faculties in developing techniques for dealing effectively with teenage students, affective education and personal development programs for students and teachers, time-out rooms managed by a teacher or paraprofessional where students talk out problems and complete academic assignments, individual and group counseling for students experiencing serious interpersonal confrontations, and counseling for parents.

"Staff Development for a Positive School" and "Communication Activities in the Regular Classroom" help students and teachers get to know and appreciate each other. "A Student's School Survival Course" and "Home Survival Course" help students with problems learn how to interact more effectively within their school and home environments.

**evidence of effectiveness**

Student suspensions in project schools decreased by about 30%, while in comparison schools they increased 10%. As a result of the success of the PASS program in pilot schools, it was expanded to all 12 high schools in the district. During the 1972-73 school year, student suspensions in Pinellas County declined while suspensions in many other districts increased. Data collected through 1975-76 show a similar trend.

**implementation requirements**

The psychologist, social worker, or counselor providing leadership needs an appropriate master's degree and must be proficient in planning and implementing staff-development programs as well as in providing direct services for students. He/she must be a skilled group leader able to learn how to conduct humanistic activities, survival courses, and encounter groups. The leader also provides training and consultation for the time-out room workers, who need at least a B.A. in one of the applied behavioral sciences and related experience or recent training in establishing helping relationships with youth.

**financial requirements**

Since use of additional equipment and materials is minimal, per-learner start-up cost for a three-year program is about \$1. Operational costs include salaries for a school psychologist and social worker for every four schools and a time-out room worker for each school. Per-learner monthly operational cost varies between \$3 and \$4.

**services available**

Awareness materials are available at no cost. Visitors are welcome at project site by appointment. Project staff are available to attend out-of-state awareness meetings (all expenses must be paid). Training is also available at adopter site. Implementation and follow-up services are available to adopters (all expenses must be paid).

**contact**

John C. Kackley, Supervisor/Consultant, or Ralph E. Bailey, Ph.D., Director; Project PASS; Pupil Personnel Services Demonstration Project; Euclid Center; 1015 Tenth Avenue North; St. Petersburg, FL 33705. (813) 823-6696, ext. 45.

**PROJECT** PRIMARY GRADES HEALTH CURRICULUM PROJECT (PGHCP)

A comprehensive health education program to teach children in grades K-3 about their senses, their bodies, and good health habits.

**target audience** Approved by JDRP for students in grades K-3.

**description** Like the School Health Curriculum Project, its companion program for students in grades 4-7, the PGHCP has been designed to assist children to make informed decisions about personal health practices. In the kindergarten unit, "Happiness Is Being Healthy," children are introduced to their five senses, feelings, caring for their health, and general health habits. The first-grade unit, "Super Me," expands on the senses of taste, touch, and smell and their roles in communicating information about personal and environmental health and explores self-concept development and individuality as well. The second-grade unit, "Sights and Sounds," emphasizes the emotions and methods of communication with regard to the senses of sight and hearing. In the third-grade unit, "The Body, Its Framework and Movement," students study the skeletal and muscular systems while exploring how the senses provide information about bodily functions and the ways in which health is influenced by the environment. The PGHCP program has seven components. The health content represents the body as a network of senses and feelings that interact with other body systems and require cultivation and care. Teaching/learning methods emphasize small-group learning centers and peer teaching, exploration of ideas through experiential activities, and the use of a wide variety of media aids and community health personnel and resources. The training program involves teachers, administrators, and other school personnel in active, participatory workshops. Community development activities involve school personnel, parents, health professionals, and the community. Other subject areas and skills, including reading, writing, arithmetic, art, and drama, are integrated into health-centered learning activities. A series of evaluation procedures and instruments measures the effectiveness of the program at each grade level.

**evidence of effectiveness** Data collected both in field test and longitudinal evaluations indicate that program participants at every grade level showed significant improvement ( $p < .01$ ) in health-related knowledge.

**implementation requirements** An implementation team is generally composed of 10 person: two classroom teachers from each grade level, the principal, and one or more support persons (school nurse, librarian, audiovisual coordinator, curriculum specialist). Members of this team receive training for the relevant grade level, perform PGHCP activities for the required length of time, use project-developed teaching materials, involve school administrators, parents, and representatives of community health organizations in the program, and offer a PGHCP training workshop for other staff after the first year.

**financial requirements** Training costs, which total approximately \$3,500, can be shared by as many as 10 teams (80 teachers, 10 principals, and 10 or more support persons). Nonconsumable instructional materials: kindergarten, \$806; grade 1, \$1,257; grade 2, \$1,386; grade 3, \$1,228. One set of instructional materials can be used by four classes at that grade level. Consumable instructional materials: approximately \$35 per classroom per year.

**services available** A variety of awareness materials, including a slide-tape, is available at no cost. A Project Facilitator has been appointed in each state to provide information and assistance. Visitors are welcome by appointment at operations management offices and many of the 440 schools in the 26 states where the program is being used. Training is provided during the summer months at various sites throughout the nation.

**contact** Kathleen Middleton, Director; Health Curriculum Projects; National Center for Health Education; 211 Sutter St., 4th Floor; San Francisco, CA 94108. (415) 781-6144.

**PROJECT** PROJECT SCAT: Skills for Consumers Applied Today

A consumer education program in health and money management for high school students.

**target audience** Approved by JDRP for students in grades 9-12. The program has also been used successfully in other settings with adult students, but no evidence of effectiveness has been submitted to or approved by the Panel.

**description** Each of the two one-semester courses developed by this project is designed to acquaint students with basic elements of our economic system and to help them to acquire the skills, concepts, and knowledge required to function as informed and wise consumers. Each course addresses six topics. "Health and the Consumer" deals with a balanced diet, food additives, food shopping, medical care, personal grooming, and product safety; "Money Management and the Consumer," with basic economic skills, budgeting, banking, credit, insurance, and taxes. Each topic is treated in a separate student Packaged Activities for Learning (PAL) booklet. Each student booklet is accompanied by a teacher PAL. Instructional materials for the 12 units include student booklets, teacher guides, and classroom aids. Student PALs, illustrated with project-developed cartoon-type characters, follow a uniform format, which consists of an introduction, vocabulary, content, and subjective and objective review questions. Teacher PALs contain content outlines; behavioral objectives; activities and suggested resources; instructional aids, including tests, activity sheets, film guides, and transparency masters; and answer keys. The project has also developed student competency tests for both courses, unit tests, transparency sets, and a teacher training manual that outlines course purposes and implementation possibilities.

**evidence of effectiveness** Multiple-choice tests were constructed for each module and administered pre and post for three years. For each of the three replications, data analysis showed that means of students receiving either Health or Money Management consumer education materials were greater than students who were not exposed to project materials. Treatment effect sizes were also significant.

**implementation requirements** No special implementation requirements exist. Reproducible project-developed materials may be used in separate, one-semester elective courses such as health and economics. A variety of student populations and teaching styles are appropriate. Adaptation of course materials to local needs is a feature of training for adopters. In addition, the teacher training manual makes it possible to implement the program without training requirements. Technical assistance and training are available upon request.

**financial requirements** Spiral-bound student booklets for each unit available at \$1.75-\$2.60\*; teacher guides in three-ring binders at \$3.95 per unit; transparency sets at \$7.50; set of 35 student tests at \$3.80-\$9.70\*; and a teacher training manual at \$1.80. Materials available from Panhandle Area Educational Cooperative, 411 West Boulevard, Chipley, FL 32428. Rights of duplication make it possible for one teacher to begin with an investment of only \$3.95, the cost of one teacher guide per unit. (\*Price varies according to topic.)

**services available** Awareness materials are available at no cost. Visitors may visit classes utilizing the program in semester classes. Cost for training is at adopter expense.

**contact** W. M. Ausherman, Director of Planning and Evaluation; Project SCAT; Osceola County School District; P.O. Box 1948; 401 N. Church; Kissimmee, FL 32741. (305) 847-3147.

**APPENDIXES**



EXEMPLARY PROJECTS APPROVED SINCE FALL 1981 EDITION

This list identifies projects that have been approved by the Joint Dissemination Review Panel since the 1981 edition of this catalog was compiled.

Athletic Health Care and Training Program B-12.3  
project BASE: Bilingual Alternative for Secondary Education C-3  
Calculator Math A-9.4  
CAMEL (Calculator Assisted Mathematics for Everyday Living) A-9.5  
C.A.R.E. (Correlating Art and Reading Essentials) B-11.3  
C.E.N.T.S. (Creative Economic Notions for Teachers and Students) B-6.3  
City As School (CAS) B-2.4  
project CLIMB: Coordinated Learning Integration - Middlesex Basics A-9.7  
project COFFEE (Cooperative Federation for Educational Experiences) A-11.3  
a Comprehensive Foundation Studies Program for the High Risk Student C-4  
Cranston's Comprehensive Reading Program K-12 A-9.12  
project DPI B-9.21  
Enriching The Curriculum (ETC) B-9.25  
project FAR (Freshman Attrition Reduction) A-2.4  
FASTT, Family And School Teaching Together B-10.6  
Ferguson-Florissant Writing Project A-9.14  
project Futureprint A-9.15  
Geology Is B-6.9  
Good Samaritan Diagnostic/Prescriptive Classroom for Handicapped Preschool Children B-10.7  
HOSTS Math: Help One Student To Succeed A-9.17  
I CAN Instructional Physical Education System B-10.8  
Individual Education Program in Physical Education (IEP/PE) B-10.9  
Individual Progress Program A-12.7  
Individualized Computer Assisted Remedial Reading Program (I CARE) B-9.37  
Individualized Prescriptive Arithmetic Skills System (I PASS) A-11.4  
Inservice Training in Developmental Therapy B-8.4  
Intercept: A Positive Alternative to Pupil Suspension Truancy, and Dropout B-2.10  
Jefferson County Adult Reading Program (JCARP) B-1.4  
KIDS KITS (Kids Interest Discovery Studies Kits) A-12.9  
project LEGAL (Law-related Education: Goals for American Leadership) B-6.11  
Marine Science Project: FOR SEA A-6.9  
MARRS: Mainstream Amplification Resource Room Study A-10.6  
Mathematics Achievement Program (MAP) B-9.42  
Merrimack Education Center CAI Project A-11.6  
Mount Vernon TV Reading and Communication B-9.45  
Muscogee Health Project (Health Through Science) A-12.10  
Packets to Assist Literacy (PALS) B-10.14  
Preparing for Tomorrow's World (PTW) B-6.13  
Reading Achievement Program (RAP) B-9.60  
a Regional Demonstration Program for Preschool Handicapped Children B-10.18  
Rose F. Kennedy Center - Community School District 8 Diagnostic Intervention Program  
B-10.19  
San Jose Nutrition Education Project (SJNEP) - Nutrition Through Science A-8.8  
Sci-Math A-6.10  
project SITE: Successful Inservice Through Turnkey Education A-8.9  
Stones and Bones, A Laboratory Approach to the Study of Biology, Modern Science, and  
Anthropology B-6.15  
Supplemental Instruction: Student Learning Center (SI) B-2.14  
TIPS: Teaching Individuals Positive Solutions/Teaching Individuals Protective Strategies  
A-7.4  
Title I Mathematics Computer Assisted Instruction (CAI) B-9.75  
Training for Turnabout Volunteers A-9.35  
Utilizing Computers in the Teaching of Secondary Mathematics A-11.8  
project ZOO: Zoo Opportunities Outreach B-6.17

Calculator Math A-9.4  
 CAMEL (Calculator Assisted Mathematics for Everyday Living) A-9.5  
 Cashflow Forecasting System B-7.5  
 Project COFFEE (Cooperative Federation for Educational Experiences) A-11.3  
 Communication Arts and Science Training (CAST) B-11.4  
 Computer-Assisted-Diagnostic-Prescriptive Program in Reading and Mathematics (CADPP) A-9.10  
 Computerized Pupil Attendance Accounting/Census System B-7.6  
 Computeronics: Gifted Child Project A-12.4  
 Demonstration Evaluation Center (CAM) A-7.3  
 HOSTS Math: Help One Student To Succeed A-9.17  
 HOSTS Reading: Help One Student To Succeed A-9.18  
 Individualized Computer Assisted Remedial Reading Program (I CARE) B-9.37  
 Individualized Prescriptive Arithmetic Skills System (I PASS) A-11.4  
 MARRS: Mainstream Amplification Resource Room Study A-10.6  
 Media Now A-11.5  
 Merrimack Education Center CAI Project A-11.6  
 Microcomputer-based Administrative Resources: Project Simu-School B-7.8  
 Migrant Student Record Transfer System (MSRTS)/a Computer Link Offering Variable Educational Records (CLOVER) A-3.4  
 Model Classrooms' Computerized Classroom Management System (CLASS) A-9.23  
 Mount Vernon TV Reading and Communication B-9.45  
 Title I Mathematics Computer Assisted Instruction (CAI) B-9.75  
 Utilizing Computers in the Teaching of Secondary Mathematics A-11.8

The projects listed below were approved by the Joint Dissemination Review Panel. They have performed exemplary work in improving educational opportunities, but their availability is now limited. They have either ceased operations at their original site or are able to handle requests for information only on an ad hoc basis.

I. Demonstration sites in operation; limited services may be available.

CRAM: Compensatory Reading and Mathematics Program

Winchester, Virginia

JDRP Approval: 5/23/79

JDRP Number: 79-16

Demonstration site may be visited; selected materials are available; contact: Esther Morrison; Frederick County School Board Annex; 3030 Valley Ave.; Winchester, VA 22601. (703) 667-8152.

Home Start

Waterloo, Iowa

JDRP Approval: 1/21/75

JDRP Number: 75-9

Tolleson, Arizona demonstration site may be visited, but no outreach services are available; contact: Virginia McNeel, Director of Migrant Programs; P.O. Box 278; Tolleson, AZ 85353. (602) 257-3870.

project Idea (A Program for Hearing-Impaired Infants)

Campbell, California

JDRP Approval: 6/3/75

JDRP Number: 74-44

Demonstration site may be visited, but no outreach services are available; contact: Marsha Haines; Coventry School; 1125 W. Campbell Ave.; Campbell, CA 95008. (408) 379-2580.

Medical Insurance: A Procedure for Instituting a Cost-Effective Program

Piscataway, New Jersey

JDRP Approval: 9/3/80

JDRP Number: 80-14

Demonstration site may be visited, but no outreach services are available; contact: John E. Carey, Director; Medical Insurance; Middlesex County Educational Services Commission; North Randolphville Rd.; Piscataway, NJ 08854. (201) 752-3321.

Pupil Transportation: A Procedure for Cooperative Purchase of Special Education Services

Piscataway, New Jersey

JDRP Approval: 9/3/80

JDRP Number: 80-15

Demonstration site may be visited, but no outreach services are available; contact: John E. Carey, Director; Pupil Transportation; Middlesex County Educational Services Commission; North Randolphville Rd.; Piscataway, NJ 08854. (201) 752-3321.

Re-Ed School of Kentucky

Louisville, Kentucky

JDRP Approval: 4/9/73

JDRP Number: 39

Demonstration site may be visited, but no outreach services are available; contact: Donald Alwes, Director; Re-Ed School; 1804 Bluegrass Ave.; Louisville, KY 40215. (502) 368-2591 or - 2592.

II. Demonstration sites no longer in operation; selected materials are available.

project BASE: Bilingual Alternative for Secondary Education

Miami, Florida

JDRP Approval: 4/21/82

JDRP Number: 82-1

Materials available through: Panhandle Area Educational Cooperative; 411 West Blvd.; Chipley, FL 32428. (904) 638-4131.

Dale Avenue Early Childhood Education Project

Cape May, New Jersey

JDRP Approval: 4/16/73

JDRP Number: 13

Contact: Helen B. Hanson; 319 Washington Street Mail; Cape May, NJ 08204. (609) 884-2092.

Directory of Representative Work Education Programs, 1972-73

Washington, D.C.

JDRP Approval: 3/16/78

JDRP Number: 49

Write: DHEW Publication OE-701701; Superintendent of Documents; Washington, D.C. 20402. \$2.95.

Elementary Metric Project

Bismark, North Dakota

JDRP Approval: 3/16/78

JDRP Number: 78-162

Contact: Project Director; Elementary Metric Project; 400 Avenue E. East; Bismark, ND 58501. (701) 255-1987.

Experience-Based Career Education (EBCE) -- Appalachia Educational Laboratory

Charleston, West Virginia

JDRP Approval: 5/7/75

JDRP Number: 75-22

Contact: Harold Henderson, Director; EBCE Program; Appalachia Educational Laboratory; P.O. Box 1348; Charleston, WV 25325. (304) 344-8371.

FAST: Functional Analysis Systems Training

Essexville, Michigan

JDRP Approval: 1/15/75

JDRP Number: 75-4

For FAST training booklets, contact: Herb Escott; Essexville-Hampton Public Schools; 303 Pine St.; Essexville, MI 48732. (517) 892-1527.

For FAST Solution Oriented Seminar Kits, contact: Sonja Tweedie, Region 6 Supplemental Center; Bay-Arenac Intermediate School District; 4228 Two Mile Rd.; Bay City, MI 48705. (517) 686-4410.

Flagstaff Remedial Reading Project (Title I)

Flagstaff, Arizona

JDRP Approval: 4/4-5/73

JDRP Number: 31

Contact: Lorraine Curry; Director of Elementary Curriculum; Flagstaff Public Schools; 701 N. Kendrick; Flagstaff, AZ 86001. (602) 774-8781, ext. 75.

Metrics Made Easy

Huntington Beach, CA

JDRP Approval: 7/11/79

JDRP Number: 79-31

Contact: Dan Moss, Project Director; Metrics Made Easy; Ocean View School District; 16940 "B" St.; Huntington Beach, CA 92647. (714) 846-7013.

II. Demonstration sites no longer in operation; selected materials are available (continued).

PA: Project Advocate -- Northwestern Illinois Association  
DeKalb, Illinois  
JDRP Approval: 7/24/75  
JDRP Number: 75-61  
Contact: Project Director; Project Advocate;  
Northwestern Illinois Association; 145 Fish  
Ave.; DeKalb, IL 60185. (815) 758-0636.

Predict I: Pre-kindergarten Education for the  
Disadvantaged Child -- Title I  
Cedar Rapids, Iowa  
JDRP Approval: 10/18/76  
JDRP Number: 76-101  
Contact: Arlene Thompson; Cedar Rapids Community  
Schools; 346 Second Avenue Southwest; Cedar  
Rapids, IA 52404. (319) 398-2111.

III. Demonstration sites no longer in operation; inquiries handled as time permits.

Early Childhood Education -- All Day Kindergarten  
Cincinnati, Ohio  
JDRP Approval: 2/26/74  
JDRP Number: 74-16  
Contact: Jane F. Pope, Project Director;  
Early Childhood Education -- All Day  
Kindergarten; Cincinnati Public Schools;  
230 E. Ninth St.; Cincinnati, OH 45202.  
(513) 369-4720.

the Fail Safe Continuum of Services for Learning  
Disabled Students  
Albuquerque, New Mexico  
JDRP Approval: 4/18/78  
JDRP Number: 78-171  
Contact: Daphne Rowden; Albuquerque Public  
Schools; North Area Office; 120 Woodland  
N.W.; Albuquerque, NM 87107. (505) 345-8531.

FEED: Facilitative Environment Encouraging  
Development  
Bloomington, Indiana  
JDRP Approval: 7/11/80  
JDRP Number: 80-12  
For available services contact: Susan Eklund;  
Institute for Child Study; Indiana University;  
Bloomington, IN 47405. (812) 337-1732.

project Learning Disabilities: Early  
Identification and Intervention  
New Orleans, Louisiana  
JDRP Approval: 4/19/73  
JDRP Number: 9  
Contact: Ruth Arnaud; Lafayette School;  
2424 Carrollton St.; New Orleans, LA 70118.  
(504) 865-1837.

Lincoln County Exemplary Project in Career Education  
Hamlin, West Virginia  
JDRP Approval: 12/13/73  
JDRP Number: 73-2  
Contact: Tom Miller, Program Director;  
Lincoln County Vocational-Technical Center;  
Box 437, Hamlin, WV 25523. (304) 824-5449.

Math Laboratories for Disadvantaged Students  
Honea Path, South Carolina  
JDRP Approval: 7/13/76  
JDRP Number: 76-88  
Contact: David Johnson, Assistant Super-  
intendent; Anderson County School District  
No. Two; P.O. Box R; Honea Path, SC 29654.  
(803) 369-7364.

National Migrant Interstate Project  
Little Rock, Arkansas  
JDRP Approval: 4/9/73  
JDRP Number: 24  
Contact: Louie Counts, Supervisor Migrant  
Education; Department of Education; National  
Migrant Interstate Project; Arch Ford Educa-  
tion Building; Little Rock, AR 72201.  
(501) 271-1853.

PAL: Pupils Advancing in Learning  
Denver, Colorado  
JDRP Approval: 4/4-5/73  
JDRP Number: 33  
Contact Cathy Wilsey, Title I Consultant;  
Adams County School District #12; 10290 N.  
Huron; Denver, CO 90221. (303) 451-8889.

Reading Improvement Program -- Secondary Schools  
Reading Laboratory  
Parkersburg, West Virginia  
JDRP Approval: 7/1/76  
JDRP Number: 76-84  
Contact: Darel K. Custer, Director; Wood County  
Schools; 1210 Thirteenth St.; Parkersburg, WV  
26101. (304) 422-8411.

IV. Demonstration sites no longer in operation; no inquiries can be handled.

APEC: America's Possible Energy Choices  
Rockford, Illinois  
JDRP Approval: 8/18/80  
JDRP Number: 80-18

Aprendemos En Dos Idiomas: Title VII Bilingual  
Program  
Corpus Christi, Texas  
JDRP Approval: 6/27/75  
JDRP Number: 75-56

a Comprehensive Foundation Studies Program  
for the High Risk Student  
Charleston, South Carolina  
JDRP Approval: 7/23/81  
JDRP Number: 81-17

Contract Learning for Educable Mentally  
Retarded Students  
Grand Rapids, Michigan  
JDRP Approval: 1/21/75  
JDRP Number: 75-11

DeKalb County Follow Through: A Direct Instruction  
Model  
Smithville, Tennessee  
JDRP Approval: 12/29/80  
JDRP Number: 80-50a

Developing Models for Special Education (DMSE)  
Monticello, Florida  
JDRP Approval: 3/16/79  
JDRP Number: 79-6

IV. Demonstration sites no longer in operation; no inquiries can be handled (continued).

Duval Consumer Education Curriculum  
Jacksonville, Florida  
JDRP Approval: 4/15/81  
JDRP Number: 80-44

Elmira Follow Through Project  
Elmira, New York  
JDRP Approval: 4/21/81  
JDRP Number: 77-156d

project Emerge: The Shop  
Dayton, Ohio  
JDRP Approval: 9/22/75  
JDRP Number: 75-1

The First Calculating and Reading Quest  
Oglala, South Dakota  
JDRP Approval: 4/4-5/73  
JDRP Number: 27

Florida Migratory Child Compensatory Program --  
Language Arts Tutorial Program  
Tallahassee, Florida  
JDRP Approval: 4/9/73  
JDRP Number: 21

Hawaii Basic Skills Remediation Project  
Hilo, Hawaii  
JDRP Approval: 10/18/74  
JDRP Number: 74-108

Hawaii English Program (HEP)  
Honolulu, Hawaii  
JDRP Approval: 4/29/74  
JDRP Number: 74-28

HEP/Project ALOHA (Allowing Learners Optimum  
Human Attainment): A Mainland Demonstration  
of the Hawaii English Program  
San Jose, California  
JDRP Approval: 4/29/74  
JDRP Number: 74-28

HIT: High Intensity Tutoring  
Highland Park, Michigan  
JDRP Approval: 1/8/74  
JDRP Number: 74-9

Lee County Follow Through: Mathemagenic Activities  
Program (MAP)  
Jonesville, Virginia  
JDRP Approval: 2/2/81  
JDRP Number: 80-51d

Model Learning Disabilities Systems (MLDS)  
University Park, Pennsylvania  
JDRP Approval: 3/23/77  
JDRP Number: 77-110

Pre-Kindergarten Prescriptive Teaching Program for  
Learning Disabled Children  
Fargo, North Dakota  
JDRP Approval: 2/25/75  
JDRP Number: 75-12

Project for the Severely Handicapped Child  
Miami, Florida  
JDRP Approval: 12/4/79  
JDRP Number: 79-29

project READ  
Pittsburgh, Pennsylvania  
JDRP Approval: 4/29/74  
JDRP Number: 74-30

Right to Read: Wilson Junior High School  
San Diego, California  
JDRP Approval: 3/25/74  
JDRP Number: 74-21

SDR: Systems Directed Reading  
Richardson, Texas  
JDRP Approval: 6/6/74  
JDRP Number: 74-83

project SMART (Success in Mathematics Through  
Aural Reading Techniques)  
Daytona Beach, Florida  
JDRP Approval: 12/6/74  
JDRP Number: 74-90

South Douglas County Early Childhood Education  
Project  
Myrtle Creek, Oregon  
JDRP Approval: 4/29/75  
JDRP Number: 74-113

St. John Valley Bilingual Education Program  
Madawaska, Maine  
JDRP Approval: 6/24/75  
JDRP Number: 75-54

project Success Environment: A Contingency  
Management Approach to Classroom Improvement  
Atlanta, Georgia  
JDRP Approval: 4/4-5/73  
JDRP Number: 5  
(Information and technical assistance will  
again be available when new training sites  
are operating.)

project Talent Development  
Miami, Florida  
JDRP Approval: 9/22/75  
JDRP Number: 75-70

Title I Remedial Reading Program  
Fort Lauderdale, Florida  
JDRP Approval: 8/21/74  
JDRP Number: 74-89

Topeka Outdoor-Environmental Education Project  
Topeka, Kansas  
JDRP Approval: 5/6/75  
JDRP Number: 75-15

## ESEA TITLE I EXEMPLARY PROJECTS

The following list of exemplary projects is provided for the convenience of those who are looking for projects developed with Title I funds. ESEA Title I has been replaced with ECIA, Chapter I. Each project is described on the catalog page indicated.

### ALABAMA

Baptist Hill Kindergarten B-5.5  
Chapter I ECIA Preschool B-5.7  
Improvement of Basic Reading Skills B-9.35

### ARIZONA

Catch Up - Keep Up B-9.10  
Flagstaff Remedial Reading Project (Title I) C-3  
Migrant Student Record Transfer System (MSRTS)/a Computer Link Offering Variable Educational Records (CLOVER)\* A-3.4  
National Migrant Interstate Project\* C-4

### CALIFORNIA

California Migrant Teacher Assistant Corps: California Mini-Corps\* A-8.3  
project Catch-Up A-9.6

### COLORADO

a Classroom Team Approach B-9.15  
PAL: Pupils Advancing in Learning C-4  
PRIOR: PReschool and Improvement Of Reading B-9.53

### CONNECTICUT

IRIT: Intensive Reading Instructional Teams B-9.38

### FLORIDA

Florida Migratory Child Compensatory Program -- Language Arts Tutorial Program\* C-5  
Title I Remedial Reading Program C-5

### GEORGIA

Reading/English Rotation Project A-9.30  
Reading -- Individualized Remedial Laboratories/Math -- Individualized Remediation B-9.62

### HAWAII

Hawaii Basic Skills Remediation Project C-5

### ILLINOIS

Child-Parent Centers Activity (CPC) B-5.9  
project Conquest B-9.17  
Early Prevention of School Failure Migrant Program (For Spanish- and English-Speaking Children)\* B-3.6

### IOWA

Chapter I Reading, Grades 2-6 B-9.12  
PREDICT-I: Pre-kindergarten Education for the Disadvantaged Child -- Title I C-4  
Title I Compensatory Mathematics Program B-9.73  
Title I Compensatory Reading Program B-9.74

### KANSAS

Team Oriented Corrective Reading (TOCR) B-9.70

\*Migrant Education Projects

**LOUISIANA**

Every Student Every Day B-9.26  
Title I Mathematics Computer Assisted Instruction (CAI) B-9.75

**MASSACHUSETTS**

Enriching The Curriculum (ETC) B-9.25  
Merrimack Education Center CAI Project A-11.6  
project Understand: Arlington's Title I Program B-9.76

**MICHIGAN**

a Chance for Every Child B-9.11  
Discovery Through Reading B-9.20  
HIT: High Intensity Tutoring C-5  
NOMAD: Needs and Objectives for Migrant Advancement and Development\* B-3.8

**NEBRASKA**

ACE: Administrative Cooperative in Education B-7.3

**NEW HAMPSHIRE**

Basic Skills in Reading (BASK) B-9.7

**NEW JERSEY**

Criterion Reading Instruction Project (CRIP) B-9.18

**NEW YORK**

project CHILD: Comprehensive Help for Individual Learning Differences\* B-3.3  
Diagnostic Prescriptive Arithmetic (DPA) A-9.13  
Learning to Read Through the Arts Program A-9.22

**NORTH CAROLINA**

project Reading Improvement B-9.61

**OHIO**

Early Childhood Education -- All Day Kindergarten C-4

**OREGON**

Upstairs School B-9.77

**PENNSYLVANIA**

Mathematics Achievement Program (MAP) B-9.42  
project PRIDE: Professional Reading Instruction with Desirable Effects B-9.52  
Reading Achievement Program (RAP) B-9.60

**RHODE ISLAND**

Cranston's Comprehensive Reading Program K-12 A-9.12  
Reading Instruction and Pupil Personnel Services (RIPPS) B-9.63  
SEAPORT: Student Education Assuring Positive Organized Reading Techniques B-9.67

**UTAH**

Improving Achievement (Reading) Through Use of Teachers and Teacher Aides B-9.36  
Programed Tutorial Reading (A second site for this project is located in Bloomington,  
Indiana) B-9.54

**VIRGINIA**

Computer-Assisted-Diagnostic Prescriptive Program in Reading and Mathematics (CADPP)  
A-9.10

**WASHINGTON**

HOSTS Reading: Help One Student To Succeed A-9.18  
Individualized Bilingual Instruction (IBI) A-3.3  
Secondary Credit Exchange Program B-3.9

**WEST VIRGINIA**

Reading Improvement Program -- Secondary Schools Reading Laboratory C-4

**WISCONSIN**

Kenosha Model: Academic Improvement Through Language Experience A-9.21



## FOLLOW THROUGH PROJECTS

These Follow Through Projects have been approved by the Joint Dissemination Review Panel and may be designated as Follow Through Resource Centers by the Department of Education's Division of Follow Through. All Follow Through Resource Centers respond to inquiries, receive visitors, have descriptive materials, and offer training. Each program is described on the catalog page indicated.

### ARKANSAS

Flippin Follow Through: A Direct Instruction Model B-9.28

### CALIFORNIA

Oakland Unified School District Follow Through Program: Learning Through Literature  
B-5.27  
San Diego City Schools Follow Through Program: A Direct Instruction Model B-9.66  
Tulare Follow Through B-5.35

### COLORADO

Boulder Valley Public Schools Follow Through B-9.8

### CONNECTICUT

West Hills Follow Through Project B-9.79

### FLORIDA

project COAST: Cognitively Oriented Approach to Skills Teaching A-9.8

### DISTRICT OF COLUMBIA

Nichols Avenue Follow Through: A Direct Instruction Model B-9.46

### GEORGIA

"Games Children Play..." -- Atlanta Follow Through/Interdependent Learning Model B-9.29  
Pickens County Follow Through: Mathemagenic Activities Program (MAP) B-9.49

### HAWAII

Hawaii Follow Through Project B-9.33

### IDAHO

Pocatello Follow Through: Mathemagenic Activities Program (MAP) B-9.51

### ILLINOIS

East St. Louis Direct Instruction Follow Through B-5.17  
Waukegan Follow Through: Demonstration Resource Center B-5.37

### INDIANA

Indianapolis Follow Through Project B-5.22

### IOWA

Waterloo Follow Through: Adaptive Learning Environments Model B-5.36

### MASSACHUSETTS

Cambridge Follow Through B-9.9

### MICHIGAN

Flint Follow Through Direct Instruction Resource Center B-9.27

### MINNESOTA

BASIC: Basic Adaptable Skills for the Individual Child B-9.6

**MISSISSIPPI**

Gulfport Follow Through: Mathemagenic Activities Program (MAP) B-9.32  
LeFlore County (Mississippi) Follow Through Resource Center B-9.40

**MISSOURI**

Kansas City Follow Through Project: Resource Center B-5.23

**MONTANA**

Northern Cheyenne Follow Through Project B-5.26

**NEW HAMPSHIRE**

project REAL B-5.31

**NEW JERSEY**

Trenton Follow Through: Behavior Analysis Approach B-5.34

**NEW MEXICO**

East Las Vegas Follow Through: A Direct Instruction Model B-9.23

**NEW YORK**

Community School 6 Bronx Follow Through B-9.16  
Community School 77 Bronx Behavior Analysis Follow Through Resource Center B-5.13  
Elmira Follow Through Project C-5  
Follow Through Nongraded Learning Model: New York City/Hampton Institute B-5.19  
Plattsburgh Follow Through Program B-9.50  
Public School 33 Manhattan Follow Through Project: A Child Development Approach B-9.56  
Public School 92 Manhattan Follow Through B-9.57  
Public School School 137 Brooklyn Follow Through: A Direct Instruction Model B-9.58  
the Weeksville School/Bank Street College Follow Through Program B-5.38

**NORTH CAROLINA**

Cherokee Follow Through: A Direct Instruction Model B-9.13  
the Responsive Early Childhood Education Program (RECEP) B-9.65

**OHIO**

Akron Follow Through: Project SELF (Selected Educational Learning Fundamentals) B-5.4  
Dayton Direct Instruction Follow Through Resource Center B-9.19

**PENNSYLVANIA**

Philadelphia Follow Through Behavior Analysis Resource Center (BARC) B-9.48

**SOUTH CAROLINA**

McCormick Follow Through: Mathemagenic Activities Program (MAP) B-9.44  
Williamsburg County Follow Through: A Direct Instruction Model B-9.80

**TENNESSEE**

DeKalb County Follow Through: A Direct Instruction Model C-4

**TEXAS**

Corpus Christi Follow Through Bilingual Project B-3.5  
Uvalde Follow Through: A Direct Instruction Model B-9.78

**VIRGINIA**

Lee County Follow Through: Mathemagenic Activities Program (MAP) C-4  
Richmond (Virginia) Follow Through Resource Center B-5.32

**WEST VIRGINIA**

Randolph County Follow Through Program B-9.59

**OSE HANDICAPPED CHILDREN'S EARLY EDUCATION OUTREACH PROGRAMS**

The following programs are supported as Early Education Outreach Programs by the Department of Education's Office of Special Education. Further information may be found on the catalog pages indicated.

**GEORGIA**

Inservice Training in Developmental Therapy B-8.4  
the Rutland Center -- Developmental Therapy Model for Treating Emotionally Disturbed Children A-10.10

**ILLINOIS**

Macomb O-3 Regional Project: A Rural Child/Parent Service B-10.11  
PEECH: Precise Early Education for Children with Handicaps B-10.15  
Peoria O-3 Project -- Replication of an Interdisciplinary Approach to the Early Education of Handicapped Children Ages O-3 B-10.16

**MASSACHUSETTS**

ERIN: Early Recognition Intervention Network A-10.5

**MICHIGAN**

Cognitively Oriented Preschool Curriculum B-5.11

**NEW YORK**

a Regional Demonstration Program for Preschool Handicapped Children B-10.18  
Rose F. Kennedy Center -- Community School District 8 Diagnostic Intervention Program B-10.19

**OREGON**

Good Samaritan Diagnostic/Prescriptive Classroom for Handicapped Preschool Children B-10.7  
the Teaching Research Infant and Child Center Classroom for Moderately and Severely Handicapped Children A-10.13

**TEXAS**

DEBT (Developmental Education Birth Through Two) B-10.4  
a Program for Early Education of Children with Handicaps B-10.17

**UTAH**

MAPPS: Multi-Agency Project for PreSchoolers B-10.12  
project SKI\*HI A-10.11

**WASHINGTON**

Communication Programs B-5.12  
Programs for Children with Down's Syndrome B-5.30

**WISCONSIN**

Comprehensive Training Program for Infant and Young Cerebral Palsied Children (C.P. Project) B-5.15  
the Portage Project: A Home Approach to the Early Education of Handicapped Children A-5.7

**INDEXES**

EXEMPLARY PROJECTS  
by State

ALABAMA

Baptist Hill Kindergarten, Greenville B-5.5  
Chapter I ECIA Preschool, Bessemer B-5.7  
Improvement of Basic Reading Skills, Sylacauga B-9.35  
PEGASUS-PACE: Continuous Progress Reading Program: Personalized Educational Growth And  
Selective Utilization of Staff -- Personalized Approach to Continuous Education,  
Tuscaloosa A-9.26  
Talents Unlimited, Mobile A-12.15

ARIZONA

Arizona Consortium for Individualized Learning (ACIL), Mesa B-7.4  
Catch Up -- Keep Up, Tucson B-9.10  
Conceptually Oriented Mathematics Program (COMP), Mesa A-9.11  
Flagstaff Remedial Reading Project (Title I), Flagstaff C-3  
PEOPEL: Physical Education Opportunity Program for Exceptional-handicapped Learners,  
Phoenix A-12.12  
Pima County Career Guidance Project, Tucson B-4.15

ARKANSAS

project CAP: Boston Mountains Educational Cooperative's Career Awareness Program,  
Greenland A-4.3  
Flippin Follow Through: A Direct Instruction Model, Flippin B-9.28  
Migrant Student Record Transfer System (MRSTS)/a Computer Link Offering Variable  
Educational Records (CLOVER), Little Rock A-3.4  
National Migrant Interstate Project, Little Rock C-4

CALIFORNIA

Alphaphonics: Beginning Reading Program, South San Francisco A-9.3  
Calculator Math, San Francisco A-9.4  
California Migrant Teacher Assistant Corps: California Mini-Corps, Sacramento A-8.3  
Career Education Responsive to Every Student (CERES), Ceres B-4.4  
project Catch-Up, Newport Beach A-9.6  
the Child Development Center, Huntington Beach B-5.8  
project CLASS (Competency-based Live-Ability Skills), Clovis A-1.4  
project DPI, Long Beach B-9.21  
Effective Use of Time In Secondary Reading Classes, Mountain View A-8.4  
Experience-Based Career Education (EBCE) [Far West Laboratory (FWL)], San Francisco A-2.3  
Freestyle, Downey B-4.9  
project Futureprint, Ontario A-9.15  
HEP/Project ALOHA (Allowing Learners Optimum Human Attainment) A Mainland Demonstration of  
the Hawaii English Program, San Jose C-5  
project Idea (A Program for Hearing-Impaired Infants), Campbell C-3  
Learning to Read by Reading, Jamestown B-9.39  
Matching Attitudes and Talents to Career Horizons (MATCH), Ontario B-4.11  
Metrics Made Easy, Huntington Beach C-3  
Modification of Children's Oral Language, Palo Alto A-10.7  
Oakland Unified School District Follow Through Program: Learning Through Literature,  
Oakland B-5.27  
Primary Grades Health Curriculum Project (PGHCP), San Bruno B-12.11  
project R-3: Readiness, Relevancy and Reinforcement, San Jose A-9.29  
Right To Read: Wilson Junior High School, San Diego C-5  
San Diego City Schools Follow Through: A Direct Instruction Model, San Diego B-9.66  
San Jose Nutrition Education Project (SJNEP) - Nutrition Through Science, San Jose A-8.8  
School Health Curriculum Project (SHCP), San Bruno A-12.13  
SCORE: Success Controlled Optimal Reading Experience, South San Francisco B-10.20  
SIGMA: System for Individually Guiding Mastery Attainment, San Diego B-8.8  
Stones and Bones, A Laboratory Approach to the Study of Biology, Modern Science, and  
Anthropology, Van Nuys B-6.15  
Tulare Follow Through, Tulare B-5.35  
UCLA Allied Health Professions Publications, Los Angeles B-4.16

COLORADO

Added Dimensions to Parent and Preschool Education, Lakewood B-5.3  
Boulder Valley Public Schools Follow Through, Boulder B-9.8  
a Classroom Team Approach, Westminster B-9.15  
a Community Approach to Year-Round Education (Project C.A.Y.R.E.), Aurora B-2.5  
KIDS KITS (Kids Interest Discovery Studies Kits), Lakewood A-12.9  
PAL: Pupils Advancing in Learning, Denver C-4  
PRIOR: Preschool and Improvement Of Reading, Fort Collins B-9.53  
STAMM: Systematic Teaching And Measuring Mathematics, Lakewood A-9.32

**CONNECTICUT**

Higher Horizons 100, Hartford B-9.34  
IRIT: Intensive Reading Instructional Teams, Hartford, B-9.38  
MECCA: Make Every Child Capable of Achieving, Meriden B-5.25  
Public Schools of Choice: High School in the Community (HSC), New Haven B-2.11  
Sci-Math, New Britain A-6.10  
West Hills Follow Through Project, New Haven B-9.79

**DELAWARE**

project FAR (Freshman Attrition Reduction), Dover A-2.4

**DISTRICT OF COLUMBIA**

Career Education Resource Center Program (CERCP), Washington B-4.3  
Directory of Representative Work Education Programs, 1972-73, Washington C-3  
Nichols Avenue Follow Through: A Direct Instruction Model, Washington B-9.46

**FLORIDA**

project BASE (Bilingual Alternative for Secondary Education), Miami C-3  
CAMEL (Calculator Assisted Mathematics for Everyday Living), Daytona Beach A-9.5  
C.A.R.E. (Correlating Art and Reading Essentials), Tallahassee B-11.3  
Child Study Center (CSC): A Validated Pupil Personnel Services Demonstration Project, St. Petersburg B-12.4  
project COAST: Cognitively Oriented Approach to Skills Teaching, Fort Walton Beach A-9.8  
Computeronics: Gifted Child Project, Tallahassee A-12.4  
Curriculum Modification Through Environmental Studies: Environmental Studies Center, Jensen Beach B-6.4  
Developing Models for Special Education (DMSE), Monticello C-4  
Developmental Play (DP): A Validated Pupil Personnel Services Demonstration Project, St. Petersburg B-5.16  
Duval Consumer Education Curriculum, Jacksonville C-5  
Early Childhood Preventive Curriculum (ECPC), Miami B-9.22  
FASTT, Family and School Teaching Together, Tallahassee B-10.6  
Florida Migratory Child Compensatory Program -- Language Arts Tutorial Program, Tallahassee C-5  
Interactive Curricular Experience, Panama City B-10.10  
ISIS: Individualized Science Instructional System Dissemination Project, Tallahassee A-6.6  
Law Education Goals and Learnings (LEGAL), Miami B-6.10  
MARC: Multisensory Approach to Reading and Reading Readiness Curriculum, Crawfordville B-9.41  
New Adventure in Learning: Success Strategies for Reading and Language (NAIL), Tallahassee A-9.24  
Packets to Assist Literacy (PALS), Chipley B-10.14  
Positive Alternatives to Student Suspensions (PASS): A Validated Pupil Personnel Services Demonstration Project, St. Petersburg B-12.10  
Project for the Severely Handicapped Child, Miami C-5  
project SCAT: Skills for Consumers Applied Today, Kissimmee B-12.12  
School Volunteer Development Project, Miami A-9.31  
project SMART (Success in Mathematics Through Aural Reading Techniques), Daytona Beach, C-5  
project Talent Development, Miami C-5  
Title I Remedial Reading Program, Fort Lauderdale C-5  
Training for Turnabout Volunteers, Miami A-9.35

**GEORGIA**

EVERY CHILD A WINNER With Movement Education, Ocilla A-12.5  
"Games Children Play. . ." -- Atlanta Follow Through/Interdependent Learning Model, Atlanta B-9.29  
Inservice Training in Developmental Therapy, Athens B-8.4  
Muscoogee Health Project (Health Through Science), Columbus A-12.10  
Occupational and Career Development, Marietta B-4.12  
Pickens County Follow Through: Mathemagenic Activities Program (MAP), Jasper B-9.49  
Reading/English Rotation Project, Thomson A-9.30  
Reading -- Individualized Remedial Laboratories/Math -- Individualized Remediation, Albany B-9.62  
the Rutland Center -- Developmental Therapy Model for Treating Emotionally Disturbed Children, Athens A-10.10  
project Success Environment: A Contingency Management Approach to Classroom Improvement, Atlanta C-5

**HAWAII**

Foundational Approaches in Science Teaching, Honolulu B-6.8  
Hawaii Basic Skills Remediation Project, Hilo C-5  
Hawaii English Program (HEP), Honolulu C-5  
Hawaii Follow Through Project, Honolulu B-9.33

**IDAHO**

Pocatello Follow Through: Mathemagenic Activities Program (MAP), Pocatello B-9.51

**ILLINOIS**

APEC: America's Possible Energy Choices, Rockford C-4  
Child-Parent Centers Activity (CPC), Chicago B-5.9  
project Conquest, East St. Louis B-9.17  
Early Prevention of School Failure, Peotone A-5.4  
Early Prevention of School Failure Migrant Program (For Spanish- and English-Speaking Children), Peotone B-3.6  
East St. Louis Direct Instruction Follow Through, East St. Louis B-5.17  
the Environment and Technology Project, LaSalle B-6.6  
Geology Is, O'Fallon B-6.9  
Intensive Reading Improvement Program (IRIP), Chicago B-8.5  
Macomb 0-3 Regional Project: A Rural Child/Parent Service, Macomb B-10.11  
MARRS: Mainstream Amplification Resource Room Study, Norris City A-10.6  
Matteson Four-Dimensional Reading Program, Matteson B-9.43  
PA: Project Advocate -- Northwestern Illinois Association, DeKalb C-4  
PEECH: Precise Early Education for Children with Handicaps, Champaign B-10.15  
PEGASUS: Personalized Educational Growth and Achievement with Selective Utilization of Staff, Princeton B-9.47  
Peoria 0-3 Project -- Replication of an Interdisciplinary Approach to the Early Education of Handicapped Children Ages 0-3, Peoria B-10.16  
Positive Attitude Toward Learning (PATL), Bethalto A-8.7  
Pre-Algebra Development Centers, Chicago A-9.27  
Proviso Reading Model, Maywood A-9.28  
TALK: Teaching Activities for Language Knowledge, Rockford A-9.33  
Waukegan Follow Through Demonstration Resource Center, Waukegan B-5.37

**INDIANA**

FEED, Bloomington C-4  
Indianapolis Follow Through Project, Indianapolis B-5.22

**IOWA**

Chapter I Reading, Grades 2-6, Fort Dodge B-9.12  
project Discovery, Red Oak A-4.6  
Home Start, Waterloo C-3  
Media Now, Red Oak A-11.5  
Pilot Project Utilizing Supportive Personnel Using Behavior Modification Techniques with Articulatory Disordered Children, Burlington B-8.6  
PREDICT-1: Pre-kindergarten Education for the Disadvantaged Child -- Title I, Cedar Rapids C-4  
Title I Compensatory Mathematics Program, Des Moines B-9.73  
Title I Compensatory Reading Program, Des Moines B-9.74  
Waterloo Follow Through: Adaptive Learning Environments Model, Waterloo B-5.36

**KANSAS**

Diversified Educational Experiences Program (DEEP), Wichita B-2.6  
Team Oriented Corrective Reading (TOCR), Wichita B-9.72  
Topeka Outdoor-Environmental Education Project, Topeka C-5

**KENTUCKY**

Cashflow Forecasting System, Louisville B-7.5  
Computerized Pupil Attendance Accounting/Census System, Ashland B-7.6  
Jefferson County Adult Reading Program (JCARP), Louisville B-1.4  
RE-ED School of Kentucky, Louisville C-3

**LOUISIANA**

Every Student Every Day, Morgan City B-9.26  
project Learning Disabilities: Early Identification and Intervention, New Orleans C-4  
Title I Mathematics Computer Assisted Instruction (CAI), Lafayette B-9.75

**MAINE**

St. John Valley Bilingual Education Program, Madawaska C-5

**MARYLAND**

Student Team Learning: Intergroup Relations, Baltimore B-9.69  
Student Teams-Achievement Divisions (STAD): Language Arts, Baltimore B-9.70  
Teams-Games-Tournament (TGT), Baltimore A-9.34

**MASSACHUSETTS**

project Adventure, Hamilton A-6.3  
AIRS: Andover's Individualized Reading System, Andover B-9.5  
Cambridge Follow Through, Cambridge B-9.9  
project COFFEE (Cooperative Federation for Educational Experiences), Oxford A-11.3  
Enriching the Curriculum (ETC), Brookline B-9.25  
ERIN: Early Recognition Intervention Network, Dedham A-10.5  
Facing History and Ourselves: Holocaust and Human Behavior, Brookline B-6.7  
Learning for Life, Boston B-12.7  
Merrimack Education Center CAI Project, Chelmsford A-11.6  
project Understand: Arlington's Title I Program, Arlington B-9.76

**MICHIGAN**

project CDCC: Career Development Centered Curriculum, Coloma B-4.6  
a Chance for Every Child, Warren B-9.11  
Cognitively Oriented Preschool Curriculum, Ypsilanti B-5.11  
Contract Learning for Educable Mentally Retarded Students, Grand Rapids C-4  
Discovery Through Reading, Clarkston B-9.20  
FAST: Functional Analysis Systems Training, Essexville C-3  
Flint Follow Through Direct Instruction Resource Center, Flint B-9.27  
HIT: High Intensity Tutoring, Highland Park C-5  
I CAN Instructional Physical Education System, East Lansing, B-10.8  
NOMAD: Needs and Objectives for Migrant Advancement and Development, Lawrence B-3.8  
Parent Readiness Education Project (PREP), Redford A-5.5

**MINNESOTA**

BASIC: Basic Adaptable Skills for the Individual Child, Montevideo B-9.6  
Demonstration Evaluation Center (CAM), Hopkins A-7.3  
Family Oriented Structured Preschool Activity (Seton Hall Program), St. Cloud B-5.18  
Focus Dissemination Project, Hastings B-2.9  
Religion in Human Culture (RIHC), Minneapolis B-6.14  
project SHARE: Sharing High Yield Accountability with Resource Educators, Hendrum B-10.21  
Special Education Preschool Program, Minneapolis B-10.22  
St. Paul Open School, St. Paul B-2.13  
Systematic Instructional Management Strategies (SIMS), Minneapolis A-10.12  
Urban Arts Program, Minneapolis A-11.7  
VRP: Reading Power in the Content Areas (Vocational Reading Power), Minneapolis A-9.36  
WWAS: Women in World Area Studies, St. Louis Park B-6.16

**MISSISSIPPI**

Gulfport Follow Through: Mathemagenic Activities Program (MAP), Gulfport B-9.32  
LeFlore County (Mississippi) Follow Through Resource Center, Greenwood B-9.40

**MISSOURI**

Central Institute for the Deaf Early Education Project, St. Louis B-5.6  
Comprehensive School Mathematics Program (CSMP), St. Louis A-9.9  
Ferguson-Florissant Writing Project, Ferguson A-9.14  
Follow Through -- Portageville Unit, Portageville B-5.20  
Kansas City Follow Through Project: Resource Center, Kansas City B-5.23  
Parent-Child Early Education Program (Saturday School), Ferguson B-5.28  
Supplemental Instruction: Student Learning Center (SI), Kansas City B-2.14

**MONTANA**

Northern Cheyenne Follow Through Project, Lame Deer B-5.26  
Precision Teaching Project, Great Falls A-10.9

**NEBRASKA**

ACE: Administrative Cooperative in Education, Columbus B-7.3  
Engineered Classroom for Students Who Are Both Educably Mentally Handicapped and  
Behaviorally Maladjusted, Papillion B-10.5  
project Success for the SLD Child, Wayne B-10.23

**NEW HAMPSHIRE**

Basic Skills in Reading (BASK), Manchester B-9.7  
project REAL, Lebanon B-5.31



## NEW JERSEY

ACTIVE: All Children Totally Involved Exercising, Oakhurst A-10.3  
project CLIMB: Coordinated Learning Integration-Middlesex Basics, Middlesex A-9.7  
Communication Arts and Science Training (Project CAST), Union B-11.4  
the Communications Workshop (CWS), Teaneck B-10.3  
Criterion Reading Instruction Project (CRIP), Linden B-9.18  
Dale Avenue Early Childhood Education Project, Cape May C-3  
Educational Services for Schoolage Parents (ESSP), New Brunswick B-2.7  
ELSMERE Project, Glassboro A-10.4  
the Glassboro Right-To-Read Project, Glassboro B-9.30  
HEAR: Human Educational Awareness Resource, Princeton B-4.10  
Individualized Language Arts: Diagnosis, Prescription, and Evaluation, Weehawken A-9.19  
Institute for Creative Education, Sewell A-12.8  
Institute for Political and Legal Education (IPLE), Sewell A-6.5  
LearnCycle: Responsive Teaching, Teaneck A-8.6  
LEM: Learning Experience Module (Educational Management Design), Hackensack B-7.7  
Medical Insurance: A Procedure for Instituting a Cost-Effective Program, Piscataway C-3  
the New Jersey Writing Project, Monmouth Junction A-9.25  
Opening the Doors, Princeton B-4.14  
Perception+, Union A-5.6  
Pollution Control Education Center -- **Priority One: Environment**, Union B-6.12  
Preparing for Tomorrow's World (PTW), New Brunswick B-6.13  
Project Management Basic Principles and Techniques, Pine Hill B-8.7  
Pupil Transportation: A Procedure for Cooperative Purchase of Special Education Services,  
Piscataway C-3  
project Read-Write, Newark B-9.64  
Senior Elective Program, Rumson B-2.12  
Trenton Follow Through: Behavior Analysis Approach, Trenton B-5.34  
Utilizing Computers in the Teaching of Secondary Mathematics, Asbury Park A-11.8

## NEW MEXICO

East Las Vegas Follow Through: A Direct Instruction Model, Las Vegas B-9.23  
the Fail Safe Continuum of Services for Learning Disabled Students, Albuquerque C-4

## NEW YORK

project CHILD: Comprehensive Help for Individual Learning Differences, Geneseo B-3.3  
City As School, New York B-2.4  
Community School 6 Bronx Follow Through, Bronx B-9.16  
Community School 77 Bronx Behavior Analysis Follow Through Resource Center, Bronx B-5.13  
Diagnostic Prescriptive Arithmetic (DPA), Staten Island A-9.13  
ECOS Training Institute (ETI), Yorktown Heights B-8.3  
the Electric Company, New York B-9.24  
Elmira Follow Through Project, Elmira C-5  
Ethical Issues in Decision Making, Scarsdale B-12.6  
Follow Through Nongraded Learning Model: New York City/Hampton Institute, New York B-5.19  
Intercept: A Positive Alternative to Pupil Suspensions, Truancy, and Dropout, Ossining  
B-2.10  
Learning to Read Through the Arts, Brooklyn A-9.22  
project LEGAL (Law-related Education: Goals for American Leadership), Syracuse B-6.11  
MCHP/VIP: Mother-Child Home Program of the Verbal Interaction Project, Freeport B-5.24  
Mount Vernon TV Reading and Communication, Mount Vernon B-9.45  
New York State External High School Diploma Program (EDP), Syracuse B-1.5  
Plattsburgh Follow Through Program, Plattsburgh B-9.50  
Prevention of Learning Disabilities: An Interdisciplinary Model, New York B-5.29  
Public School 33 Manhattan Follow Through Project: A Child Development Approach, New York  
B-9.56  
Public School 92 Manhattan Follow Through, New York B-9.57  
Public School 137 Brooklyn Follow Through: A Direct Instruction Model, Brooklyn B-9.58  
a Regional Demonstration Program for Preschool Handicapped Children, Yorktown Heights  
B-10.18  
Rose F. Kennedy Center - Community School District 8 Diagnostic Intervention Program,  
Bronx B-10.19  
project SITE: Successful Inservice Through Turnkey Education, Staten Island A-8.9  
the Weeksville School/Bank Street College Follow Through Program, Brooklyn B-5.38

## NORTH CAROLINA

Cherokee Follow Through: A Direct Instruction Model, Cherokee B-9.13  
Ombudsman, Charlotte A-12.11  
project Reading Improvement, Burgaw B-9.61  
the Responsive Early Childhood Education Program (RECEP), Goldsboro B-9.65  
Sequential Physical Education Reform: The M-5 Project, Marion A-12.14  
project ZOO: Zoo Opportunities Outreach, Asheboro B-6.17

## NORTH DAKOTA

a Comprehensive Program for Handicapped Preschool Children and Their Families in Rural and  
Non-Urban Areas, Fargo B-5.14  
Elementary Metric Project, Bismarck C-3

Northwest Special Education (NWSE), Lignite B-10.13  
Pre-Kindergarten Prescriptive Teaching Program for Learning Disabled Children, Fargo C-5

#### OHIO

Akron Follow Through: Project SELF (Selected Educational Learning Fundamentals), Akron B-5.4  
Career Development Programs, Akron A-4.4  
Career Planning Support System, Columbus A-4.5  
Curriculum for Meeting Modern Problems (The New Model Me), Lakewood B-12.5  
Dayton Direct Instruction Follow Through Resource Center, Dayton B-9.19  
Early Childhood Education -- All Day Kindergarten, Cincinnati C-4  
project Emerge: The Shop, Dayton C-5  
project Instruct, Upper Arlington A-9.20

#### OKLAHOMA

"Go Metric": A Supplemental Low-Cost Metric Curriculum, Tulsa B-9.31  
Oklahoma Child Service Demonstration Center for Secondary LD Students, Cushing A-10.8  
project STAY: School To Aid Youth, Moore B-5.33

#### OREGON

Experience-Based Career Education (EBCE) [Northwest Regional Educational Laboratory], Portland B-2.8  
Good Samaritan Diagnostic/Prescriptive Classroom for Handicapped Preschool Children, Portland B-10.7  
South Douglas County Early Childhood Education Project, Myrtle Creek C-5  
a Systems Approach to Individualized Instruction (SAII), Grants Pass B-9.71  
Teaching Research Data Based Inservice Training, Monmouth A-8.10  
the Teaching Research Infant and Child Center Classroom for Moderately and Severely Handicapped Children, Monmouth A-10.13  
Upstairs School, Portland B-9.77

#### PENNSYLVANIA

Career Intern Program, Philadelphia B-4.5  
COPE: Cognitively Oriented Pre-Primary Experience, Philadelphia A-5.3  
Experience-Based Career Education (EBCE) [Research for Better Schools, Inc. (RBS)], Philadelphia B-4.8  
Individualized Computer Assisted Remedial Reading Program (I CARE), Schuylkill Haven B-9.37  
project KARE (Knowledgeable Action to Restore our Environment), Erdenheim A-6.7  
Mathematics Achievement Program (MAP), Chester B-9.42  
Model Learning Disabilities Systems (MLDS), University Park C-5  
Philadelphia Follow Through Behavior Analysis Resource Center (BARC), Philadelphia B-9.48  
project PRIDE: Professional Reading Instruction with Desirable Effects, Yeadon B-9.52  
project READ, Pittsburgh C-5  
Reading Achievement Program (RAP), Chester B-9.60

#### RHODE ISLAND

Alternate Learning Project (ALP), Providence B-2.3  
Cranston's Comprehensive Reading Program K-12, Cranston A-9.12  
Individualized Prescriptive Arithmetic Skills System (I PASS), Pawtucket A-11.4  
Reading Instruction and Pupil Personnel Services (RIPPS), Portsmouth B-9.63  
SEAPORT: Student Education Assuring Positive Organized Reading Techniques, Newport B-9.67

#### SOUTH CAROLINA

C.E.N.T.S. (Creative Economic Notions for Teachers and Students), Columbia B-6.3  
a Comprehensive Foundation Studies Program for the High Risk Student, Charleston C-4  
Individual Education Program in Physical Education (IEP/PE), Columbia B-10.9  
Math Laboratories for Disadvantaged Students, Honea Path C-4  
McCormick County Follow Through: Mathemagenic Activities Program (MAP), McCormick B-9.44  
Williamsburg County Follow Through: A Direct Instruction Model, Kingstree B-9.80

#### SOUTH DAKOTA

the First Calculating and Reading Quest, Oglala C-5

#### TENNESSEE

Clinch-Powell Educational Cooperative: Home-Based Early Childhood Education Program, Tazewell B-5.10  
DeKalb County Follow Through: A Direct Instruction Model, Smithville C-4

## TEXAS

Adult Performance Level Project (APL), Austin A-1.3  
Aprendemos en Dos Idiomas: Title VII Bilingual Program, Corpus Christi C-4  
Confluence of Cultures for an Affluent Tomorrow, Alice B-3.4  
Corpus Christi Follow Through Bilingual Project, Corpus Christi B-3.5  
DEBT (Developmental Education Birth through Two), Lubbock B-10.4  
Houston Independent School District Bilingual Programs, Houston B-3.7  
Law in a Changing Society (LCS), Dallas A-6.8  
Microcomputer-Based Administrative Resources: Project Simu-School, Dallas B-7.8  
a Program for Early Education of Children with Handicaps, Wichita Falls B-10.17  
SDR: Systems Directed Reading, Richardson C-5  
Uvalde Follow Through: A Direct Instruction Model, Uvalde B-9.78

## UTAH

Critical Analysis and Thinking Skills (CATS), Salt Lake City A-12.4  
Exemplary Center for Reading Instruction (ECRI), Salt Lake City A-8.5  
GEMS: Goal-based Educational Management System, Sandy A-9.16  
Improving Achievement (Reading) Through Use of Teachers and Teacher Aides, Logan B-9.36  
MAPPS: Multi-Agency Project for Pre-Schoolers, Logan B-10.12  
Programed Tutorial Reading, Farmington B-9.54  
project SKI\*HI, Logan A-10.11  
U-SAIL: Utah System Approach to Individualized Learning, Salt Lake City A-7.5

## VIRGINIA

Computer-Assisted-Diagnostic-Prescriptive Program in Reading and Mathematics (CADPP),  
Dillwyn A-9.10  
CRAM: Compensatory Reading And Mathematics Program, Winchester C-3  
FLIT: Functional Literacy, Alexandria B-1.3  
Lee County Follow Through: Mathemagenic Activities Program (MAP), Jonesville C-5  
Psychomotor Learnings for Academic Yields (Project PLAY), Bristol B-9.55  
Richmond (Virginia) Follow Through Resource Center, Richmond B-5.32  
TIPS: Teaching Individuals Positive Solutions/Teaching Individuals Protective Strategies,  
Charlottesville A-7.4

## WASHINGTON

Athletic Health Care and Training Program, Seattle B-12.3  
Classroom Intervention: Individualized Basic Skill Reading Program, Seattle B-9.14  
Communication Programs, Seattle B-5.12  
project ECOlogy (Environmental Career-Oriented Learning), Seattle B-6.5  
project Equality, Seattle A-4.7  
Have a Healthy Heart, Bellevue A-12.6  
project Home Base, Yakima B-5.21  
HOSTS Math: Help One Student To Succeed, Vancouver A-9.17  
HOSTS Reading: Help One Student To Succeed, Vancouver A-9.18  
Individual Progress Program, Seattle A-12.7  
Individualized Bilingual Instruction (IBI), Pasco A-3.3  
Marine Science Project: FOR SEA, Poulsbo A-6.9  
Model Classrooms' Computerized Classroom Management System (CLASS), Bellevue A-9.23  
Occupational Versatility (O.V.), Seattle B-4.13  
Programs for Children with Down's Syndrome, Seattle B-5.30  
Secondary Credit Exchange Program, Sunnyside B-3.9  
project Success: Handicapped, Poulsbo B-10.24

## WEST VIRGINIA

Experience-Based Career Education (EBCE) [Appalachia Educational Laboratory (AEL)],  
Charleston C-3  
Lincoln County Exemplary Project in Career Education, Hamlin C-4  
Physical Efficiency and Corrective Physical Education (PECPE), Vienna B-12.9  
Randolph County Follow Through Program, Elkins B-9.59  
Reading Improvement Program -- Secondary Schools Reading Laboratory, Parkersburg C-4

## WISCONSIN

Comprehensive Training Program for Infant and Young Cerebral Palsied Children (C.P.  
Project), Wauwatosa B-5.15  
Experience-Based Career Education (EBCE) -- Fond du Lac, Wisconsin, Fond du Lac B-4.7  
project I-C-E (Instruction-Curriculum-Environment), Green Bay A-6.4  
Kenosha Model: Academic Improvement Through Language Experience, Kenosha A-9.21  
the ME-ME Drug Prevention Education Program, Appleton B-12.8  
the Portage Project: A Home Approach to the Early Education of Handicapped Children,  
Portage A-5.7  
Strategies in Early Childhood Education, Waupum B-9.68

## SECTIONAL CROSS-REFERENCE INDEX

This catalog has been organized according to program content. However, some programs span several content categories. This Sectional Cross-Reference Index lists all programs under all appropriate headings.

### ADULT EDUCATION

Adult Performance Level Project (APL) A-1.3  
Alternate Learning Project (ALP) B-2.3  
project CLASS (Competency-based Live-Ability Skills) A-1.4  
Exemplary Center for Reading Instruction (ECRI) A-8.5  
FLIT: Functional Literacy B-1.3  
Jefferson County Adult Reading Program (JCARP) B-1.4  
Learning to Read by Reading B-9.39  
New York State External High School Diploma Program (EDP) B-1.5  
NOMAD: Needs and Objectives for Migrant Advancement and Development B-3.8

### ALTERNATIVE SCHOOLS/PROGRAMS

Adult Performance Level Project (APL) A-1.3  
project Adventure A-6.3  
Alternate Learning Project (ALP) B-2.3  
Career Intern Program B-4.5  
City As School (CAS) B-2.4  
project CLASS (Competency-based Live-Ability Skills) A-1.4  
the Communications Workshop (CWS) B-10.3  
a Community Approach to Year-Round Education (Project C.A.Y.R.E.) B-2.5  
Diversified Educational Experiences Program (DEEP) B-2.6  
Educational Services for Schoolage Parents (ESSP) B-2.7  
Experience-Based Career Education (EBCE) [Far West Laboratory] A-2.3  
Experience-Based Career Education (EBCE) [Northwest Regional Educational Laboratory] B-2.8  
project FAR (Freshman Attrition Reduction) A-2.4  
Focus Dissemination Project B-2.9  
Intercept: A Positive Alternative to Pupil Suspension, Truancy, and Dropout B-2.10  
New York State External High School Diploma Program (EDP) B-1.5  
Public Schools of Choice: High School in the Community (HSC) B-2.11  
Secondary Credit Exchange Program B-3.9  
Senior Elective Program B-2.12  
St. Paul Open School B-2.13  
Supplemental Instruction: Student Learning Center (SI) B-2.14  
Urban Arts Program A-11.7

### BILINGUAL/MIGRANT EDUCATION

California Migrant Teacher Assistant Corps: California Mini-Corps A-8.3  
project Catch-Up A-9.6  
project CHILD: Comprehensive Help for Individual Learning Differences B-3.3  
Confluence of Cultures for an Affluent Tomorrow B-3.4  
Corpus Christi Follow Through Bilingual Project B-3.5  
Early Prevention of School Failure A-5.4  
Early Prevention of School Failure Migrant Program (For Spanish- and English-Speaking Children) B-3.6  
Houston Independent School District Bilingual Programs B-3.7  
Individualized Bilingual Instruction (IBI) A-3.3  
Migrant Student Record Transfer System (MSRTS)/a Computer Link Offering Variable Educational Records (CLOVER) A-3.4  
Modification of Children's Oral Language A-10.7  
NOMAD: Needs and Objectives for Migrant Advancement and Development B-3.8  
Secondary Credit Exchange Program B-3.9

### CAREER/VOCATIONAL EDUCATION

project CAP: Boston Mountains Educational Cooperative's Career Awareness Program A-4.3  
Career Development Programs A-4.4  
Career Education Resource Center Program (CERCP) B-4.3  
Career Education Responsive to Every Student (CERES) B-4.4  
Career Intern Program B-4.5  
Career Planning Support System A-4.5  
project CDCC: Career Development Centered Curriculum B-4.6  
City As School (CAS) B-2.4  
project COFFEE (Cooperative Federation for Educational Experiences) A-11.3  
project Discovery A-4.6  
project ECOLOGY (Environmental Career-Oriented Learning) B-6.5  
ECOS Training Institute (ETI) B-8.3  
project Equality A-4.7  
Experience-Based Career Education (EBCE) [Far West Laboratory] A-2.3  
Experience-Based Career Education (EBCE) -- Fond du Lac, Wisconsin B-4.7  
Experience-Based Career Education (EBCE) [Northwest Regional Educational Laboratory] B-2.8  
Experience-Based Career Education (EBCE) [Research for Better Schools, Inc. (RBS)] B-4.8

FLIT: Functional Literacy B-1.3  
 Freestyle B-4.9  
 HEAR: Human Educational Awareness Resource B-4.10  
 Matching Attitudes and Talents to Career Horizons (MATCH) B-4.11  
 NOMAD: Needs and Objectives for Migrant Advancement and Development B-3.8  
 Occupational and Career Development B-4.12  
 Occupational Versatility (O.V.) B-4.13  
 Opening the Doors B-4.14  
 Pima County Career Guidance Project B-4.15  
 Public Schools of Choice: High School in the Community (HSC) B-2.11  
 project R-3: Readiness, Relevancy and Reinforcement A-9.29  
 UCLA Allied Health Professions Publications B-4.16  
 VRP: Reading Power in the Content Areas (Vocational Reading Power) A-9.36

#### EARLY CHILDHOOD/PARENT INVOLVEMENT

Added Dimensions to Parent and Preschool Education B-5.3  
 Akron Follow Through: Project SELF (Selected Educational Learning Fundamentals) B-5.4  
 Alphaphonics: Beginning Reading Program A-9.3  
 Baptist Hill Kindergarten B-5.5  
 Boulder Valley Public Schools Follow Through B-9.8  
 Cambridge Follow Through B-9.9  
 Central Institute for the Deaf Early Education Project B-5.6  
 Chapter I ECIA Preschool B-5.7  
 Cherokee Follow Through: A Direct Instruction Model B-9.13  
 the Child Development Center B-5.8  
 Child-Parent Centers Activity (CPC) B-5.9  
 Clinch-Powell Educational Cooperative: Home-Based Early Childhood Education Program B-5.10  
 project COAST: Cognitively Oriented Approach to Skills Teaching A-9.8  
 Cognitively Oriented Preschool Curriculum B-5.11  
 Communication Programs B-5.12  
 Community School 6 Bronx Follow Through B-9.16  
 Community School 77 Bronx Behavior Analysis Follow Through Resource Center B-5.13  
 a Comprehensive Program for Handicapped Preschool Children and Their Families in Rural and  
 Non-Urban Areas B-5.14  
 Comprehensive Training Program for Infant and Young Cerebral Palsied Children (C.P.)  
 Project) B-5.15  
 COPE: Cognitively Oriented Pre-Primary Experience A-5.3  
 Dayton Direct Instruction Follow Through Resource Center B-9.19  
 DEBT (Developmental Education Birth Through Two) B-10.4  
 Developmental Play (DP): A Validated Pupil Personnel Services Demonstration Project B-5.16  
 Early Childhood Preventive Curriculum (ECPC) B-9.22  
 Early Prevention of School Failure A-5.4  
 East Las Vegas Follow Through: A Direct Instruction Model B-9.23  
 East St. Louis Direct Instruction Follow Through B-5.17  
 ERIN: Early Recognition Intervention Network A-10.5  
 EVERY CHILD A WINNER With Movement Education A-12.5  
 Every Student Every Day B-9.26  
 Family Oriented Structured Preschool Activity (Seton Hall Program) B-5.18  
 FASTT, Family and School Teaching Together B-10.6  
 Flint Follow Through Direct Instruction Resource Center B-9.27  
 Flippin Follow Through: A Direct Instruction Model B-9.28  
 Follow Through Nongraded Learning Model: New York City/Hampton Institute B-5.19  
 Follow Through -- Portageville Unit B-5.20  
 "Games Children Play" -- Atlanta Follow Through/Interdependent Learning Model B-9.29  
 GEMS: Goal-based Educational Management System A-9.16  
 Gulfport Follow Through: Mathemagenic Activities Program (MAP) B-9.32  
 Hawaii Follow Through Project B-9.33  
 project Home Base B-5.21  
 Indianapolis Follow Through Project B-5.22  
 Individualized Bilingual Instruction (IBI) A-3.3  
 project Instruct A-9.20  
 Kansas City Follow Through Project: Resource Center B-5.23  
 LeFlore County (Mississippi) Follow Through Resource Center B-9.40  
 MARC: Multisensory Approach to Reading and Reading Readiness Curriculum B-9.41  
 McCormick County Follow Through: Mathemagenic Activities Program (MAP) B-9.44  
 MCHP/VIP: Mother-Child Home Program of the Verbal Interaction Project B-5.24  
 MECCA: Make Every Child Capable of Achieving B-5.25  
 Migrant Student Record Transfer System (MSRTS)/a Computer Link Offering Variable  
 Educational Records (CLOVER) A-3.4  
 Modification of Children's Oral Language A-10.7  
 New Adventure In Learning: Success Strategies for Reading and Language (NAIL) A-9.24  
 Nichols Avenue Follow Through: A Direct Instruction Model B-9.46  
 Northern Cheyenne Follow Through Project B-5.26  
 Oakland Unified School District Follow Through Program: Learning Through Literature B-5.27  
 Parent-Child Early Education Program (Saturday School) B-5.28  
 Parent Readiness Education Project (PREP) A-5.5  
 PEECH: Precise Early Education for Children with Handicaps B-10.15  
 Peoria 0-3 Project -- Replication of an Interdisciplinary Approach to the Early Education  
 of Handicapped Children Ages 0-3 B-10.16  
 Perception+ A-5.6  
 Philadelphia Follow Through Behavior Analysis Resource Center (BARC) B-9.48  
 Pickens County Follow Through: Mathemagenic Activities Program (MAP) B-9.49  
 Pima County Developmental Career Guidance Project B-4.15  
 Plattsburgh Follow Through Program B-9.50

Pocatello Follow Through: Mathemagenic Activities Program (MAP) B-9.51  
 the Portage Project: A Home Approach to the Early Education of Handicapped Children A-5.7  
 Prevention of Learning Disabilities: An Interdisciplinary Model B-5.29  
 PRIOR: Preschool and Improvement Of Reading B-9.53  
 a Program for Early Education of Children with Handicaps B-10.17  
 Programs for Children with Down's Syndrome B-5.30  
 Psychomotor Learnings for Academic Yields (Project PLAY) B-9.55  
 Public School 33 Manhattan Follow Through Project: A Child Development Approach B-9.56  
 Public School 92 Manhattan Follow Through B-9.57  
 Public School 137 Brooklyn Follow Through: A Direct Instruction Model B-9.58  
 Randolph County Follow Through Program B-9.59  
 project REAL B-5.31  
 the Responsive Early Childhood Education Program (RECEP) B-9.65  
 Richmond (Virginia) Follow Through Resource Center B-5.32  
 San Diego City Schools Follow Through: A Direct Instruction Model B-9.66  
 SEAPORT: Student Education Assuring Positive Organized Reading Techniques B-9.67  
 project SKI\*HI A-10.11  
 project STAY: School to Aid Youth B-5.33  
 Strategies in Early Childhood Education B-9.68  
 TALK: Teaching Activities for Language Knowledge A-9.33  
 the Teaching Research Infant and Child Center Classroom for Moderately and Severely  
 Handicapped Children A-10.13  
 Team Oriented Corrective Reading (TOCR) B-9.72  
 Trenton Follow Through: Behavior Analysis Approach B-5.34  
 Tulare Follow Through B-5.35  
 project Understand: Arlington's Title I Program B-9.76  
 Uvalde Follow Through: A Direct Instruction Model B-9.78  
 Waterloo Follow Through: Adaptive Learning Environments Model B-5.36  
 Waukegan Follow Through Demonstration Resource Center B-5.37  
 the Weeksville School/Bank Street College Follow Through Program B-5.38  
 West Hills Follow Through Project B-9.79  
 Williamsburg County Follow Through: A Direct Instruction Model B-9.80

#### **ENVIRONMENTAL EDUCATION/SCIENCE/SOCIAL SCIENCE**

project Adventure A-6.3  
 C.E.N.T.S. (Creative Economic Notions for Teachers and Students) B-6.3  
 Critical Analysis and Thinking Skills (CATS) A-12.4  
 Curriculum for Meeting Modern Problems (The New Model Me) B-12.5  
 Curriculum Modification Through Environmental Studies: Environmental Studies Center B-6.4  
 project ECOlogy (Environmental Career-Oriented Learning) B-6.5  
 ECOS Training Institute (ETI) B-8.3  
 the Environment and Technology Project B-6.6  
 Facing History and Ourselves: Holocaust and Human Behavior B-6.7  
 Foundational Approaches in Science Teaching B-6.8  
 Geology Is B-6.9  
 project I-C-E (Instruction-Curriculum-Environment) A-6.4  
 Institute for Political and Legal Education (IPLE) A-6.5  
 ISIS: Individualized Science Instructional System Dissemination Project A-6.6  
 project KARE (Knowledgeable Action to Restore our Environment) A-6.7  
 Law Education Goals and Learnings (LEGAL) B-6.10  
 Law in a Changing Society (LCS) A-6.8  
 project LEGAL (Law-related Education: Goals for American Leadership) B-6.11  
 Marine Science Project: FOR SEA A-6.9  
 Media Now A-11.5  
 Pollution Control Education Center -- Priority One: Environment B-6.12  
 Preparing for Tomorrow's World (PTW) B-6.13  
 project R-3: Readiness, Relevancy and Reinforcement A-9.29  
 Religion in Human Culture (RIHC) B-6.14  
 Sci-Math A-6.10  
 Stones and Bones, A Laboratory Approach to the Study of Biology, Modern Science, and  
 Anthropology B-6.15  
 WWAS: Women in World Area Studies B-6.16  
 project ZOO: Zoo Opportunities Outreach B-6.17

#### **ORGANIZATIONAL ARRANGEMENTS/ADMINISTRATION**

ACE: Administrative Cooperative in Education B-7.3  
 Alternate Learning Project (ALP) B-2.3  
 Arizona Consortium for Individualized Learning (ACIL) B-7.4  
 Cashflow Forecasting System B-7.5  
 Chapter I Reading, Grades 2-6 B-9.12  
 a Community Approach to Year-Round Education (Project C.A.Y.R.E.) B-2.5  
 Computerized Pupil Attendance Accounting/Census System B-7.6  
 Demonstration Evaluation Center (CAM) A-7.3  
 Diversified Educational Experiences Program (DEEP) B-2.6  
 GEMS: Goal-based Educational Management System A-9.16  
 HOSTS Reading: Help One Student To Succeed A-9.18  
 Improving Achievement (Reading) Through Use of Teachers and Teacher Aides B-9.36  
 LEM: Learning Experience Module (Educational Management Design) B-7.7  
 Microcomputer-based Administrative Resources: Project Simu-School B-7.8  
 PEGASUS: Personalized Educational Growth and Achievement with Selective Utilization of  
 Staff B-9.47

PEGASUS-PACE: Continuous Progress Reading Program: Personalized Educational Growth And Selective Utilization of Staff -- Personalized Approach to Continuous Education A-9.26

Programed Tutorial Reading B-9.54

Public Schools of Choice: High School in the Community (HSC) B-2.11

the Rutland Center -- Developmental Therapy Model for Treating Emotionally Disturbed Children A-10.10

School Volunteer Development Project A-9.31

Senior Elective Program B-2.12

Student Team Learning: Intergroup Relations B-9.69

TIPS: Teaching Individuals Positive Solutions/Teaching Individuals Protective Strategies A-7.4

Title I Mathematics Computer Assisted Instruction (CAI) B-9.75

Urban Arts Program A-11.7

U-SAIL: Utah System Approach to Individualized Learning A-7.5

#### **PRESERVICE/INSERVICE TRAINING**

ACTIVE: All Children Totally InVolved Exercising A-10.3

Arizona Consortium for Individualized Learning (ACIL) B-7.4

Athletic Health Care and Training Program B-12.3

California Migrant Teacher Assistant Corps: California Mini-Corps A-8.3

Developmental Play (DP): A Validated Pupil Personnel Services Demonstration Project B-5.16

ECOS Training Institute (ETI) B-8.3

Effective Use of Time in Secondary Reading Classes A-8.4

ERIN: Early Recognition Intervention Network A-10.5

Exemplary Center for Reading Instruction (ECRI) A-8.5

Ferguson-Florissant Writing Project A-9.14

Focus Dissemination Project B-2.9

Individualized Bilingual Instruction (IBI) A-3.3

Inservice Training in Developmental Therapy B-8.4

Intensive Reading Improvement Program (IRIP) B-8.5

Intercept: A Positive Alternative to Pupil Suspension, Truancy, and Dropout B-2.10

Learncycle: Responsive Teaching A-8.6

the New Jersey Writing Project A-9.25

Northwest Special Education (NWSE) B-10.13

Pilot Project Utilizing Supportive Personnel Using Behavior Modification Techniques with Articulatory Disordered Children B-8.6

Pima County Career Guidance Project B-4.15

Positive Alternatives to Student Suspensions (PASS): A Validated Pupil Personnel Services Demonstration Project B-12.10

Positive Attitude Toward Learning (PATL) A-8.7

Project Management Basic Principles and Techniques B-8.7

San Jose Nutrition Education Project (SJNEP) - Nutrition Through Science A-8.8

project SHARE: Sharing High Yield Accountability with Resource Educators B-10.20

SIGMA: System for Individually Guiding Mastery Attainment B-8.8

project SITE: Successful Inservice Through Turnkey Education A-8.9

Teaching Research Data Based Inservice Training A-8.10

VRP: Reading Power in the Content Areas (Vocational Reading Power) A-9.36

#### **READING/LANGUAGE ARTS/MATHEMATICS/WRITING**

ACE: Administrative Cooperative in Education B-7.3

AIRS: Andover's Individualized Reading System B-9.5

Akron Follow Through: Project SELF (Selected Educational Learning Fundamentals) B-5.4

Alphaphonics: Beginning Reading Program A-9.3

Arizona Consortium for Individualized Learning (ACIL) B-7.4

BASIC: Basic Adaptable Skills for the Individual Child B-9.6

Basic Skills in Reading (BASK) B-9.7

Boulder Valley Public Schools Follow Through Program B-9.8

Calculator Math A-9.4

Cambridge Follow Through B-9.9

CAMEL (Calculator Assisted Mathematics for Everyday Living) A-9.5

C.A.R.E. (Correlating Art and Reading Essentials) B-11.3

project Catch-Up A-9.6

Catch Up - Keep Up B-9.10

a Chance for Every Child B-9.11

Chapter I Reading, Grades 2-6 B-9.12

Cherokee Follow Through: A Direct Instruction Model B-9.13

Child-Parent Centers Activity (CPC) B-5.9

Classroom Intervention: Individualized Basic Skill Reading Program B-9.14

a Classroom Team Approach B-9.15

project CLIMB: Coordinated Learning Integration - Middlesex Basics A-9.7

project COAST: Cognitively Oriented Approach to Skills Teaching A-9.8

the Communications Workshop (CWS) B-10.3

Community School 6 Bronx Follow Through B-9.16

Community School 77 Bronx Behavior Analysis Follow Through Resource Center B-5.13

Comprehensive School Mathematics Program (CSMP) A-9.9

Computer-Assisted-Diagnostic-Prescriptive Program in Reading and Mathematics (CADPP)

A-9.10

Conceptually Oriented Mathematics Program (COMP) A-9.11

Confluence of Cultures for an Affluent Tomorrow B-3.4

project Conquest B-9.17

Corpus Christi Follow Through Bilingual Project B-3.5

Cranston's Comprehensive Reading Program K-12 A-9.12  
 Criterion Reading Instruction Project (CRIP) B-9.18  
 Dayton Direct Instruction Follow Through Resource Center B-9.19  
 Demonstration Evaluation Center (CAM) A-7.3  
 Diagnostic Prescriptive Arithmetic (DPA) A-9.13  
 Discovery Through Reading B-9.20  
 project DPI B-9.21  
 Early Childhood Preventive Curriculum (ECPC) B-9.22  
 East Las Vegas Follow Through: A Direct Instruction Model B-9.23  
 East St. Louis Direct Instruction Follow Through B-5.7  
 Effective Use of Time in Secondary Reading Classes A-8.4  
 the Electric Company B-9.24  
 Enriching the Curriculum (ETC) B-9.25  
 Every Student Every Day B-9.26  
 Exemplary Center for Reading Instruction (ECRI) A-8.5  
 FASTT, Family and School Teaching Together B-10.6  
 Ferguson-Florissant Writing Project A-9.14  
 Flint Follow Through Direct Instruction Resource Center B-9.27  
 Flippin Follow Through: A Direct Instruction Model B-9.28  
 FLIT: Functional Literacy B-1.3  
 Follow Through Nongraded Learning Model: New York City/Hampton Institute B-5.19  
 Follow Through -- Portageville Unit B-5.20  
 "Games Children Play" -- Atlanta Follow Through/Interdependent Learning Model B-9.29  
 project Futureprint A-9.15  
 GEMS: Goal-based Educational Management System A-9.16  
 the Glassboro Right-To-Read Project B-9.30  
 "Go Metric": A Supplemental Low-Cost Metric Curriculum B-9.31  
 Gulfport Follow Through: Mathemagenic Activities Program (MAP) B-9.32  
 Hawaii Follow Through Project B-9.33  
 Higher Horizons 100 B-9.34  
 HOSTS Math: Help One Student To Succeed A-9.17  
 HOSTS Reading: Help One Student To Succeed A-9.18  
 Improvement of Basic Reading Skills B-9.35  
 Improving Achievement (Reading) Through Use of Teachers and Teacher Aides B-9.36  
 Individual Progress Program A-12.7  
 Individualized Computer Assisted Remedial Reading Program (I CARE) B-9.37  
 Individualized Language Arts: Diagnosis, Prescription, and Evaluation A-9.19  
 Individualized Prescriptive Arithmetic Skills System (I PASS) A-11.4  
 project Instruct A-9.20  
 Intensive Reading Improvement Program (IRIP) B-8.5  
 IRIT: Intensive Reading Instructional Teams B-9.38  
 Kansas City Follow Through Project: Resource Center B-5.23  
 Kenosha Model: Academic Improvement Through Language Experience A-9.21  
 Learning to Read by Reading B-9.39  
 Learning to Read Through the Arts Program A-9.22  
 LeFlore County (Mississippi) Follow Through Resource Center B-9.40  
 LEM: Learning Experience Module (Educational Management Design) B-7.7  
 MARC: Multisensory Approach to Reading and Reading Readiness Curriculum B-9.41  
 Mathematics Achievement Program (MAP) B-9.42  
 Matteson Four-Dimensional Reading Program B-9.43  
 McCormick County Follow Through: Mathemagenic Activities Program (MAP) B-9.44  
 Merrimack Education Center CAI Project A-11.6  
 Migrant Student Record Transfer System (MSRTS)/a Computer Link Offering Variable  
 Educational Records (CLOVER) A-3.4  
 Model Classrooms' Computerized Classroom Management System (CLASS) A-9.23  
 Mount Vernon TV Reading and Communication B-9.45  
 New Adventure In Learning: Success Strategies for Reading and Language (NAIL) A-9.24  
 the New Jersey Writing Project A-9.25  
 Nichols Avenue Follow Through: A Direct Instruction Model B-9.46  
 Northern Cheyenne Follow Through Project B-5.26  
 Oakland Unified School District Follow Through Program: Learning Through Literature B-5.27  
 Oklahoma Child Service Demonstration Center for Secondary LD Students A-10.8  
 PEGASUS: Personalized Educational Growth and Achievement with Selective Utilization of  
 Staff B-9.47  
 PEGASUS-PACE: Continuous Progress Reading Program: Personalized Educational Growth And  
 Selective Utilization of Staff - Personalized Approach to Continuous Education A-9.26  
 Philadelphia Follow Through Behavior Analysis Resource Center (BARC) B-9.48  
 Pickens County Follow Through: Mathemagenic Activities Program (MAP) B-9.49  
 Plattsburgh Follow Through Program B-9.50  
 Pocatello Follow Through: Mathemagenic Activities Program (MAP) B-9.51  
 Pre-Algebra Development Centers A-9.27  
 Precision Teaching Project A-10.9  
 project PRIDE: Professional Reading Instruction with Desirable Effects B-9.52  
 PRIOR: PReschool and Improvement Of Reading B-9.53  
 Programed Tutorial Reading B-9.54  
 Proviso Reading Model A-9.28  
 Psychomotor Learnings for Academic Yields (Project PLAY) B-9.55  
 Public School 33 Manhattan Follow Through Project: A Child Development Approach B-9.56  
 Public School 92 Manhattan Follow Through B-9.57  
 Public School 137 Brooklyn Follow Through: A Direct Instruction Model B-9.58  
 project R-3: Readiness, Relevancy and Reinforcement A-9.29  
 Randolph County Follow Through Program B-9.59  
 Reading Achievement Program (RAP) B-9.60  
 Reading/English Rotation Project A-9.30  
 project Reading Improvement B-9.61  
 Reading -- Individualized Remedial Laboratories/Math -- Individualized Remediation B-9.62



Reading Instruction and Pupil Personnel Services (RIPPS) B-9.63  
 project Read-Write B-9.64  
 project REAL B-5.31  
 the Responsive Early Childhood Education Program (RECEP) B-9.65  
 Rose F. Kennedy Center -- Community School District 8 Diagnostic Intervention Program  
 B-10.19  
 San Diego City Schools Follow Through: A Direct Instruction Model B-9.66  
 School Volunteer Development Project A-9.31  
 Sci-Math A-6.10  
 SEAPORT: Student Education Assuring Positive Organized Reading Techniques B-9.67  
 project SHARE: Sharing High Yield Accountability with Resource Educators B-10.21  
 project SITE: Successful Inservice Through Turnkey Education A-8.9  
 project SKI\*HI A-10.11  
 STAMM: Systematic Teaching And Measuring Mathematics A-9.32  
 project STAY: School To Aid Youth B-5.33  
 Strategies in Early Childhood Education B-9.68  
 Student Team Learning: Intergroup Relations B-9.69  
 Student Teams-Achievement Divisions (STAD): Language Arts B-9.70  
 project Success: Handicapped B-10.24  
 Systematic Instructional Management Strategies (SIMS) A-10.12  
 a Systems Approach to Individualized Instruction (SAII) B-9.71  
 TALK: Teaching Activities for Language Knowledge A-9.33  
 Team Oriented Corrective Reading (TOCR) B-9.72  
 Teams-Games-Tournament (TGT) A-9.34  
 Title I Compensatory Mathematics Program B-9.73  
 Title I Compensatory Reading Program B-9.74  
 Title I Mathematics Computer Assisted Instruction (CAI) B-9.75  
 Training for Turnabout Volunteers A-9.35  
 Trenton Follow Through: Behavior Analysis Approach B-5.34  
 Tulare Follow Through B-5.35  
 project Understand: Arlington's Title I Program B-9.76  
 Upstairs School B-9.77  
 U-SAIL: Utah System Approach to Individualized Learning A-7.5  
 Utilizing Computers in the Teaching of Secondary Mathematics A-11.8  
 Uvalde Follow Through: A Direct Instruction Model B-9.78  
 VRP: Reading Power in the Content Areas (Vocational Reading Power) A-9.36  
 Waterloo Follow Through: Adaptive Learning Environments Model B-5.36  
 Waukegan Follow Through Demonstration Resource Center B-5.37  
 the Weeksville School/Bank Street College Follow Through Program B-5.38  
 West Hills Follow Through Project B-9.79  
 Williamsburg County Follow Through: A Direct Instruction Model B-9.80  
 project ZOO: Zoo Opportunities Outreach B-6.17

#### SPECIAL EDUCATION/LEARNING DISABILITIES

ACTIVE: All Children Totally InVolved Exercising A-10.3  
 project Catch-Up B-9.10  
 Central Institute for the Deaf Early Education Project B-5.6  
 the Child Development Center B-5.8  
 Child Study Center (CSC): A Validated Pupil Personnel Services Demonstration Project  
 B-12.4  
 City As School (CAS) B-2.4  
 Classroom Intervention: Individualized Basic Skill Reading Program B-9.14  
 Cognitively Oriented Preschool Curriculum B-5.11  
 Communication Programs B-5.12  
 the Communications Workshop (CWS) B-10.3  
 a Comprehensive Program for Handicapped Preschool Children and Their Families in Rural and  
 Non-Urban Areas B-5.14  
 Comprehensive Training Program for Infant and Young Cerebral Palsied Children (C.P.  
 Project) B-5.15  
 Conceptually Oriented Mathematics Program (COMP) A-9.11  
 COPE: Cognitively Oriented Pre-Primary Experience A-5.3  
 DEBT (Developmental Education Birth Through Two) B-10.4  
 Developmental Play (DP): A Validated Pupil Personnel Services Demonstration Project B-5.16  
 Diagnostic Prescriptive Arithmetic (DPA) A-9.13  
 Diversified Educational Experiences Program (DEEP) B-2.6  
 Early Childhood Preventive Curriculum (ECPC) B-9.22  
 Early Prevention of School Failure A-5.4  
 ELSMERE Project A-10.4  
 Engineered Classroom for Students Who Are Both Educably Mentally Handicapped and  
 Behaviorally Maladjusted B-10.5  
 ERIN: Early Recognition Intervention Network A-10.5  
 EVERY CHILD A WINNER With Movement Education A-12.5  
 Family Oriented Structured Preschool Activity (Seton Hall Program) B-5.18  
 FASST, Family And School Teaching Together B-10.6  
 Focus Dissemination Project B-2.9  
 Good Samaritan Diagnostic/Prescriptive Classroom for Handicapped Preschool Children B-10.7  
 project Home Base B-5.21  
 HOSTS Math: Help One Student To Succeed A-9.17  
 I CAN Instructional Physical Education System B-10.8  
 Individual Education Program in Physical Education (IEP/PE) B-10.9  
 project Instruct A-9.20  
 Interactive Curricular Experience B-10.10  
 Kansas City Follow Through Project: Resource Center B-5.23  
 Learnycle: Responsive Teaching A-8.6

Learning to Read by Reading B-9.39  
 Macomb 0-3 Regional Project: A Rural Child/Parent Service B-10.11  
 MAPPS: Multi-Agency Project for Pre-Schoolers B-10.12  
 MARC: Multisensory Approach to Reading and Reading Readiness Curriculum B-9.41  
 MARRS: Mainstream Amplification Resource Room Study A-10.6  
 MECCA: Make Every Child Capable of Achieving B-5.25  
 Modification of Children's Oral Language A-10.7  
 Mount Vernon TV Reading and Communication B-9.45  
 New Adventure In Learning: Success Strategies for Reading and Language (NAIL) A-9.24  
 Northwest Special Education (NWSE) B-10.13  
 Oklahoma Child Service Demonstration Center for Secondary LD Students A-10.8  
 Packets to Assist Literacy (PALS) B-10.14  
 Parent-Child Early Education Program (Saturday School) B-5.28  
 Parent Readiness Education Project (PREP) A-5.5  
 PEECH: Precise Early Education for Children with Handicaps B-10.15  
 PEOPEL: Physical Education Opportunity Program for Exceptional-handicapped Learners  
 A-12.12  
 Peoria 0-3 Project -- Replication of an Interdisciplinary Approach to the Early Education  
 of Handicapped Children Ages 0-3 B-10.16  
 Perception+ A-5.6  
 Pilot Project Utilizing Supportive Personnel Using Behavior Modification Techniques with  
 Articulatory Disordered Children B-8.6  
 the Portage Project: A Home Approach to the Early Education of Handicapped Children A-5.7  
 Positive Alternatives to Student Suspensions (PASS): A Validated Pupil Personnel Services  
 Demonstration Project B-12.10  
 Positive Attitude Toward Learning (PATL) A-8.7  
 Precision Teaching Project A-10.9  
 Prevention of Learning Disabilities: An Interdisciplinary Model B-5.29  
 a Program for Early Education of Children with Handicaps B-10.17  
 Programs for Children with Down's Syndrome B-5.30  
 Reading Achievement Program (RAP) B-9.60  
 a Regional Demonstration Program for Preschool Handicapped Children B-10.18  
 Rose F. Kennedy Center -- Community School District 8 Diagnostic Intervention Program  
 B-10.19  
 the Rutland Center -- Developmental Therapy Model for Treating Emotionally Disturbed  
 Children A-10.10  
 San Jose Nutrition Education Project (SJNEP) - Nutrition Through Science A-8.8  
 School Volunteer Development Project A-9.31  
 SCORE: Success Controlled Optimal Reading Experience B-10.20  
 project SHARE: Sharing High Yield Accountability with Resource Educators B-10.21  
 project SKI\*HI A-10.11  
 Special Education Preschool Program B-10.22  
 project STAY: School To Aid Youth B-5.33  
 Strategies in Early Childhood Education B-9.68  
 project Success for the SLD Child B-10.23  
 project Success: Handicapped B-10.24  
 Systematic Instructional Management Strategies (SIMS) A-10.12  
 Teaching Research Data Based Inservice Training A-8.10  
 the Teaching Research Infant and Child Center Classroom for Moderately and Severely  
 Handicapped Children A-10.13

#### ARTS/COMMUNICATION/TECHNOLOGY

Calculator Math A-9.4  
 CAMEL (Calculator Assisted Mathematics for Everyday Living) A-9.5  
 C.A.R.E. (Correlating Art and Reading Essentials) B-11.3  
 project COFFEE (Cooperative Federation for Educational Experiences) A-11.3  
 Communication Arts and Science Training (Project CAST) B-11.4  
 "Go Metric": A Supplemental Low-cost Metric Curriculum B-9.31  
 HOSTS Math: Help One Student To Succeed A-9.17  
 Individualized Computer Assisted Remedial Reading Program (I CARE) B-9.37  
 Individualized Prescriptive Arithmetic Skills System (I PASS) A-11.4  
*Institute for Creative Education A-12.8*  
 Learning to Read Through the Arts Program A-9.22  
 Media Now A-11.5  
 Merrimack Education Center CAI Project A-11.6  
 Mount Vernon TV Reading and Communication B-9.45  
 the New Jersey Writing Project A-9.25  
 Occupational Versatility (O.V.) B-4.13  
 TALK: Teaching Activities for Language Knowledge A-9.33  
 Title I Mathematics Computer Assisted Instruction (CAI) B-9.75  
 Urban Arts Program A-11.7  
 Utilizing Computers in the Teaching of Secondary Mathematics A-11.8

#### GIFTED AND TALENTED/HEALTH/PHYSICAL EDUCATION/SPECIAL INTERESTS

Athletic Health Care and Training Program B-12.3  
 ACTIVE: All Children Totally InVolved Exercising A-10.3  
 project Adventure A-6.3  
 Child Study Center (CSC): A Validated Pupil Personnel Services Demonstration Project  
 B-12.4  
 Computeronics: Gifted Child Project A-12.4  
 Critical Analysis and Thinking Skills (CATS) A-12.4  
 Curriculum for Meeting Modern Problems (The New Model Me) B-12.5

project Equality A-4.7  
Ethical Issues in Decision Making B-12.6  
EVERY CHILD A WINNER With Movement Education A-12.5  
Have a Healthy Heart A-12.6  
HEAR: Human Educational Awareness Resource B-4.10  
Individual Education Program in Physical Education (IEP/PE) B-10.9  
Individual Progress Program A-12.7  
Institute for Creative Education A-12.8  
ISIS: Individualized Science Instructional System Dissemination Project A-6.6  
KIDS KITS (Kids Interest Discovery Studies Kits) A-12.9  
Learning for Life B-12.7  
project LEGAL (Law-related Education: Goals for American Leadership) B-6.11  
the ME-ME Drug Prevention Education Program B-12.8  
Muscogee Health Project (Health Through Science) A-12.10  
Ombudsman A-12.11  
PEOPEL: Physical Education Opportunity Program for Exceptional-handicapped Learners  
A-12.12  
Physical Efficiency and Corrective Physical Education (PECPE) B-12.9  
Positive Alternatives to Student Suspensions (PASS): A Validated Pupil Personnel Services  
Demonstration Project B-12.10  
Positive Attitude Toward Learning (PATL) A-8.7  
Primary Grades Health Curriculum Project (PGHCP) B-12.11  
Religion in Human Culture (RIHC) B-6.14  
project SCAT: Skills for Consumers Applied Today B-12.12  
School Health Curriculum Project (SHCP) A-12.13  
Sequential Physical Education Reform: The M-5 Project A-12.14  
Talents Unlimited A-12.15  
TIPS: Teaching Individuals Positive Solutions/Teaching Individuals Protective Strategies  
A-7.4  
WWAS: Women in World Area Studies B-6.16

EXEMPLARY PROJECTS  
Alphabetical

- ACE: Administrative Cooperative in Education B-7.3  
ACTIVE: All Children Totally Involved Exercising A-10.3  
Added Dimensions to Parent and Preschool Education B-5.3  
Adult Performance Level Project (APL) A-1.3  
project Adventure A-6.3  
AIRS: Andover's Individualized Reading System B-9.5  
Akron Follow Through: Project SELF (Selected Educational Learning Fundamentals) B-5.4  
Alphaphonics: Beginning Reading Program A-9.3  
Alternate Learning Project (ALP) B-2.3  
APEC: America's Possible Energy Choices C-4  
Aprendemos En Dos Idiomas: Title VII Bilingual Program C-4  
Arizona Consortium for Individualized Learning (ACIL) B-7.4  
\*Athletic Health Care and Training Program B-12.3
- Baptist Hill Kindergarten B-5.5  
\*project BASE: Bilingual Alternative for Secondary Education C-3  
BASIC: Basic Adaptable Skills for the Individual Child B-9.6  
Basic Skills in Reading (BASK) B-9.7  
Boulder Valley Public Schools Follow Through B-9.8
- \*Calculator Math A-9.4  
California Migrant Teacher Assistant Corps: California Mini-Corps A-8.3  
Cambridge Follow Through B-9.9  
\*CAMEL (Calculator Assisted Mathematics for Everyday Living) A-9.5  
project CAP: Boston Mountains Educational Cooperative's Career Awareness Program A-4.3  
\*C.A.R.E. (Correlating Art and Reading Essentials) B-11.3  
Career Development Programs A-4.4  
Career Education Resource Center Program (CERCP) B-4.3  
Career Education Responsive to Every Student (CERES) B-4.4  
Career Intern Program B-4.5  
Career Planning Support System A-4.5  
Cashflow Forecasting System B-7.5  
project Catch-Up A-9.6  
Catch Up - Keep Up B-9.10  
project CDCC: Career Development Centered Curriculum B-4.6  
Central Institute for the Deaf Early Education Project B-5.6  
\*C.E.N.T.S. (Creative Economic Notions for Teachers and Students) B-6.3  
a Chance for Every Child B-9.11  
Chapter I, ECIA Preschool B-5.7  
Chapter I Reading, Grades 2-6 B-9.12  
Cherokee Follow Through: A Direct Instruction Model B-9.13  
project CHILD: Comprehensive Help for Individual Learning Differences B-3.3  
the Child Development Center B-5.8  
Child-Parent Centers Activity (CPC) B-5.9  
Child Study Center (CSC): A Validated Pupil Personnel Services Demonstration Project  
B-12.4  
\*City As School B-2.4  
project CLASS (Competency-based Live-Ability Skills) A-1.4  
Classroom Intervention: Individualized Basic Skill Reading Program B-9.14  
a Classroom Team Approach B-9.15  
\*project CLIMB: Coordinated Learning Integration - Middlesex Basics A-9.7  
Clinch-Powell Educational Cooperative: Home-Based Early Childhood Education Program B-5.10  
project COAST: Cognitively Oriented Approach to Skills Teaching A-9.8  
\*project COFFEE (Cooperative Federation for Educational Experiences) A-11.3  
Cognitively Oriented Preschool Curriculum B-5.11  
Communication Arts and Science Training (CAST) B-11.4  
Communication Programs B-5.12  
the Communications Workshop (CWS) B-10.3  
a Community Approach to Year-Round Education (Project C.A.Y.R.E.) B-2.5  
Community School 6 Bronx Follow Through B-9.16  
Community School 77 Bronx Behavior Analysis Follow Through Resource Center B-5.13  
\*a Comprehensive Foundation Studies Program for the High Risk Student C-4  
a Comprehensive Program for Handicapped Preschool Children and Their Families in Rural and  
Non-Urban Areas B-5.14  
Comprehensive School Mathematics Program (CSMP) A-9.9  
Comprehensive Training Program for Infant and Young Cerebral Palsied Children B-5.15  
Computer-Assisted-Diagnostic-Prescriptive Program in Reading and Mathematics (CADPP)  
A-9.10  
Computerized Pupil Attendance Accounting/Census System B-7.6  
Computronics: Gifted Child Project A-12.4  
Conceptually Oriented Mathematics Program (COMP) A-9.11  
Confluence of Cultures for an Affluent Tomorrow B-3.4  
project Conquest B-9.17  
Contract Learning for Educable Mentally Retarded Students C-4  
COPE: Cognitively Oriented Pre-Primary Experience A-5.3  
Corpus Christi Follow Through Bilingual Project B-3.5

\*Approved by JDRP since 1981 edition.

CRAM: Compensatory Reading and Mathematics Program C-3  
\*Cranston's Comprehensive Reading Program K-12 A-9.12  
Criterion Reading Instruction Project (CRIP) B-9.18  
Critical Analysis and Thinking Skills (CATS) A-12.4  
Curriculum for Meeting Modern Problems (The New Model Me) B-12.5  
Curriculum Modification Through Environmental Studies: Environmental Studies Center B-6.4

Dale Avenue Early Childhood Education Project C-3  
Dayton Direct Instruction Follow Through Resource Center B-9.19  
DEBT (Developmental Education Birth through Two) B-10.4  
DeKalb County Follow Through: A Direct Instruction Model C-4  
Demonstration Evaluation Center (CAM) A-7.3  
Developing Models for Special Education (DMSE) C-4  
Developmental Play (DP): A Validated Pupil Personnel Demonstration Project B-5.16  
Diagnostic Prescriptive Arithmetic (DPA) A-9.13  
Directory of Representative Work Education Programs, 1972-73 C-3  
project Discovery A-4.6  
Discovery Through Reading B-9.20  
Diversified Educational Experiences Program (DEEP) B-2.6  
\*project DPI B-9.21  
Duval Consumer Education Curriculum C-5

Early Childhood Education -- All Day Kindergarten C-4  
Early Childhood Preventive Curriculum (ECPC) B-9.22  
Early Prevention of School Failure A-5.4  
Early Prevention of School Failure Migrant Program (For Spanish- and English-Speaking Children) B-3.6  
East Las Vegas Follow Through: A Direct Instruction Model B-9.23  
East St. Louis Direct Instruction Follow Through B-5.17  
project ECOLOGY (Environmental Career-Oriented Learning) B-6.5  
ECOS Training Institute (ETI) B-8.3  
Educational Services for Schoolage Parents (ESSP) B-2.7  
Effective Use of Time In Secondary Reading Classes A-8.4  
the Electric Company B-9.24  
Elementary Metric Project C-3  
Elmira Follow Through Project C-5  
ELSMERE Project A-10.4  
project Emerge: The Shop C-5  
Engineered Classroom for Students Who Are Both Educably Mentally Handicapped and Behaviorally Maladjusted B-10.5  
\*Enriching the Curriculum (ETC) B-9.25  
the Environment and Technology Project B-6.6  
project Equality A-4.7  
ERIN: Early Recognition Intervention Network A-10.5  
Ethical Issues in Decision Making B-12.6  
EVERY CHILD A WINNER With Movement Education A-12.5  
Every Student Every Day B-9.26  
Exemplary Center for Reading Instruction (ECRI) A-8.5  
Experience-Based Career Education (EBCE) [Appalachia Educational Laboratory (AEL)] C-3  
Experience-Based Career Education (EBCE) [Far West Laboratory] A-2.3  
Experience-Based Career Education (EBCE) -- Fond du Lac, Wisconsin B-4.7  
Experience-Based Career Education (EBCE) [Northwest Regional Educational Laboratory (NWREL)] B-2.8  
Experience-Based Career Education (EBCE) [Research for Better Schools, Inc. (RBS)] B-4.8

Facing History and Ourselves: Holocaust and Human Behavior B-6.7  
the Fall Save Continuum of Services for Learning Disabled Students C-4  
Family Oriented Structured Preschool Activity (Seton Hall Program) B-5.18  
\*project FAR (Freshman Attrition Reduction) A-2.4  
FAST: Functional Analysis Systems Training C-3  
\*FASTT, Family and School Teaching Together B-10.6  
FEED: Facilitative Environment Encouraging Development C-4  
\*Ferguson-Florissant Writing Project A-9.14  
the First Calculating and Reading Quest C-5  
Flagstaff Remedial Reading Project (Title I) C-3  
Flint Follow Through Direct Instruction Resource Center B-9.27  
Flippin Follow Through: A Direct Instruction Model B-9.28  
FLIT: Functional Literacy B-1.3  
Florida Migratory Child Compensatory Program -- Language Arts Tutorial Program C-5  
Focus Dissemination Project B-2.9  
Follow Through Nongraded Learning Model: New York City/Hampton Institute B-5.19  
Follow Through -- Portageville Unit B-5.20  
Foundational Approaches in Science Teaching B-6.8  
Freestyle B-4.9  
\*project Futureprint A-9.15

"Games Children Play" -- Atlanta Follow Through/Interdependent Learning Model  
B-9.29  
GEMS: Goal-based Educational Management System A-9.16

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- \*Geology Is B-6.9
- the Glassboro Right-to-Read Project B-9.30
- "Go Metric": A Supplemental Low-Cost Metric Curriculum B-9.31
- \*Good Samaritan Diagnostic/Prescriptive Classroom for Handicapped Preschool Children B-10.7
- Gulfport Follow Through: Mathemagenic Activities Program (MAP) B-9.32

- Have a Healthy Heart A-12.6
- Hawaii Basic Skills Remediation Project C-5
- Hawaii English Program (HEP) C-5
- Hawaii Follow Through Project B-9.33
- HEAR: Human Educational Awareness Resource B-4.10
- HEP/Project ALOHA (Allowing Learners Optimum Human Attainment): A Mainland Demonstration of the Hawaii English Program C-5
- Higher Horizons 100 B-9.34
- HIT: High Intensity Tutoring C-5
- project Home Base B-5.21
- Home Start C-3
- \*HOSTS Math: Help One Student To Succeed A-9.17
- HOSTS Reading: Help One Student To Succeed A-9.18
- Houston Independent School District Bilingual Programs B-3.7

- \*I CAN Instructional Physical Education System B-10.8
- project I-C-E (Instruction-Curriculum-Environment) A-6.4
- project Idea (A Program for Hearing-Impaired Infants) C-3
- Improvement of Basic Reading Skills B-9.35
- Improving Achievement (Reading) Through Use of Teachers and Teacher Aides B-9.36
- Indianapolis Follow Through Project B-5.22
- \*Individual Education Program in Physical Education (IEP/PE) B-10.9
- \*Individual Progress Program A-12.7
- Individualized Bilingual Instruction (IBI) A-3.3
- \*Individualized Computer Assisted Remedial Reading Program (I CARE) B-9.37
- Individualized Language Arts: Diagnosis, Prescription, and Evaluation A-9.19
- \*Individualized Prescriptive Arithmetic Skills System (I PASS) A-11.4
- \*Inservice Training in Developmental Therapy B-8.4
- Institute for Creative Education A-12.8
- Institute for Political and Legal Education (IPLE) A-6.5
- project Instruct A-9.20
- Intensive Reading Improvement Program (IRIP) B-8.5
- Interactive Curricular Experience B-10.10
- \*Intercept: A Positive Alternative to Pupil Suspensions, Truancy, and Dropout B-2.10
- IRIT: Intensive Reading Instructional Teams B-9.38
- ISIS: Individualized Science Instructional System Dissemination Project A-6.6

- \*Jefferson County Adult Reading Program (JCARP) B-1.4

- Kansas City Follow Through Project: Resource Center B-5.23
- project KARE (Knowledgeable Action to Restore our Environment) A-6.7
- Kenosha Model: Academic Improvement Through Language Experience A-9.21
- \*KIDS KITS (Kids Interest Discovery Studies Kits) A-12.9

- Law Education Goals and Learning (LEGAL) B-6.10
- Law in A Changing Society (LCS) A-6.8
- Learncycle: Responsive Teaching A-8.6
- project Learning Disabilities: Early Identification and Intervention C-4
- Learning for Life B-12.7
- Learning to Read by Reading B-9.39
- Learning to Read through the Arts Program A-9.22
- Lee County Follow Through: Mathemagenic Activities Program (MAP) C-5
- LeFlore County (Mississippi) Follow Through Resource Center B-9.40
- \*project LEGAL (Law-related Education: Goals for American Leadership) B-6.11
- LEM: Learning Experience Module (Educational Management Design) B-7.7
- Lincoln County Exemplary Project in Career Education C-4

- Macomb 0-3 Regional Project: A Rural Child/Parent Service B-10.11
- MAPPS: Multi-Agency Project for Pre-Schoolers B-10.12
- MARC: Multisensory Approach to Reading and Reading Readiness Curriculum B-9.41
- \*Marine Science Project: FOR SEA A-6.9
- \*MARRS: Mainstream Amplification Resource Room Study A-10.6
- Matching Attitudes and Talents to Career Horizons (MATCH) B-4.11
- Math Laboratories for Disadvantaged Students C-4
- \*Mathematics Achievement Program (MAP) B-9.42
- Matteson Four-Dimensional Reading Program B-9.43
- McCormick County Follow Through: Mathemagenic Activities Program (MAP) B-9.44
- MCHP/VIP: Mother/Child Home Program of the Verbal Interaction Project B-5.24
- MECCA: Make Every Child Capable of Achieving B-5.25
- Media Now A-11.5
- Medical Insurance: A Procedure for Instituting a Cost-Effective Program C-3

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the ME-ME Drug Preventive Education Program B-12.8  
 •Merrimack Education Center CAI Project A-11.6  
 Metrics Made Easy C-3  
 Microcomputer-based Administrative Resources: Project Simu-School B-7.8  
 Migrant Student Record Transfer System (MSRTS)/a Computer Link Offering Variable  
 Educational Records (CLOVER) A-3.4  
 Model Classrooms' Computerized Classroom Management System (CLASS) A-9.23  
 Model Learning Disabilities Systems (MLDS) C-5  
 Modification of Children's Oral Language A-10.7  
 •Mount Vernon TV Reading and Communication B-9.45  
 •Muscoogie Health Project (Health Through Science) A-12.10

National Migrant Interstate Project C-4  
 New Adventure in Learning: Success Strategies for Reading and Language (NAIL) A-9.24  
 the New Jersey Writing Project A-9.25  
 New York State External High School Diploma Program (EDP) B-1.5  
 Nichols Avenue Follow Through: A Direct Instruction Model B-9.46  
 NOMAD: Needs and Objectives for Migrant Advancement and Development B-3.8  
 Northern Cheyenne Follow Through Project B-5.26  
 Northwest Special Education (NWSE) B-10.13

Oakland Unified School District Follow Through Program: Learning Through Literature B-5.27  
 Occupational and Career Development B-4.12  
 Occupational Versatility (O.V.) B-4.13  
 Oklahoma Child Service Demonstration Center for Secondary LD Students A-10.8  
 Ombudsman A-12.11  
 Opening the Doors B-4.14

PA: Project Advocate -- Northwestern Illinois Association C-4  
 •Packets to Assist Literacy (PALS) B-10.14  
 PAL: Pupils Advancing in Learning C-4  
 Parent-Child Early Education Program (Saturday School) B-5.28  
 Parent Readiness Education Project (PREP) A-5.5  
 PEECH: Precise Early Education for Children with Handicaps B-10.15  
 PEGASUS: Personalized Educational Growth and Achievement with Selective Utilization of  
 Staff B-9.47  
 PEGASUS-PACE: Continuous Progress Reading Program: Personalized Educational Growth And  
 Selective Utilization of Staff -- Personalized Approach to Continuous Education A-9.26  
 PEOPEL: Physical Education Opportunity Program for Exceptional-handicapped Learners  
 A-12.12  
 Peoria 0-3 Project: Replication of an Interdisciplinary Approach to the Early Education of  
 Handicapped Children Ages 0-3 B-10.16  
 Perception+ A-5.6  
 Philadelphia Follow Through Behavior Analysis Resource Center (BARC) B-9.48  
 Physical Efficiency and Corrective Physical Education (PECPE) B-12.9  
 Pickens County Follow Through: Mathemagenic Activities Program (MAP) B-9.49  
 Pilot Project Utilizing Supportive Personnel Using Behavior Modification Techniques with  
 Articulatory Disordered Children B-8.6  
 Pima County Career Guidance Project B-4.15  
 Plattsburgh Follow Through Program B-9.50  
 Pocatello Follow Through: Mathemagenic Activities Program (MAP) B-9.51  
 Pollution Control Education Center -- Priority One: Environment B-6.12  
 the Portage Project: A Home Approach to the Early Education of Handicapped Children A-5.7  
 Positive Alternatives to Student Suspensions (PASS): A Validated Pupil Personnel Services  
 Demonstration Project B-12.10  
 Positive Attitude Toward Learning (PATL) A-8.7  
 Pre-Algebra Development Centers A-9.27  
 Precision Teaching Project A-10.9  
 PREDICT I: Pre-Kindergarten Education for the Disadvantaged Child -- Title I C-4  
 Pre-Kindergarten Prescriptive Teaching Program for Learning Disabled Children C-5  
 •Preparing for Tomorrow's World (PTW) B-6.13  
 Prevention of Learning Disabilities: An Interdisciplinary Model B-5.29  
 project PRIDE: Professional Reading Instruction with Desirable Effects B-9.52  
 Primary Grades Health Curriculum Project (PGHCP) B-12.11  
 PRIOR: PReschool and Improvement Of Reading B-9.53  
 a Program for Early Education of Children with Handicaps B-10.17  
 Programed Tutorial Reading B-9.54  
 Programs for Children with Down's Syndrome B-5.30  
 Project for the Severely Handicapped Child C-5  
 Project Management Basic Principles and Techniques B-8.7  
 Proviso Reading Model A-9.28  
 Psychomotor Learnings for Academic Yields (Project PLAY) B-9.55  
 Public School 33 Manhattan Follow Through Project: A Child Development Approach B-9.56  
 Public School 92 Manhattan Follow Through B-9.57  
 Public School 137 Brooklyn Follow Through: A Direct Instruction Model B-9.58  
 Public Schools of Choice: High School in the Community (HSC) B-2.11  
 Pupil Transportation: A Procedure for Cooperative Purchase of Special Education Services  
 C-3

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project R-3: Readiness, Relevancy and Reinforcement A-9.29  
 Randolph County Follow Through Program B-9.59  
 project READ C-5  
 • Reading Achievement Program (RAP) B-9.60  
 Reading/English Rotation Project A-9.30  
 project Reading Improvement B-9.61  
 Reading Improvement Program -- Secondary Schools Reading Laboratory C-4  
 Reading -- Individualized Remedial Laboratories/Math -- Individualized Remediation B-9.62  
 Reading Instruction and Pupil Personnel Services (RIPPS) B-9.63  
 project Read-Write B-9.64  
 project REAL B-5.31  
 RE-ED School of Kentucky C-3  
 • a Regional Demonstration Program for Preschool Handicapped Children B-10.18  
 Religion in Human Culture (RIHC) B-6.14  
 the Responsive Early Childhood Education Program (RECEP) B-9.65  
 Richmond (Virginia) Follow Through Resource Center B-5.32  
 Right to Read: Wilson Junior High School C-5  
 • Rose F. Kennedy Center -- Community School District 8 Diagnostic Intervention Program  
 B-10.19  
 the Rutland Center -- Developmental Therapy Model for Treating Emotionally Disturbed  
 Children A-10.10

San Diego City Schools Follow Through: A Direct Instruction Model B-9.66  
 • San Jose Nutrition Education Project (SJNEP) - Nutrition Through Science A-8.8  
 project SCAT: Skills for Consumers Applied Today B-12.12  
 School Health Curriculum Project (SHCP) A-12.13  
 School Volunteer Development Project A-9.31  
 • Sci-Math A-6.10  
 SCORE: Success Controlled Optimal Reading Experience -- A Tutorial Reading Program B-10.20  
 SDR: Systems Directed Reading C-5  
 SEAPORT: Student Education Assuring Positive Organized Reading Techniques B-9.67  
 Secondary Credit Exchange Program B-3.9  
 Senior Elective Program B-2.12  
 Sequential Physical Education Reform: The M-5 Project A-12.14  
 project SHARE: Sharing High Yield Accountability with Resource Educators B-10.21  
 SIGMA: System for Individually Guiding Mastery Attainment B-8.8  
 • project SITE: Successful Inservice Through Turnkey Education A-8.9  
 project SKI\*HI A-10.11  
 project SMART (Success in Mathematics Through Aural Reading Techniques) C-5  
 South Douglas County Early Childhood Education Project C-5  
 Special Education Preschool Program B-10.22  
 St. John Valley Bilingual Education Program C-5  
 St. Paul Open School B-2.13  
 STAMM: Systematic Teaching And Measuring Mathematics A-9.32  
 project STAY: School to Aid Youth B-5.33  
 • Stones and Bones, A Laboratory Approach to the Study of Biology, Modern Science, and  
 Anthropology B-6.15  
 Strategies in Early Childhood Education B-9.68  
 Student Team Learning: Intergroup Relations B-9.69  
 Student-Teams Achievement Divisions (STAD): Language Arts B-9.70  
 project Success Environment: A Contingency Management Approach to Classroom Improvement  
 C-5  
 project Success for the SLD Child B-10.23  
 project Success: Handicapped B-10.24  
 • Supplemental Instruction: Student Learning Center (SI) B-2.14  
 Systematic Instructional Management Strategies (SIMS) A-10.12  
 a Systems Approach to Individualized Instruction (SAII) B-9.71

project Talent Development C-5  
 Talents Unlimited A-12.15  
 TALK: Teaching Activities for Language Knowledge A-9.33  
 Teaching Research Data Based Inservice Training A-8.10  
 the Teaching Research Infant and Child Center Classroom for Moderately and Severely  
 Handicapped Children A-10.13  
 Team Oriented Corrective Reading (TOCR) B-9.72  
 Teams-Games-Tournament (TGT) A-9.34  
 • TIPS: Teaching Individuals Positive Solutions/Teaching Individuals Protective Strategies  
 A-7.4  
 Title I Compensatory Mathematics Program B-9.73  
 Title I Compensatory Reading Program B-9.74  
 • Title I Mathematics Computer Assisted Instruction (CAI) B-9.75  
 Title I Remedial Reading Program C-5  
 Topeka Outdoor-Environmental Education Project C-5  
 • Training for Turnabout Volunteers A-9.35  
 Trenton Follow Through: Behavior Analysis Approach B-5.34  
 Tulare Follow Through B-5.35

UCLA Allied Health Professions Publications B-4.16  
 project Understand: Arlington's Title I Program B-9.76  
 Upstairs School B-9.77

\*Approved by JDRP since 1981 edition.



Urban Arts Program A-11.7  
U-SAIL: Utah System Approach to Individualized Learning A-7.5  
•Utilizing Computers in the Teaching of Secondary Mathematics A-11.8  
Uvalde Follow Through: A Direct Instruction Model B-9.78

VRP: Reading Power in the Content Areas (Vocational Reading Power) A-9.36

Waterloo Follow Through: Adaptive Learning Environments Model B-5.36  
Waukegan Follow Through: Demonstration Resource Center B-5.37  
the Weeksville School/Bank Street College Follow Through Program B-5.38  
West Hills Follow Through Project B-9.79  
Williamsburg County Follow Through: A Direct Instruction Model B-9.80  
WWAS: Women in World Area Studies B-6.16

•project ZOO: Zoo Opportunities Outreach B-6.17