

DOCUMENT RESUME

ED 193 613

CS 005 692

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TITLE Selected Remediation Programs for Reading and Math: A Guide for State and Local Use.  
INSTITUTION Appalachia Educational Lab., Charleston, W. Va.  
SPONS AGENCY National Inst. of Education (DHEW), Washington, D.C.  
PUB DATE Jan 79  
NOTE 55p.: Appendix may be marginally legible.  
EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.  
DESCRIPTORS Elementary Secondary Education: Program Descriptions: \*Program Design: \*Program Evaluation: \*Remedial Mathematics: \*Remedial Programs: \*Remedial Reading

ABSTRACT

The purpose of this paper is to summarize for educational practitioners the progress made in identifying existing reading and mathematics remediation programs that might be appropriate for use in Kentucky schools. The information provided includes: (1) a description of the process used to obtain information about remediation programs currently in operation throughout the nation, (2) a discussion of the criteria used for choosing programs to be profiled in-depth for the Kentucky State Department of Education, (3) a description of the components that make up each profile, (4) a review of the projects that were profiled, and (5) some conclusions reached as a result of the process described above. An appendix contains program profile statements, with information on each program's area (reading, language arts, mathematics, and staff development), title, grade levels, training requirements, outcomes, necessary materials, organizational needs, instructional processes, costs, and contact persons. (RL)

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SELECTED REMEDIATION PROGRAMS FOR READING AND MATH: A  
GUIDE FOR STATE AND LOCAL USE

**BEST COPY AVAILABLE**

by

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January 1979

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The project presented or reported herein was performed pursuant to one or more contracts and/or grants from the National Institute of Education, Department of Health, Education and Welfare. However, the opinions expressed herein do not necessarily reflect the position or policy of the Appalachia Educational Laboratory or the National Institute of Education; and no official endorsement by the Appalachia Educational Laboratory or the National Institute of Education should be inferred.

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## INTRODUCTION

A great deal of recent controversy about American education focuses on the deficiencies in fundamental reading, writing, and computation skills prevalent among high school graduates. Increasing numbers of Americans consider more emphasis on skill development in schools an answer to this problem. For example, 83 percent of those asked in a 1977 Gallup poll indicated a favorable attitude toward the back-to-basics movement. Many state education agencies and/or state legislatures have responded to this public dissatisfaction by mandating more school-subject mastery tests in their schools. A 1978 survey by the Education Policy Research Institute of the Educational Testing Service indicates that 29 states test for minimum competency in basic skills; 9 test for minimum competency in functional literacy; and 11 have other areas in their testing programs, including citizenship, leisure skills, lifelong learning, and attitudes toward schools.\*

Kentucky's legislature passed a bill in 1978 requiring annual reports on measurement of achievement in the basic skills of all students in grades 3, 5, 7, and 10. The testing is to begin in the 1978-79 school year. Local education agencies are mandated to develop appropriate competency-based educational remediation programs for their students as indicated by the test

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\*Joan Baratz, "Policy Implications of Minimum Competency Testing." Paper presented at the 2nd Annual AERA Topical Conference, Minimum Competency Achievement Testing: Motives, Models, Measures and Consequences. Washington, D.C., October 12, 1978.

results. The Kentucky Department of Education will assist local school districts in their efforts to fulfill the legislated requirements.

The Appalachia Educational Laboratory (AEL) is working with the Kentucky Department of Education to identify or develop, test and implement remediation programs applicable to the needs of Kentucky school districts. One of AEL's efforts in this regard has been to identify (systematically) remediation programs existing nationally that may be appropriate for adoption or adaptation in Kentucky school districts.

The purpose of this paper is to summarize for educational practitioners the progress made in identifying existing remediation programs that might be appropriate for consideration in schools in Kentucky. The information that follows includes: (1) a description of the process used to obtain information about remediation programs currently in operation throughout the nation, (2) a discussion of the criteria used for choosing programs to be profiled in-depth for the Kentucky State Education Department, (3) a description of the components that make up each profile, (4) a review of the projects that were profiled, and (5) some conclusions reached as a result of the process described above.

It is hoped that this narrative will help educators understand the procedure and will enable them to make decisions about remediation programs within the context with which this information was obtained.

#### OBTAINING INFORMATION ON REMEDIATION PROGRAMS

There are several possible sources of information about remediation programs in existence around the country. The major program areas reviewed were minimum competency testing, mathematics, and reading, but some consideration was given to language composition (writing) skills. Information was

sought through ERIC searches and the Northwest Regional Educational Laboratory's Clearinghouse for Applied Performance Testing (CAPT), through contacts with federal organizations such as the National Institute of Education (NIE) and Right-to-Read, and through contacts with persons at universities who were considered to be experts concerning remediation programs. Since these searches resulted in a great deal of information on existing reading programs and very little information on mathematics programs, an additional search was made of the publications of the National Council of Teachers of Mathematics (NCTM).

The ERIC and CAPT searches yielded some valuable background materials. Books, articles, and pamphlets such as Reading and the Law (Harper, 1976), Effective Reading Programs (Holloway, 1975), and Development of Functional Communication Competencies: Grades 7-12 (Wood, 1977) were useful. These materials were excellent sources of knowledge about the current situation in remediation. A Synthesis of Research in Basic Skills (Gow, 1977) and Progress Toward Raising the Level of Basic Skills (Taylor, 1978) provided a great deal of relevant information focusing on the development of basic skills. CAPT's Annotated Bibliography on Minimum Competency Testing contains additional background information. Two sources of tremendous value were the U.S. Office of Education (USOE) publication entitled Educational Programs That Work, Volume IV, Winter 1977, and the Northwest Reading Consortium's Knowledge Base of Research and Development Outcomes in Reading. These catalogs identify and describe exemplary educational programs developed by local school districts. These programs have been recognized by the National Dissemination Network (NDN) and/or the Northwest Reading Consortium and are recommended as appropriate for possible adoption or adaptation in other school districts.

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The National Institute of Education and Right-to-Read offices recommended the above-mentioned USOE catalog. They also mentioned the names of experts at Harvard University and Syracuse University who might be contacted. Additional names of experts were obtained from colleagues at West Virginia University, from contacts through the Appalachia Educational Laboratory's Regional-Exchange, and from the experts themselves. It became clear, after talking to a few experts, that they had been identified on the basis of specific remediation programs they had developed. These programs had been implemented by the experts working closely with teachers in a particular school district, teaching teachers and administrators how to use their programs. However, adoption by any interested school district is dependent upon close work with the experts who devised the programs. Contacts with the education department of most colleges or universities can be helpful in finding out about programs developed by such experts.

The NCTM has three publications that seemed likely to contain information on mathematics remediation programs. They are the Journal for Research in Mathematics Education, The Arithmetic Teacher, and The Mathematics Teacher. Every issue of each of these periodicals, from May 1975 to April 1978, was reviewed. One mathematics program was reported in the February 1978 issue of The Arithmetic Teacher by Gary Bitter and Jerald Mikesell. They described a process of teacher involvement in setting up a district-wide mathematics laboratory in an Arizona school district. That was the only program mentioned in these periodicals which related even indirectly to high school remedial mathematics. It seemed to be of the same order as other programs developed by experts; that is, implementation would be contingent upon work with the persons involved in the original program.

The Research Council for Diagnostic and Prescriptive Mathematics was contacted. The director, James Heddens, suggested contacting publishers and indicated that persons with expertise are available through the Council. Director Heddens reported that diagnostic and prescriptive mathematics programs are practically nonexistent at this time. He said the major difficulty is that existing tests do not include analysis giving reasons for deficiencies evidenced by scores.

After examining the information obtained from the above sources, the author decided to concentrate further information-gathering efforts on those programs which have been nationally validated as exemplary. Nationally validated exemplary educational programs are those which have been developed and tested by local school districts and then approved as effective by the Joint Dissemination Review Panel (JDRP) within USOE. JDRP approves only those programs deemed appropriate for national dissemination based on evaluation data submitted by the developer. The author took this course of action since earlier efforts identified no promising programs in the areas of reading and mathematics. Some programs identified by the Northwest Reading Consortium in Knowledge Base of Research and Development Outcomes in Reading were also considered.

CRITERIA ESTABLISHED FOR CHOOSING PROGRAMS  
TO BE PROFILED IN-DEPTH

Educational Programs That Work is a catalog containing descriptions of 188 projects validated by the JDRP. Several decisions had to be made in order to determine which of these programs to contact for more complete information concerning format and implementation procedures. Seven major questions were considered when deciding which program directors to contact and which programs to profile.



For whom is the program designed? Programs designed exclusively for primary schools were not included, as the Kentucky school concerns are described as more comprehensive. Therefore, programs had to deal with K-6 skill development or junior high and/or high school remediation needs.

What does the program cost to adopt/adapt? Although it was expected that local school districts will be able to obtain some state and/or federal monies for implementing needed programs, it was assumed that extensive funding will seldom be available.

Is the program educationally sound? This may sound presumptuous, but it seemed necessary to look for programs that (1) don't isolate learners and (2) don't require extensive prerequisites in order for public school students to benefit from them.

Is the program easy to communicate? It seemed essential that profitable consideration of a program requires simplicity of design so that potential users can rapidly comprehend its purpose and necessary components.

Does the program have a social awareness aspect? This question was an attempt to take into account how carefully the project designers considered the community, administrators, teachers, and students involved in the program. It seemed that a well-thought-out public relations component would greatly aid potential adopters/adapters of the program.

Can the program be implemented in one classroom? A wide variety of programs is available, especially in reading. Some programs require implementation in primary school and continually build upon past efforts of the program. Some programs are for one, two, or three years of sequential work requiring a team of teachers or one teacher available to work with a student for several semesters. The programs with the greatest ease of implementation are those that can be readily adopted by the individual teacher who is hoping

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to improve instruction. This allows additional teachers to become part of the innovation when they are comfortable with the new procedures, without jeopardizing the work of the initial implementors.

Does the program have a staff development component? Some projects emphasize staff development as a major focus. Others indicate anything from a half-day to a week inservice, prior to implementation, for those to be involved in the project. And some projects devote time to staff development on an intermittent basis throughout the project. As staff commitment seems essential to success, this aspect was reviewed carefully.

Each of these questions was considered as programs were identified to be profiled. Although programs profiled do not necessarily meet all of these aspects, each was expected to meet at least several of the criteria.

#### A DESCRIPTION OF THE COMPONENTS THAT MAKE UP EACH PROFILE

An attempt was made to gather information on every project that met several of the criteria for selection. Project directors were contacted and additional descriptive materials obtained. The amount of detailed information available varied widely from project to project. There did seem to be some basic information that was necessary so that prospective users could decide if a particular project was appropriate for their school district. Ultimately, the JDRP profiles presented in Educational Programs That Work served as the primary basis for these profiles, with some adaptation by the author.

Categories for this key information include:

- general information--the program area of the project, the title, the appropriate grade levels, the program start date, and a brief description of the project;

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- specific requirements--any specialized training of the professional staff that is required and how easily it is obtained, and what organizational requirements are needed in terms of administrative support, space/facilities, personnel, and the management framework;
  - instructional considerations--the instructional process of identification and remediation, the materials necessary for implementation, the recordkeeping procedure used in the program, and what known outcomes have been identified and described; and
  - estimates of time for the initial set-up of the program, as well as the daily use and costs of materials, staff, and other implementation expenses.

After material was compiled in the above areas for each project, the programs to be profiled were selected. The JDRP profiles, the Northwest Reading Consortium profiles and awareness literature available from the projects were adapted to the key information categories described above. Four language arts programs, twelve reading programs, four reading and mathematics programs, and three mathematics programs were profiled for this project. Three language arts projects, six reading projects, four reading and mathematics projects, and three mathematics projects were profiled in-depth for this report.

#### REVIEW OF PROJECTS

The appendix contains the profiles of the 23 projects selected for this in-depth description. Some highlights of these projects should be considered when looking at the profiles.

#### Language Arts Programs

Four language arts programs were identified to be profiled for this report.

The Reading/English Rotation Project. This project, designed for any students, grades 6-12, was especially strong in its staff development component. Teachers working with the programs meet daily and are involved in weekly inservice activities. The program is expensive as it requires a reading teacher and four aides, as well as existing school personnel. Although it cannot be implemented in one classroom (the team concept is integral to its effectiveness), this program would be appropriate in a school large enough to already possess full-time developmental reading teachers and aides. Commitment to team-teaching and time for planning are essential.

Individualized Language Arts: Diagnosis, Prescription, and Evaluation. This project is appropriate for all ability levels, grades 1-12, special education, and adult education. The program is strongly recommended, since it can be successfully implemented in an individual classroom or by an entire school system. Staff development starts with a two-day workshop and includes followup work with individual teachers. It is inexpensive, no additional staff or materials are required.

Higher Horizons 100. Serving students in grades 7-10 with reading retardation of 1-4 years, the program has a particularly strong emphasis on improving reading along with speech, mathematics, science, and social studies. It also focuses on improving students' self-concept and helping students adjust to high school behavior patterns. The project depends upon additional personnel--a guidance counselor, a project aide, and a reading specialist--for each group of 100 students participating in the program. This program does not rely on new or special materials. It would be useful at a school in which all (or a group of) teachers wanted to work together to integrate school subjects and skill development.



Exemplary Center for Reading Instruction. This program emphasizes staff development. It is appropriate for teachers at any grade level, kindergarten through high school. Teachers are trained in a systems approach to instruction in reading and language arts. Although this program is designed for optimum use as a district-wide endeavor (all professional staff including administrators and supervisors would profit from the training sessions) it can be implemented at the building level or by individual teachers. The emphasis of this program is to use existing staff and materials more effectively.

### Reading Programs

Twelve reading projects were profiled.

Intensive Reading Improvement Program. This staff development program is designed to initially train one teacher from each school building in reading theories and methods. The teacher then conducts inservice sessions for the rest of the teachers in the building. The major investment for a school district is providing the necessary training time (60 hours for the first teacher + 30 hours of inservice for the entire school staff.) This program is appropriate for school districts committed to extensive upgrading of existing staff professional skills.

Programmed Tutorial Reading. The unique aspect of this program is an emphasis on paraprofessionals and high school students as tutors. A part-time director and tutor supervisors are essential to its success. The program is designed to complement existing classroom instruction in basal readers. The project materials explain in detail their relationship to skill needs identified in the 1-4th grade classroom programs. Tutor training is specified.

Glassboro Right-to-Read. This project is especially pertinent for school districts attempting long-range and extensive community involvement. It

requires considerable time to implement, as a task force of community members and professional staff conduct a needs assessment prior to introduction of the reading program. Staff commitment includes selecting and/or writing reading instructional sequences for children K-6 grades.

Title I Corrective Reading/Wichita, Kansas. This program requires certified reading teachers. The reading teachers are trained to use the corrective reading program, serve as resources to classroom teachers and work with parent volunteer tutors. A district or neighborhood school commitment to nurturing positive attitudes toward reading and literature as well as self-concept are basic to the program's success. It is designed for children in grades 2-6 with low reading achievement.

Systems Directed Reading. The major feature of this program is a Skills Bank which pools all the instructional materials available at a school building. These materials are then keyed to specific skill development. Criterion-referenced diagnostic tests identify the skill needs of individual children. This program is appropriate for a school faculty desiring a more structured use of the wide variety of reading materials they possess. Some professional and paraprofessional help is needed in addition to the participation of classroom teachers of grades K-6.

Classroom Intervention. This program is a management system for existing reading programs. Adaptation requires school use of specific basal textbooks in the classroom. It also assumes that reading support services are available. Commitment from the reading services personnel is essential. Existing reading materials are reorganized for optimal effectiveness.

Vocational Reading Power. A staff development program used in vocational schools, non-vocational junior-senior high schools, and post-secondary

settings, this project helps all teachers work with students who have reading problems. The program requires the pervasive commitment of the school staff and administration to improving reading skills of students. It is flexible to local needs and interests; a school district can choose as few as two of the six components for adoption. This program is likely to be successful in any school in which teachers and administrators recognize the need to teach reading in the content areas at the secondary level.

Improving Achievement (Reading) Through Use of Teachers and Teacher Aides.

The program is for students (grades 7-12) who are reading two or more years below grade level. It provides a teaching laboratory/resource room staffed by trained teachers and aides to help students improve their reading skills. This project requires materials for the laboratory, a project teacher, and eight aides in order to serve approximately 200 high school students. The project staff coordinates its efforts with those of the school's English teachers. This program would be valuable in a school district in which a reading laboratory exists or in a school district which needs materials for individualized instruction in basic reading and language arts skills and which can obtain funding. Local, state, or national funds might exist for this through such programs as NDN and Right-to-Read.

Reading Improvement Program--Secondary Schools Reading Laboratory. The program is for junior and senior high school students who are reading one or more years below grade level. It also provides special resources outside of the regular classroom. This program requires space, a teacher, an aide, and a reading consultant, as well as reading laboratory materials for each school building participating in the project. This program is appropriate for school districts with financial and attitudinal commitment to the reading laboratory concept.

HOSTS: Help One Student to Succeed. The program is an organized community effort to work with students (grades 1-12) who need to improve reading skills. It requires reading specialists, aides, and community volunteers, as well as appropriate instructional materials. The emphasis on community participation (each child has a volunteer tutor) is reported to have been very successful. School districts choosing this program will need good school-community relationships to build upon during the project.

Reading Instruction and Pupil Personnel Services. The program serves students (grades K-10) reading below grade level. This program is designed to combine the expertise of classroom teachers, reading specialists, guidance counselors, special services personnel, and parents to best serve the needs of children who are not reading at their ability level. The expense involved depends upon what services are already available in a school district. The cooperative nature of this program makes it appropriate for communities committed to collaborative efforts among school personnel and between parents and school staff.

SEAPORT: Student Education Assuring Positive Organized Reading Techniques. Serving pre-kindergarten through grade 9 students who are at least one year below their appropriate reading level, the program emphasizes parental involvement. This program is supplemental to existing school programs. It is appropriate for city school districts. Although the additional staff (e.g., 18 reading specialists) seems expensive, large numbers of children are served.

### Mathematics and Reading Programs

Four projects described as mathematics and reading (or language arts) were profiled for this report.

Teams-Games-Tournaments (TGT). Appropriate for students in grades 3-12, this program of classroom management techniques is designed to complement other classroom instruction. It is inexpensive, easy to use, and can be implemented by one teacher or an entire school district. Commercial materials are available or teachers can design their own materials, using the techniques of this program. Eight years of research studies on student team learning techniques have shown that benefits resulting from the implementation of TGT are twofold: an increase in student performance in mathematics and language arts, and an increase in cross-racial friendships.

Utah System Approach to Individualized Learning. Designed for use in grades K-9, this project emphasizes administrator and teacher training in planning and implementing individualized reading and mathematics programs. It uses existing staff, space, and materials, but organizes them for more specific instruction for the individual. The primary purpose is staff development for learning new administrator and teacher behavior.

Project R-3: Readiness, Relevancy, and Reinforcement. A program for junior high students, it emphasizes intensive instruction for students throughout grades 7, 8, and 9. The staff development aspect is extensive, requiring a week-long workshop prior to implementation, as well as weekly inservice sessions. Teachers must work together as teams for this program to work. The additional staff required is considerable. There are excellent opportunities for community and total staff involvement in this project.

High-Intensity Tutoring (HIT). This program is a peer-tutoring program for sixth, seventh, and eighth graders. The major expense of this program is individualized materials for use by the tutors and by the students being tutored. The most important element for success is the commitment of administrators, teachers, and students to the program. A positive, helping atmosphere is essential.

### Mathematics Programs

Three mathematics programs were identified and profiled for this report.

Conceptually-Oriented Mathematics Program (COMP). Designed for students grades 1-8, this project is primarily a sequenced set of mathematics materials. It is recommended that at least three grade levels implement the program at one time. Undoubtedly, it would be more beneficial if use of the materials started in grade one, rather than in later grades. Expense involved would probably be a shift in budget appropriations previously used for other materials.

Systematic Teaching and Measuring Mathematics (STAMM). A comprehensive K-12 mathematics program, it has several high school courses--one in mathematics competencies which may be of special interest to school districts looking for ways to increase high school students' mathematics skills. These materials are appropriate for a variety of school organizational patterns, such as laboratories, teams, self-contained classrooms. One classroom or an entire school system can use these materials. This program is meant for use by existing faculty and as a complement to existing materials.

Educational Developmental Laboratories Mathematics System. This program is a commercially-prepared set of materials designed to teach elementary school mathematics skills to young adults. This program is specifically remedial and would be of special interest in school districts where there are large numbers of junior and senior high school students with deficiencies in elementary school mathematics skills.

Each program described above has valuable aspects which make it worthy of consideration for adoption or adaptation. Reviewers need to consider their own local school/community characteristics and needs before making a choice as to which program(s) would be most appropriate.

## IMPLICATIONS AND CONCLUSIONS

The reading problems of students seem to have been recognized by educators and researchers, and attempts have been made to deal with them for more than a decade. Consequently, a number of programs are available from which a school district needing a remedial reading program may choose. The situation in mathematics is not so fortunate. A great deal of progress needs to be accomplished in developing materials that help students with deficiencies in mathematics basic skills.

Some common threads run through all of the successful remedial programs. These common characteristics must be recognized by the school district attempting to solve basic skills problems in its junior and senior high schools. Successful program developers provide a systematic approach to the problems they want to solve. They are careful to identify specific deficiencies in students and provide consistent evaluation of what progress the student is making, as well as what problems still exist. They are careful to continually assess their effectiveness and look for ways to increase their usefulness to students.

Some program developers, including Developer/Demonstrators funded by NDN, often provide limited funds to schools who choose to adopt their program. They work closely with teachers and provide followup support throughout the duration of the project. The staff development component is recognized as essential to effective programs. It is also recognized that administrators and students need to learn new roles when a new institutional system is implemented. Good programs don't happen in isolation. If successful, they lead to pervasive positive changes in the attitudes of everyone involved.

Selection of the best program for your school district or classroom needs to occur after some serious introspection. You need to consider the following:

- What program do you want for your students?
- Why do you want this program?
- Do you want to emphasize remediation or skills maintenance?
- How are you going to use the program?
- How are you going to know that this program is working for your students?
- What changes will need to occur in teacher behavior, student behavior, administrative behavior, and community behavior?
- How can you help make these changes in behavior occur successfully?

Any of the remedial programs developed could be adapted with some success in a school district where a need for change is recognized and wanted. But all of the programs require educators--administrators and teachers--to look carefully at themselves and their work with students.

## BIBLIOGRAPHY OF SUGGESTED REFERENCES

While publications abound on basic skills and on the need for remediation programs in schools, the following references were found to be most helpful to the author. They are listed here for convenient reference by educators who are considering the implications of such programs.

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APPENDIX  
Program Profile Statements

**PROGRAM AREA:** Language Arts  
**TITLE:** Reading/English Rotation Project  
**GRADE LEVELS:** Grades 6-12  
**PROGRAM START DATE:** 1970-71

**BRIEF DESCRIPTION OF PROJECT:** The Reading/English Rotation Project consists of four phases: identification of student strengths and weaknesses, grouping students exhibiting similar needs and interests, instruction based on established needs, and evaluation of program effectiveness as evidenced by student achievement. The unique organizational pattern of this program provides students with three types of instruction during a two-period time block of one hour and thirty minutes. Rotation groups are formed consisting of 60 students divided into three groups of 20. Each group of 20 spends 30 minutes in each of three classes: (1) a reading laboratory with a reading teacher and two aides for work on basic reading skills, (2) a developmental reading class with a reading teacher and one aide for language experiences with high-interest reading materials, and (3) an English class with an English teacher and an aide for work on basic skills in communication (speaking, writing, spelling, etc.).

#### **SPECIALIZED TRAINING OF PROFESSIONAL STAFF:**

**Required.** Staff development is an integral part of daily two-hour staff planning periods. Project staff also participate in weekly inservice sessions conducted by a reading specialist. Teaching aides receive special training.

**Availability.** Awareness materials are available. Three regularly scheduled training programs are conducted at project site for adjoining districts. Workshops by project staff can be arranged at adjoining sites. Training programs are three days long and involve three teachers and one administrator.

**KNOWN OUTCOMES:** The basic evaluation for this project was the analysis of data yielded by the pre- and post-administration of the Gates-MacGillivray or SRA Achievement Test. While no true experimental design was utilized, an attempt was made to compare the results with historical information. Prior to the program, participant sixth graders were reading at a 3.3 grade equivalent level. That is, for every year in school, these children were making a half-year gain in reading. During the project years, the average rate of progress was three times the previous rate. Over a period of seven years, participants have averaged one month's growth in reading per month of instruction as measured by standardized achievement tests.

**MATERIALS USED:** A variety of multi-media, high-interest, low-level materials is recommended. The materials should allow for individual as well as small-group instruction. Choice should be based on student need and interest. Reading laboratory is equipped with listening center, and other commercially available materials.

#### **ORGANIZATIONAL REQUIREMENTS:**

**Administrative Support.** Must participate in training; identification of students; pre- and post-testing; scheduling of classes.

**Space/Facilities.** Three classrooms (one set up as reading laboratory) must be available for two class periods for each group of 60 students.

**Personnel.** An English teacher, one developmental reading teacher, one reading specialist, and four teacher aides are needed for each group of 60 students (for 90 minutes of class, plus planning time).

**Management Framework.** Participants are chosen on the basis of SRA Achievement Test administered to students in grades 6-12. All students scoring two or more grades below grade level are individually tested with several diagnostic tests. Reading level and difficulties are recorded. On the basis of these tests, and beginning in ascending order from the lowest score, the program participants are chosen. Provides lower pupil-teacher ratio to maximize the teacher-learner interaction. Short class periods aids teacher in coping with short attention span.

#### **INSTRUCTIONAL PROCESS:**

**Identification.** After the project group is selected, the supervising reading teacher diagnoses the individual needs and progress of participants through the repeated use of basic word tests and informal reading inventories.

**Remediation.** A record of diagnostic results and the completion of specific activities and materials is maintained in an individual folder for each student. This information serves as the basis for formulating performance objectives, for grouping, for instruction, and for the selection of specialized materials which are tailored to participants' needs, interests, and instructional level. All instruction focuses on reading and communication skills. Specific needs are diagnosed individually and every effort is made to help each participant develop basic skills sequentially. Emphasis is also placed upon motivating a sense of enjoyment in the reading experience.

**RECORDKEEPING PROCEDURE:** Manual records are kept on each student. A student's file includes all formal and informal test results, records of all activities and materials used in individual's program of instruction, progress and difficulties noted throughout instructional program.

**TIME:**

Initial Set-up. Training, identification of students and personnel, scheduling and materials need to be planned well in advance of implementation.

Daily Use. Requires 90 minutes (two class periods) of student time; staff participates in daily two-hour planning session. Follow-up post-testings students in program on a yearly basis.

**COSTS:** Annual maintenance costs are estimated at \$4 to \$5 per student per year, excluding personnel. First-year costs require special instructional materials for individualized teaching and the reading laboratory equipped with standard hardware and software to facilitate audiovisual skill building for program participants. Extra personnel are one reading specialist and four teacher aids (English and developmental reading teacher are from existing school staff).

**CONTACT:**

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**PROGRAM AREA:** Language Arts

**TITLE:** Individualized Language Arts: Diagnosis, Prescription, and Evaluation

**GRADE LEVELS:** All ability levels, grades 1-12; adult education; special education

**PROGRAM START DATE:** 1970-71 school year

**BRIEF DESCRIPTION OF PROJECT:** The Individualized Language Arts Project provides a method for teachers, grades 1-12, to analyze students' writing. It includes guidelines, procedures, strategies, and specific examples of how to teach writing. The teaching methodology also emphasizes ways for teachers to develop and reinforce other language arts skills. The approach can be used with either graded or non-graded classes, as the discovery orientation is compatible with almost any kind of classroom organization. It has been successfully implemented with students for whom English is a second language. This language-experience approach to basic writing skills is used in English, language arts, and content-area classes.

**SPECIALIZED TRAINING OF PROFESSIONAL STAFF:**

Required. Staff training of all teachers to be involved. Provision must be made for follow-up supervision, help, encouragement, and support of staff.

Availability. The project staff offers a two-day training workshop, plus follow-up consultation to the staffs of districts that make a commitment to implement the program. Two additional days of consultation are available to persons who wish to become trainers in the program, either in support of one district's implementation or in service to many districts.

**KNOWN OUTCOMES:** Evaluation data consists of three writing samples taken during the year in both the experimental and the comparison-group classes (in rural, urban, and suburban classrooms). Eleven criteria (spelling, organization, usage, punctuation, sentence structure, vocabulary, overall clarity, etc.). Each set of ratings was summarized and subjected to statistical analysis under the direction of the Evaluation Office of the New Jersey Department of Education. By mid-year, the project classes which had begun the year with low ratings were catching up with their competitors, and the project classes which had started on a par with comparison groups were forging ahead. By the end of the year, for the majority of the criteria, the project students had substantially out-performed the comparison groups. Most of the differential gains were statistically significant at the .05 level. The program has proved itself equally effective on the college level in a state college in New Jersey.

**MATERIALS USED:** Can incorporate Individualized Language Arts Program into existing curriculum guide, textbooks, or materials. Teacher's manual, file folders, and duplicating paper are needed.

**ORGANIZATIONAL REQUIREMENTS:**

Administrative Support. Need cooperative effort of teachers and administrators to identify and find ways to meet existing needs.

Space/Facilities. Takes place in existing classrooms with current classroom teachers.

Personnel. Teachers now responsible for language arts instruction.

Management Framework. Planned instructional lessons, designed to meet specific needs identified by the teacher, will vary according to grade level and maturity of students.

**INSTRUCTIONAL PROCESS:**

Identification. Three times a year, the teacher asks each student to submit a writing sample on a topic of his own choosing. Then the teacher reads through the class set of papers, without a marking pencil, to get a general overview of the writing competence of the students. Using a Diagnostic Grid Sheet, the teacher reads each paper a second time and indicates on the Diagnostic Grid Sheet the specific needs of each student.

Remediation. Keeping in mind the major writing needs that she has identified, the teacher chooses, from the Resource Manual, techniques which will help students to meet these needs. Usually, the teacher can select from a number of different techniques to cope with any one need, keeping in mind the maturity of the class. The manual correlates each technique with specific objectives, to help teachers with this step. The diagnostic procedure is repeated three times throughout the year.

**RECORDKEEPING PROCEDURE:** A cumulative folder is kept for each student and, at the end of the year, is passed on to the next teacher. Each year, the three dated writing samples are added to the folder and these are kept for a period of three years so that the teacher can analyze the growth made by each pupil. Students also have free access to their folders so that they may be continuously aware of their growth and improvement.

**TIME:**

**Initial Set-up.** Requires an awareness of the values of teaching writing and an assessment of the current curriculum. A two-day training workshop is essential.

**Daily Use.** No precise time limits can be set. Generally, elementary students should do some original writing every day in the content areas. Secondary level students' writing assignments should be flexible in length, topic, and frequency.

Follow-up is provided in the three evaluations each year; this is an ongoing 1-12 program.

**COST:** A two-day training workshop plus follow-up supervision of teachers. Cost depends upon whatever stipends for teachers' attendance at workshops exist in the school system. Costs for materials (file folders, paper, teacher's manual) can probably be absorbed within present budget. Teacher's Resource Manual is \$10 per copy.

**CONTACT:**

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Louisa Place  
Weehawken, New Jersey 07087  
(201) 865-193(2274)

**PROGRAM AREA:** Language Arts  
**TITLE:** Higher Horizons 100  
**GRADE LEVELS:** Grades 7, 8, 9 and 10: students with reading problems  
**PROGRAM START DATE:** 1965

**BRIEF DESCRIPTION OF PROJECT:** The primary goal of the HH100 program is to develop and improve the language skills, self-concept, and school adjustment capabilities of groups of 100 secondary students who are one to three years below grade level in their basic skills. Other goals include improvement of speech, mathematics, science, and social studies. This project was started in one high school as a ninth grade demonstration center. It has been expanded to include the seventh, eighth, and tenth grades. Each year, approximately 800 students receive HH100 services. At present, the program has eight clusters of 100 students, each of which is staffed by a team of five or six teachers and a guidance counselor. Because the cluster setting separates HH100 participants from other students, the program maintains a school-within-a-school atmosphere. This mini-school is characterized by small classes, individualized instruction, and intensive counseling services. After completion of one year in the program, students are evaluated and may return to the regular school program.

#### **SPECIALIZED TRAINING OF PROFESSIONAL STAFF:**

**Required.** On-going inservice meetings and summer workshops allow for staff development and interdisciplinary coordination. Cluster teaming is necessary for success. Each team must learn how to plan, work, and instruct as an entity. The cluster teachers must learn to make team decisions regarding grouping, curriculum development, cultural enrichment, individualized programs, etc.

**Availability.** No awareness materials are available. No training is conducted on site, but project staff is available for out-of-state consultation.

**KNOWN OUTCOMES:** Pre- and post-testing (September and May), Metropolitan Achievement Test (MAT) for grades 7-9, and CTAS for grade 10. Have consistently produced improved reading scores (average reading gain for program has been 1.5 years per group); use Pupil Self-Rating Scale for non-cognitive areas with salutary results; excellent reactions from parents and students who were asked about HH100 program two to three years after program "graduation."

**MATERIALS USED:** Does not call for new discoveries or special techniques. Materials typical to other programs are used for language development and content areas. Reading, writing, speech, and vocabulary skills are integrated into daily content-oriented lesson plans in math, science, and social studies. Reading, speech, and English teachers integrate content areas into each student's daily oral and written presentations.

#### **ORGANIZATIONAL REQUIREMENTS:**

**Administrative Support.** Requires staff selection for teams; appointment of team leader for each cluster; scheduling which allows for team planning; school-within-a-school supportive atmosphere.

**Space/Facilities.** Can operate within existing classroom space and facilities; need place for aide, counselor, team meetings.

**Personnel.** Each HH100 team has a full-time guidance counselor serving as the point of contact between parents, students, and staff. A project aide is available to provide secretarial and recordkeeping duties for the project and to perform student-related services. Four subject-matter teachers and one or two language specialists provide individualized instruction in their particular subject area: English, math, science, social studies, speech, and remedial reading.

**Management Framework.** Team leader, in addition to regular team assignment, assumes responsibility for the general supervision of the program, conduct of staff meetings, preparation of program reports and budgets, and the recruitment of HH100 staff. Major features of the program include language remediation, team planning, intensive counseling, and cultural enrichment.

#### **INSTRUCTIONAL PROCESS:**

**Identification.** Students selected are within normal range of intelligence and without serious emotional problems, but score one to four years below grade level in reading on the Metropolitan Achievement Test.

**Remediation.** Counselor, team members, and project aide coordinate efforts to plan each student's course of study, group classes, provide individual and group guidance, visit student homes, arrange field trips and speakers, and provide integrated daily instruction in language arts and the content areas.

**RECORDKEEPING:** Counselor and project aide assist in recordkeeping for individualized instructional plans for students.

**TIME:**

Initial Set-up. Start in spring for full implementation. Requires daily team planning during a regularly scheduled period. Staff spends one week during the summer preceding the academic year to plan the year's instructional and cultural activities. Ongoing inservice meetings and summer workshops for staff development and interdisciplinary coordination. Home visits follow-up. After one year in program, students are evaluated and may return to regular school program.

**COSTS:** Estimated at \$250 per pupil over and above the cost of students in regular school program. Guidance counselor, project aide, reading specialist are extra personnel.

**CONTACT:**

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Higher Horizons 100  
Hartford Public Schools  
55 Forest Street  
Hartford, Connecticut 06105  
(203) 278-5920

**PROGRAM AREA:** Reading And Language Arts (Staff Development)  
**TITLE:** Exemplary Center for Reading Instruction (ECRI)  
**GRADE LEVELS:** Teachers of Elementary and Secondary Students  
**PROGRAM START DATE:** 1967

**BRIEF DESCRIPTION OF PROJECT:** This project is designed to train teachers of students at all ability levels, grades K-12, in reading and language arts. The Center found that "teacher behavior is of greater significance than material in affecting gains in reading achievement." Teachers are trained in week-long seminars to develop the management system for mastery and individualization and employ teacher behaviors which lead to more effective instruction for students in reading and language arts.

**SPECIALIZED TRAINING FOR PROFESSIONAL STAFF:**

Required. A five to ten day inservice education program is initially required with followup visits to classrooms desirable.

Availability. Seminars are available at developer site or adopter district. Project inservice also includes university classes (where teachers pay tuition). Teacher-training internship program and teacher-exchange program are available.

**KNOWN OUTCOMES:** Gates-MacGinitie Reading Tests showed project students making 1.8 yr. gain in vocabulary and 2.5 years gain in comprehension during an 8-month period. Data available upon request.

**MATERIALS USED:** There are 20 self-instructional teacher training workbooks available for various components of the program.

**ORGANIZATIONAL REQUIREMENTS:**

Administrative Support. Supervisors and administrators participate in training sessions.

Space/Facilities. Additional facilities unnecessary.

Personnel. Existing personnel used.

Management Framework. Teachers learn a structure of scheduling, recordkeeping, and multi-sensory instruction. Can be adopted by a teacher, building, or school district.

**INSTRUCTIONAL PROCESS:**

Identification. Teacher uses techniques for all students when teaching reading and language arts.

Remediation. Each student works independently at own skill level using appropriate materials.

**RECORDKEEPING PROCEDURE:** Students take mastery tests at each skill level; students participate in recording their progress.

**TIME:**

Initial Set-up. Five to ten day inservice prior to implementing techniques.

Daily Use. Becomes integral part of all reading and language arts instruction.

**COSTS:** Training costs depend upon number of teachers involved. Consultant time - \$185 per diem plus expenses.

**CONTACT:**

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 ECRI  
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 Salt Lake City, Utah 84106  
 (801) 486-5083

**PROGRAM AREA:** Reading (Staff Development)  
**TITLE:** Intensive Reading Improvement Program (IRIP)  
**GRADE LEVELS:** Grades K-8  
**PROGRAM START DATE:** 1972

**BRIEF DESCRIPTION OF PROJECT:** This program is designed to upgrade the reading teaching skills of teachers working with children in kindergarten through grade 8. One teacher from each school is trained in theories and methods of teaching reading during 50 hours of instruction. The teacher returns to the school to conduct 30 hours of inservice for the teachers at that building.

**SPECIALIZED TRAINING OF PROFESSIONAL STAFF:**

Required. There are 21 teacher-training units used for the 60 hour resource teacher training and the 30 hour inservice teacher training.

Availability. Training units are available. On-site visitations and discussion of training strategies are available by appointment. No training or consultation can be provided out-of-state by project staff.

**KNOWN OUTCOMES:** The project was validated over a four-year period in 207 sites with approximately 7,000 teachers and 250,007 learners. Student performance was measured by norm-referenced tests.

**MATERIALS USED:** Teacher training includes units on: Self-Assessment, Test Data Interpretation, Continuous Progress-Mastery Learning, Grouping for Instruction, Directed Reading Lesson, Word Attack, Comprehension, Study Skills, Literature Program, Oral Reading, Content Area Reading, Audiovisual Resources, Teaching Reading to Speakers of Non-Standard English, Reading and the Non-English Speaker, and Home-School Partnership.

**ORGANIZATIONAL REQUIREMENTS:**

Administrative Support. Involvement of administrative, teaching and paraprofessional staff is recommended.

Space/Facilities. No additional facilities needed.

Personnel. Requires a district-wide coordinator, school reading resource teachers and classroom teachers.

Management Framework. Smallest implementation unit is one school. Can implement K-8, K-3, K-4, 6-8, or 7-8.

**INSTRUCTIONAL PROCESS:**

Identification. All students in school are instructed using IRIP techniques.

Remediation. One aspect of the comprehensive program.

**RECORDKEEPING PROCEDURE:** Not specified in literature on project.

**TIME:**

Initial Set-up. 60 hours of instruction for the reading resource teacher; 30 hours of instruction for the classroom teacher.

Daily Use. Techniques are incorporated into the existing reading program in the school district.

**COSTS:** Depends upon number of substitute teachers required during training sessions and/or number of teachers involved.

**CONTACT:**

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 Chicago Board of Education  
 Room 822  
 Chicago, Illinois 60601  
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**PROGRAM AREA:** Reading  
**TITLE:** Programmed Tutorial Reading (PTR)  
**GRADE LEVELS:** Grades 1-4 (Depending on basal reading series)

**BRIEF DESCRIPTION OF PROJECT:** This highly structured tutoring program supplements regular classroom instruction by providing daily tutoring on a one-to-one basis for underachieving students. Programmed instruction complements classroom basal readers.

**SPECIALIZED TRAINING OF PROFESSIONAL STAFF:**

Required. Tutors must be trained by the project director for three full days. Continual training is also necessary at bimonthly sessions.

Availability. Training materials and services are available from the project.

**KNOWN OUTCOMES:** Tutored students have made excellent achievement gains. Their scores on the Gate MacGinitie vocabulary and comprehension subtests were significantly higher than those of students in a control group.

**MATERIALS USED:** A variety of highly structured tutoring materials specifying what to teach and how to teach and other reading materials which complement the basal reading series in use.

**ORGANIZATIONAL REQUIREMENTS:**

Administrative Support. Principal must participate in training; part-time project supervisor necessary, as well as a tutorial supervisor for every 40 tutors (who work 2 hours a day.)

Space/Facilities. Tutoring sessions can be held in regular classrooms.

Personnel. A part-time project supervisor, tutorial supervisors, and tutors (paraprofessionals and high school students) are required in addition to regular staff.

Management Framework. Project supervisor and tutorial supervisors work with tutors to plan and coordinate 15 minute daily tutor-student sessions.

**INSTRUCTIONAL PROCESS:**

Identification. Students underachieving in reading are identified through below grade level test scores.

Remediation. Detailed profiles are kept of student testing, lessons and results.

**RECORDKEEPING PROCEDURE:** Student profiles.

**TIME:**

Initial Set-up. Needs assessment, instruction on use of materials and program, and schedule of tutors necessary before implementing.

Daily Use. Students work with tutors for 15 minutes each day until they no longer need remediation.

**COSTS:** Annual per pupil cost ranges from \$150 to \$250 depending upon rates of pay for tutors and existing materials available.

**CONTACT:**

Edwin R. Cammack  
 Project Director  
 Programmed Tutorial Reading  
 Davis School District  
 45 East State Street  
 Farmington, Utah 84025  
 (801) 867-2291

**PROGRAM AREA:** Reading  
**TITLE:** Glaszboro Right-to-Read  
**GRADE LEVELS:** Grades K-6  
**PROGRAM START DATE:** 1972

**BRIEF DESCRIPTION OF PROJECT:** This project provides individualized diagnostic/prescriptive reading instruction through a comprehensive reading program which involves parents and community members. After a district assessment of staff and community needs, a program of staff development, reading instruction and community support is devised and implemented.

**SPECIALIZED TRAINING OF PROFESSIONAL STAFF:**

Required. Approximately 20 hours of inservice prior to implementation. About one hour per week inservice training and planning after implementation.

Availability. Two-part four day training program available for districts making a commitment to adaptation of the project. Three manuals available: a guide to Program Planning Procedure; a guide to Program Implementation; a guide to Parent-Community Involvement.

**KNOWN OUTCOMES:** For two consecutive years the project achieved average gains exceeding the project's goal of 1.5 years reading achievement for each 3 months of instruction.

**MATERIALS USED:** Instructional sequences devised may come from commercially prepared materials or teachers can write their own.

**ORGANIZATIONAL REQUIREMENTS:**

Administrative Support. Superintendent must appoint a Local Unit Task force of district staff members and parents. Support of needs assessment and commitment to action on findings are essential.

Space/Facilities. Existing facilities can be used.

Personnel. Existing personnel and parents must be committed to project.

Management Framework. This project needs total district commitment--staff and community--in order to succeed.

**INSTRUCTIONAL PROCESS:**

Identification. Students take a battery of teacher administered diagnostic reading tests to determine instructional reading level.

Remediation. Students follow an instructional sequence based on their skill needs. This sequence is desired by the teachers and may be individual or small group activities.

**RECORDKEEPING PROCEDURE:** Each child has individual profile developed on the basis of skills and needs.

**TIME:**

Initial Set-up. Need to plan needs assessment, conduct it, and develop work plan prior to teacher inservice and implementation. Approximately two years of development is desirable.

Daily Use. This program is used as the program of reading instruction for the school district.

**COSTS:** Major cost is training of teachers in diagnostic/prescriptive reading, classroom management and instructional recordkeeping. Approximately 20 hours of inservice are necessary.

**CONTACT:**

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 Project Specialist  
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 Glaszboro, New Jersey 08038  
 (609) 881-6366

**PROGRAM AREA:** Reading

**TITLE:** Title I Corrective Reading/Wichita, Kansas

**GRADE LEVELS:** Grades 2-6 Students With Low Reading Achievement.

**PROGRAM START DATE:** 1967

**BRIEF DESCRIPTION OF PROJECT:** This corrective reading program is designed to improve students' reading instructional level, vocabulary, comprehension, and self-image. The handbook Team Approach to Reading Success delineates six phases of the program: identification, screening, diagnosis, scheduling, instruction and evaluation. Certified reading teachers have responsibility for program and as building resource persons. Parents are used as aides to tutor children.

**SPECIALIZED TRAINING OF PROFESSIONAL STAFF:**

Required. Orientation training necessary for administrators and special reading teachers using the program.

Availability. Workshops can be arranged at demonstration site or at adoption site.

**KNOWN OUTCOMES:** Results measured with the California Reading Test. The average gain per month of instruction was 1.5 months. 76.4% of students achieved gain of .8 months or more.

**MATERIALS USED:** A variety of materials typical of those in any corrective reading program are used.

**ORGANIZATIONAL REQUIREMENTS:**

Administrative Support. May be adopted at building or district level, depending on the commitment and funds available.

Space/Facilities. Need space to store materials and instruction space for small groups (4-8 children).

Personnel. Certified reading specialists, an aide for each instructor with 50 or more students; parents as tutors.

Management Framework. The essential component of this program is the reading teacher with expertise to use the corrective reading program, serve as a resource to classroom teachers, and work with parent tutors.

**INSTRUCTIONAL PROCESS:**

Identification. Metropolitan Achievement Tests and Iowa Tests of Basic Skills were used to identify students for the program.

Remediation. Multi-level multi-media materials are used as well as the basal texts used in classrooms. These are correlated to the Wichita Management System for Reading which includes behavioral objectives and criterion tests. Instruction is individualized and in groups of 4-8 children, depending on student needs.

**RECORDKEEPING PROCEDURE:** Profiles of all students needs and progress are kept throughout their participation in the program.

**TIME:**

Initial Set-up. Depends upon existing corrective reading materials and specialists in district or building.

Daily Use. Students spend an average of one-half hour daily involved in special instruction as determined by the program.

**COSTS:** On-site technical assistance and inservice training--\$100 per day plus expenses. Start-up cost for 50 pupils run approximately \$20,000 (includes reading specialist and materials).

**CONTACT:**

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Wichita Public Schools  
USO 259  
Wichita, Kansas  
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**PROGRAM AREA:** Reading

**TITLE:** Systems Directed Reading

**GRADE LEVELS:** K-6; Older students with reading difficulty

**BRIEF DESCRIPTION OF PROJECT:** This program provides comprehensive instruction in reading skills with special emphasis on word attack skills. A Skills Bank is set up at each school. Children are grouped cross-age according to skill needs determined from criterion-referenced tests and informal inventories. The major goal is to provide a system approach to reading instruction in which student needs and appropriate materials and instructional strategies are matched.

**SPECIALIZED TRAINING OF PROFESSIONAL STAFF:**

Required. Two-day training session is part of implementation process.

Availability. Training sessions, followup visits and technical help available.

**KNOWN OUTCOMES:** These procedures have reduced the reading problems by 75%. Students with prior difficulty in reading averaged one month's growth for each month of participation in the program.

**MATERIALS USED:** Criterion-Referenced Diagnostic Test; pupil profile cards; typical commercially prepared materials available in most schools.

**ORGANIZATIONAL REQUIREMENTS:**

Administrative Support. Complete commitment of time, human resources and financial resources are required.

Space/Facilities. Storage space for Skills Bank.

Personnel. Unit leaders, unit teachers and instructional aides are the personnel components.

Management Framework. Non-graded format followed; at least three grade levels must participate; reading specialist helps place children, then unit leaders and teachers instruct and, with aides help, prepare and manage paper work.

**INSTRUCTIONAL PROCESS:**

Identification. Students are identified by reading specialist and classroom teachers using criterion-referenced tests and informal inventories.

Remediation. Skill groups are formed on the basis of student need; these change as pupil progress indicates.

**RECORDKEEPING PROCEDURE:** Pupil profile cards indicate which skills a student is deficient or proficient in in the reading program.

**TIME:**

Initial Set-up. A two-year phase is recommended.

Daily Use. Must commit one-half hour each day to work with this project; student participation as needed.

**COSTS:** Diagnostic Criterion-Referenced Test, \$100. Pupil Profile Cards, 10¢ per student. Cost varies with the extent of the adaptation by a school district and existing materials and personnel.

**CONTACT:**

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Project Director  
Region 10 Education Service Center  
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Richardson, Texas, 75081  
(214) 231-6301, Ext. 329

**PROGRAM AREA:** Reading  
**TITLE:** Classroom Intervention  
**GRADE LEVELS:** Grades 1-6

**BRIEF DESCRIPTION OF PROJECT:** This project individualizes existing reading materials (from major textbook publishers). Students must reach mastery at each skill level prior to moving to the next level. This program was developed and used in inner-city schools.

**SPECIALIZED TRAINING OF PROFESSIONAL STAFF:**

Required. Teachers must learn to use Intervention Center classrooms which make available supplementary reading services which are related to each student's reading problem.

Availability. On-site project visitations can be arranged; inservice workshops and consultation services are available.

**KNOWN OUTCOMES:** Students in the program have averaged more than a year's growth in a year's time for three consecutive years, more than doubling the reading growth of their peers.

**MATERIALS USED:** Complements: Ginn 360 and 720, Lippincott (1969 and 1975), Houghton-Mifflin (1976), Holt, Rinehart & Winston (1974), and Macmillan (1975).

**ORGANIZATIONAL REQUIREMENTS:**

Administrative Support. A half-time director and support from reading services are required.

Space/Facilities. Need an additional classroom for supplementary reading services.

Personnel. The project requires a half-time director.

Management Framework. As this program is primarily a management system, it can be adopted as extensively as a school district requires.

**INSTRUCTIONAL PROCESS:**

Identification. Students are evaluated by teachers and/or reading specialists. Individual contracts are developed on the basis of this assessment.

Remediation. Each student is provided with appropriate materials from existing reading series and supplementary aids where necessary. Individual profiles are kept.

**RECORDKEEPING PROCEDURE:** Individual profiles and contracts.

**TIME:**

Initial Set-up. Needs assessment, resources available must be determined. Inservice prior to implementation.

Daily Use. Functions as part of existing reading program.

**COSTS:** The average startup cost is approximately \$11.00 per student, while the maintenance cost is approximately \$5.00 per student.

**CONTACT:**

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Bailey Gatzert Elementary School  
615 12th Avenue, South  
Seattle, Washington 98144  
(206) 587-6371

**PROGRAM AREA:** Reading

**TITLE:** Improving Achievement (Reading) Through Use of Teachers and Teacher Aides

**GRADE LEVELS:** Grades 10 through 12; can be adapted for grades 7 through 9; students reading two or more years below grade level

**PROGRAM START DATE:** August 1972

**BRIEF DESCRIPTION OF PROJECT:** This program involves approximately 200 senior high school students who read at least two years below grade level and who also function at low or failing levels in two academic areas. These students are enrolled in a special reading laboratory and resource room program staffed by teachers and aides trained to give special assistance to students with reading deficiencies. The project reading teacher and eight aides coordinate activities with English teachers on the regular high school staff. Each individual's reading skills are thoroughly analyzed during the first week of the program. The project emphasis is a classroom environment in which the student's self-image can be improved in a positive, non-threatening way, and where the student can work at the correction of his reading deficiencies on a one-to-one basis or in very small groups. This program involves the reading improvement process in the larger context of communication and language improvement.

**SPECIALIZED TRAINING OF PROFESSIONAL STAFF:**

Required. Training of project teacher (a certified English/reading person); training of eight aides; some inservice for high school English teachers who will collaborate with project staff.

Availability. No training conducted on site. Some project staff may conduct training out of state. (No funds available for dissemination efforts.)

**KNOWN OUTCOMES:** Subjective evaluation indicated that the teachers believed most of the project students showed improved reading ability, and their academic work in their subject of greatest difficulty was also improved. The students showed considerable enthusiasm for the project, and especially enjoyed an opportunity to participate in various developmental reading activities. The objective analysis shows that in both reading speed and accuracy, reading vocabulary, and reading comprehension, the behavioral objectives as measured by Form E of the Gates-MacGinitie Standardized Reading Test are consistently achieved. Comparisons with previous reading performance of the students would indicate that had these students been left to ordinary English and literature methods used in senior high schools, their growth in reading skills would have been much less than was achieved. Eighty-five percent of participating rural, low-to-middle income students measured an average monthly gain of 1.1 months or more per month.

**MATERIALS USED:** Commercially-prepared materials for individualized instruction in basic reading skills and language arts.

**ORGANIZATIONAL REQUIREMENTS:**

Administrative Support. Commitment of high school to reading lab program and necessary cooperation of English teachers and scheduling requirements are essential.

Space/Facilities. Equipped reading resource laboratory.

Personnel. One project teacher and eight aides are required in addition to existing English faculty.

Management Framework. Students in program are registered for English Track One if sophomore, and Development Reading or Reading and Communication Skills if juniors or seniors. Project teacher and aides provide individualized or small-group instruction, depending on the needs of students and their reading deficiencies.

**INSTRUCTIONAL PROCESS:**

Identification. Reading deficiencies identified through formal and informal testing of stated behavioral objectives.

Remediation. Instruction begins at point of identified deficiencies; personalized sequential program planned and followed for each student.

**RECORDKEEPING PROCEDURE:** Individual records are kept of identified areas of weakness and patterns of improvement.

**TIME:**

Initial Set-up. Requires training of project director, aides, and involved English staff--several days orientation; need time to acquire and set up reading lab.

Daily Use. Students obtain concentrated instruction for class period every day.

Students are in program for one year if sophomores; one semester (possibly more, if needed) if juniors or seniors.

**COSTS:** Additional personnel are one project reading teacher and eight aides. Materials and equipment for laboratory also needed. Estimated cost for above for 180 students was \$200-\$225 per student (at 1975 prices).

**CONTACT:**

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Sky View High Project  
Cache County School District  
2063 North 17th Street, East  
Logan, Utah 84321  
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**PROGRAM AREA:** Reading (Staff Development)  
**TITLE:** Vocational Reading Power (VRP)  
**GRADE LEVELS:** Staff development project originally for vocational programs; has been adapted in non-vocational junior-senior high and post-secondary settings  
**PROGRAM START DATE:** 1971

**BRIEF DESCRIPTION OF PROJECT:** The goals of VRP are to: (1) narrow the gap between student reading ability and the skill level required to read printed instructional materials; (2) help teachers make appropriate selections of printed materials and plan reading-related activities appropriate for the abilities of their students; and (3) train every teacher as a reading teacher, regardless of their discipline. There are six components to the program:

**Testing.** Train teachers to determine the reading abilities of their students through the use of standardized and teacher-developed tests.

**Readability.** Apply computerized or manual techniques to analyze the reading level of printed materials.

**Teacher Survey.** Plan curriculum and inservice based on teachers' perceptions and needs within a department, school, or district.

**Vocabulary Development.** Assist all content area instructors in vocabulary development activities and, for vocational adopters, provide glossaries of "Need to Know" words for each of 32 occupational areas.

**Reading in the Content Area Modules.** Auto-instructional inservice modules to provide instructors with training in basic reading strategies and procedures.

**Vocational Instructional Materials System.** A resource bank which provides instructors with an opportunity to examine a wide variety of instructional materials within a specific content area.

Adopter sites must choose a minimum of two components for adoption/adaption.

#### **SPECIALIZED TRAINING OF PROFESSIONAL STAFF:**

**Required.** Intensive adoption training for all staff involved in the project. Training sessions range from four to eight hours per component adopted.

**Availability.** Introductory audio/video presentation is available. One-day, pre-adoption workshop for tentative adopters is available (one-half of trainer's travel costs must be provided). Training workshops at the adopter site is available (full reimbursement of trainer's travel costs must be provided). Training and instructional materials available at cost. Second-generation trainers located at various sites throughout the country are also available to provide pre-adoption and training workshops.

**KNOWN OUTCOMES:** Longitudinal pre- and post-tests were administered over a three-year period on all students within the original project. The students completed the Gates-MacGinitie Survey F Comprehension subtest. Findings indicated that more students scored in the functional reading literate category (7.0-10.9) each successive year of the project's implementation. Teacher evaluation data demonstrated growth of teacher attitudes and knowledge of text utilization and reading-related activities.

**MATERIALS USED:** The project staff has developed a set of materials to go with each of the six components of the program. They are available from the project site at cost.

#### **ORGANIZATIONAL REQUIREMENTS:**

**Administrative Support.** This program requires recognition of need for reading teaching in content areas at the secondary level. Staff involved will need to develop responsibility for relating instruction to reading ability of students. There may be major changes in orientation toward teacher activities.

**Space/Facilities.** Takes place in existing classrooms.

**Personnel.** Involves administrators, reading consultants, and content-area instructors. Staff development of existing faculty; one person with background in curriculum development and/or reading to act as coordinator/director on part-time basis.

**ORGANIZATIONAL REQUIREMENTS, cont'd.**

Management Framework. School faculty identifies components of the program they will use; a pre-adoption one-half or full day workshop determines one-to-four day inservice training workshop.

**INSTRUCTIONAL PROCESS:**

Identification. Teachers are trained in basic reading strategies and procedures; they are trained to determine reading abilities of their students and to assess appropriateness of available materials.

Remediation. Resource materials of a wide variety of instructional levels are available from resource bank.

**RECORDKEEPING PROCEDURE:** This is oriented toward staff development of appropriate printed materials and reading-related activities for the abilities of students.

**TIME:**

Initial Set-up. Requires intensive training for all staff involved. Training sessions range from four to eight hours per component adopted.

Daily Use. Is incorporated into daily lesson planning of instructors. Inservice sessions are held periodically to help and support faculty implementing the program.

**COSTS:** Training and instructional materials are available at cost. No new equipment or staff required. Modules for Reading in the Content Areas vary in cost--entire set may be purchased for under \$400.

**CONTACT:**

Eileen Ostergaard  
Minnesota Instructional Materials Center  
3554 White Bear Avenue  
White Bear Lake, Minnesota 55110  
(612) 770-3943

**PROGRAM AREA:** Reading

**TITLE:** Reading Improvement Program--Secondary Schools  
Reading Laboratory

**GRADE LEVELS:** Junior and senior high school students reading one year or more below grade level

**PROGRAM START DATE:** 1973

**BRIEF DESCRIPTION OF PROJECT:** The Reading Improvement Program is designed for educationally disadvantaged students. Diagnostic and prescriptive in design, it provides a high intensity, success-oriented approach in reading skill instruction for participating students. This project operates in five junior high schools, two high schools, and one parochial school. The reading labs are designed to accommodate 60 students with low reading scores. Each reading lab has one full-time teacher and one full-time aide who work with no more than 12 students in one class period. Student participants are scheduled in the lab for one 55-minute period each day for the entire school year. Techniques and procedures are identified for each individual's program, including activities which complement students' strengths. Parents are involved through teacher-parent meetings, home visits, and parent advisory councils. Content area teachers are involved in decisions regarding student placement, inservice training on recognition of and improving reading skill deficiencies, and discussion of individual student's progress.

**SPECIALIZED TRAINING OF PROFESSIONAL STAFF:**

Required. It is recommended that teachers and aides receive approximately 60 hours of inservice training prior to implementation of a secondary reading lab. Teachers and aides are involved in inservice presentations from the county administrative office, the state department of education, and nationally-known authorities in reading. Additional inservice is presented as needed throughout the year and includes assessment of new procedures and techniques vital to the operation of the lab.

Availability. No funding supports this project's dissemination efforts. Training costs on site or at developer district can be provided by project staff but adopting site must cover all costs.

**KNOWN OUTCOMES:** Evaluation of the FY 75 secondary reading lab program indicated that the participants in the seventh grade program had an average gain of 2.1 years, while the control group had an average gain of 1.1 years. The tenth grade students in the program experienced an average gain of 1.8 years, with the control group experiencing an average gain of 1.3 years. Eighty percent of the seventh grade participants and seventy-three percent of the tenth grade participants met or surpassed the program objective, as compared to forty-two percent of the seventh grade and sixty-four percent of tenth grade control groups.

**MATERIALS USED:** The secondary reading lab uses commercially-prepared materials for instruction in visual perception, vocabulary, word attack skills, comprehension, and study skills. Audiovisual equipment typical of reading labs is also necessary.

**ORGANIZATIONAL REQUIREMENTS:**

Administrative Support. The school administration and subject-area teachers must be in agreement with the precept that students who are deficient in reading skills cannot be expected to master content area information. This consensus is necessary if students are to be scheduled into the lab for corrective skill instruction with total staff cooperation (students may need to be assigned to the lab during regular classes on a rotating basis).

Space/Facilities. A reading lab is needed for each school building.

Personnel. A reading lab teacher and a teacher aide are necessary for each school lab. A reading consultant provides the administrative leadership.

Management Framework. The reading consultant is responsible for screening students for the program, assists in ordering of materials and equipment, provides necessary inservice for staff, provides information about the program to various groups and organizations, and compiles the evaluative data from the program.

**INSTRUCTIONAL PROCESS:**

Identification. Students are selected from information gathered through state-county achievement tests administered in the sixth and ninth grades, standardized reading achievement tests, teacher observations and recommendations, and parental requests. Lab teachers conduct pre- and post-testing with standardized reading achievement tests for evaluation purposes. Reading strengths and weaknesses are diagnosed.

**INSTRUCTIONAL PROCESS, cont'd.**

**Remediation.** Ongoing evaluation of students' progress is conducted through the use of informal tests, evaluative instruments built into the instructional programs, and teacher observations. Programs and activities are provided for correction of deficiencies in an atmosphere conducive to improving and enjoying reading.

**RECORDKEEPING PROCEDURE:** Each student's folder is kept up to date by aide.

**TIME:**

**Initial Set-up.** Requires installation of reading lab and 60 hours of inservice for teachers and aides prior to implementation of program.

**Daily Use.** Students may come to lab as an elective in their schedule or on a rotating basis from other classes. Teacher and aide in lab work with groups of 12 for 50-minute sessions daily.

Students are in program while remediation needs exist. Weekly evaluations are conducted.

**COSTS:** Equipment and materials for each lab (estimated at \$6,000); teachers' salary, aides' salary, reading consultant's salary.

**CONTACT:**

Darel K. Custen, Director  
Title I, Wood County Schools  
1210 Thirteenth Street  
Parkersburg, West Virginia 26101  
(304) 422-8411

**PROGRAM AREA:** Reading  
**TITLE:** HOSTS: Help One Student To Succeed  
**GRADE LEVELS:** K-12 students in need of remedial reading instruction  
**PROGRAM START DATE:** 1971

**BRIEF DESCRIPTION OF PROJECT:** The HOSTS program operates from a learning resource center staffed by a reading specialist and an aide. It is a diagnostic/prescriptive/tutorial approach to basic reading skills set-up to improve reading ability levels. HOSTS focuses on the use of human material and physical resources available in the community to improve reading. Teaching procedures in the HOSTS program are designed so that teachers may discover the abilities of each student, and allow him/her to advance at his/her individual learning rate. Community volunteers work as tutors on a one-to-one basis with students, following prescriptions developed by the reading specialist for each student.

#### **SPECIALIZED TRAINING OF PROFESSIONAL STAFF.**

**Required.** Districts who are potential adopters will be asked to send key personnel to visit the developer project. Upon completion of the visitation period, those districts who remain interested may apply to become HOSTS sites. Special training necessary for reading specialists, aides, and community volunteers.

**Availability.** The HOSTS Corporation provides training experiences for certified and non-certified staff so that they may acquire the skills necessary for conducting the program (five days).

**KNOWN OUTCOMES:** Program evaluation consists of normative (Gates-MacGinitie, CTBS) and criterion-referenced tests. Student achievement scores indicate that, on the average, students doubled their learning rate while in HOSTS (1973-76).

**MATERIALS USED:** Instructional materials have been identified and cross referenced in HOSTS notebooks, ranging from readiness level through junior high level. A tutor training manual is also available.

#### **ORGANIZATIONAL REQUIREMENTS:**

**Administrative Support.** Reading specialists, community relations enabling the enlistment of volunteer tutors (some may be local high school students).

**Space/Facilities.** Reading center in each school.

**Personnel.** A reading specialist and aide for each reading center; a volunteer tutor for each student.

**Management Framework.** Reading specialists work with instructional aides to plan and coordinate tutor-student sessions.

#### **INSTRUCTIONAL PROCESS:**

**Identification.** Students are evaluated by reading specialist. An individual student reading profile contains the results of the student assessment process. Individual lessons are developed in this profile.

**Remediation.** Specific directions for tutor implementation of the prescribed program lessons are included in the student profiles. Daily student progress is recorded by the tutors and incorporated into the profile.

**RECORDKEEPING:** Student profiles.

#### **TIME:**

**Initial Set-up.** Needs assessment, resources available, and evaluation plan must be made prior to initial site visit. Application to program follows.

**Daily Use.** Tutors work with students on a daily basis until no longer needing remediation.

**COSTS:** HOSTS has a start-up cost ranging from \$30-\$115 per pupil and a continuation cost ranging from 50¢ to \$12 per pupil per year, depending upon existing resources (figures based on 2,000 target pupils). Five-day training session. Reading specialists, instructional aides, and materials are provided. Also provision of reading centers in schools. HOSTS manual is \$125 per set; tutor training manual is \$10.

**CONTACT:** Bill Gibbons, Executive Director  
 HOSTS Corporation  
 5802 MacArthur Boulevard  
 Vancouver, Washington 98661  
 (206) 694-1705, 694-1775

**PROGRAM AREA:** Reading

**TITLE:** Reading Instruction and Pupil Personnel Services (RIPPS)

**GRADE LEVELS:** K-10th graders reading below grade level; concentration on K-4

**PROGRAM START DATE:** 1971 (existing reading and guidance programs merged)

**BRIEF DESCRIPTION OF PROJECT:** This program attempts to coordinate all the factors contributing to a child's development. It combines a multi-disciplinary guidance approach with a corrective reading program. The aim is to identify the student's problem and to assist her/him to function more effectively. The project uses a reading services program for two basic functions: (1) a corrective reading component to treat reading as a causal factor in a child's progress, and (2) a reading service program to treat reading difficulties as a symptom of other problems (social, emotional, physical, etc.) adversely affecting progress. Each participant is evaluated by a guidance counselor. Social worker services are an important part of the program and psychological/psychiatric services are provided when needed. Now serves 315 students in six schools, grades K-10. Includes an open entry and exit plan. Students who reach grade level leave the program but are closely followed.

**SPECIALIZED TRAINING OF PROFESSIONAL STAFF:**

Required. Extensive close work of RIPPS team and adaptor site staff is necessary. Training must be in the area of program management as well as program content. A year of planning prior to implementation is recommended.

Availability. RIPPS project staff is available for extensive aid to committed school districts. No special funding supports this project's dissemination. Amount of aid depends on local funds available.

**KNOWN OUTCOMES:** Outside evaluation conducted yearly. Cognitive evaluation: the CTBS, CAT, and Silverroll. Informal Reading Inventory used. Objectives have been met consistently. Affective evaluation: instruments were developed locally. Objectives met i. positive attitudinal changes with respect to school, peers, and selves.

**MATERIALS USED:** Commercial and teacher-made materials are used for the remedial reading aspect of the program.

**ORGANIZATIONAL REQUIREMENTS:**

Administrative Support. The adaptor must become familiar with the basic operation and makeup of the project. A representative cross-section of the school community (teachers, administrators, parents, etc.) must visit project site. This decision to adapt the project must be made by the school, not for the school.

Space/Facilities. Space is needed for some small-group and individualized reading instruction; a place for team meetings, classroom teacher-project teacher consultation, parent conferences, and parent study groups.

Personnel. Classroom teachers, reading specialists, guidance counselors, special services personnel, and parents work as team.

Management Framework. Most components of the RIPPS program exist in school districts. The program can be adapted through reorganization of existing staff and commitment to the team approach for meeting learner needs. Must be willing to train and involve parents in the process.

**INSTRUCTIONAL PROCESS:**

Identification. A Selection Scale Score Criteria system was devised as an objective means of determining which students would be involved in the RIPPS remedial program. The system takes into consideration standardized achievement testing, diagnostic testing, and teacher assessment. Each component is assigned a value which was determined by the RIPPS staff after input from teachers, administrators, and the project evaluator.

Remediation. After diagnostic testing of present skills and abilities, an individual learning program is established for each student. This reading program is the result of a team effort of teachers, reading and pupil personnel specialists, and parents.

**RECORDKEEPING PROCEDURE:** An individual file of each student's diagnosis results, prescribed activities results, and conference decisions is kept.

**TIME:**

Initial Set-up. Requires about one year of school district work with project staff prior to implementation.

Daily Use. Regularly scheduled consultations of all involved personnel are as necessary as the daily reading instruction provided.

Early identification and follow-up of students is part of program.

**COSTS:** Estimated costs for 1977-78 program was \$938 per student. Estimated start-up costs \$1,000-\$1,500 per teacher, depending upon materials and purchases required.

**PROGRAM AREA:** Reading

**TITLE:** SEAPORT: Student Education Assuring Positive Organized Reading Techniques

**GRADE LEVELS:** Pre-kindergarten to grade 9 students at least one year below appropriate grade level

**PROGRAM START DATE:** 1966

**BRIEF DESCRIPTION OF PROJECT:** The goals of the SEAPORT project are to improve reading skills; improve reading achievement levels; improve students' attitudes toward themselves, learning, and school; and improve community understanding and support of the program. This program serves over 800 children in 14 schools. Each student served receives an intensive, individualized prescriptive program of instruction geared to his/her most critical needs in the areas of basic reading skills, word attack skills, and language arts. A team of 19 remedial reading specialists conduct the basic instructional program and serve as remedial reading consultants to the students' classroom teachers. The program also has the services of three learning therapists, a supplementary learning specialist, a home school learning specialist, and a guidance counselor. This program includes parental involvement in all aspects of the operational, planning, and implementation components of the program. Feedback from parents was utilized to plan the original program as well as changes that occurred during implementation.

**SPECIALIZED TRAINING OF PROFESSIONAL STAFF:**

Required. Project staff receives training throughout the year to enhance competence and instructional expertise.

Availability. Awareness materials are available. Visitors are welcome. Training may be conducted at the project site. No funds are available for dissemination.

**KNOWN OUTCOMES:** The 1976-77 evaluation showed that some students, who were expected to gain approximately one-half year in growth, stopped "losing ground" and gained reading skills (almost two years of growth) faster than students in regular program. Student attitudes improved. Attendance at school improved.

**MATERIALS USED:** Commercially-available materials for individualized remedial instruction in reading.

**ORGANIZATIONAL REQUIREMENTS:**

Administrative Support. The additional staff necessary for this program require the commitment of the entire school system.

Space/Facilities. A resource room equipped as a reading lab is needed in each school building.

Personnel. This program required 18 teachers trained as reading specialists and two certified early childhood teachers, one full-time director, and one full-time secretary. Aides are also used in the labs.

Management Framework. This program is supplemental, that is, in addition to existing programs. The Project director administrates activities of all reading lab teachers and coordinates lab teachers' conferences with content area teachers and parents.

**INSTRUCTIONAL PROCESS:**

Identification. Once a student is selected for participation in the program, intensive diagnostic information is utilized in order to formulate an individualized, prescriptive learning program that is geared specifically for that student.

Remediation. Educational skills deficiencies are translated into learning skills objectives and the program's remedial reading specialists, in collaboration with the student's classroom teacher, formulate a learning program that concentrates on these specific objectives on a daily basis in small group and one-to-one instructional sessions that are geared to the learning style of the student in order to optimize his/her learning potential.

**RECORDKEEPING-PROCEDURE:** Students' individual program files include test scores, achievement records, teacher recommendations, and instructional level deficiencies.

**TIME:**

Initial Set-up. Requires identification of staff and students and acquisition of labs and materials. Monetary support may take longest to obtain.

Daily Use. Students are given daily instruction by a classroom teacher on a regular weekly basis.

Students are in program until remediation needs are corrected or through grade nine.

**COSTS:** Extra personnel (one project director, one secretary, 10 reading specialists, eight aides, two early childhood teachers) are part of the program. Additional services are used from existing guidance counselors and pupil services personnel. Reading resource centers (labs) need to be equipped in each school.

**CONTACT:**

Mary Macioci, Coordinator of Grant Programs  
Grant Programs Office  
Edward Street  
Newport, Rhode Island 02840  
(401) 846-4700

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PROGRAM AREA: Basic Skills in Mathematics and Language Arts

TITLE: Teams-Games-Tournaments (TGT)

GRADE LEVELS: Grades 3-12

PROGRAM START DATE:

**BRIEF DESCRIPTION OF PROJECT:** The students in a classroom are grouped into four- or five-member learning teams. Each week the teacher introduces new material in a lecture or discussion. The teams then study worksheets on the material together. At the end of the week, team members compete in tournaments with other teams to add points to their team scores. In the tournaments, students compete on skill-exercise games with others who are comparable in past academic performance. This equal competition makes it possible for every student to have a good chance of contributing a maximum number of points to his or her team. A weekly newsletter prepared by the teacher recognizes successful teams and students who have contributed outstandingly to their team scores. TGT is designed to supplement other classroom instruction.

**SPECIALIZED TRAINING OF PROFESSIONAL STAFF:**

Required. Many teachers have implemented TGT in their classes using only the commercially-available manual for this technique. If used by entire school or district, a half-day workshop is recommended.

Availability. Awareness and adoption materials and personnel are available.

**KNOWN OUTCOMES:** TGT has been evaluated in ten studies involving nearly 3,000 students in schools across the country. In all of these studies, TGT students learned more than students not using the materials. In seven of these studies, the difference in academic achievement was statistically significant. Recent analyses have shown positive TGT effects on classroom race relations.

**MATERIALS USED:** TGT's published materials may be implemented or teachers may develop their own materials, using the TGT teacher's manual.

**ORGANIZATIONAL REQUIREMENTS:**

Administrative Support. Administrative support is necessary for providing teacher time for making materials and/or allotting some existing budget for implementation.

Space/Facilities. No special requirements.

Personnel. No special requirements other than using some teacher time differently.

Management Framework. Implemented in each teacher's classroom.

**INSTRUCTIONAL PROCESS:**

Identification. Teams are composed of 4-5 students representing all levels of academic achievement in the class, all racial and ethnic groups, and both sexes.

Remediation. The team works together to ensure that each team member knows the material.

**RECORDKEEPING PROCEDURE:** Students use worksheets to learn material and games to test for knowledge of material. Tournaments are designed to change the opponents students face each week. The newsletter is the primary means of rewarding teams and individuals.

**TIME:**

Initial Set-up. Require more preparation than traditional instruction if teachers make own materials; this is required for first time only--if commercially-prepared materials are not obtained.

Daily Use. Part of class session each day; designed to be used over a 6-12 week period to complement other instruction.

**COSTS:** If using commercially-prepared materials, approximate costs vary: Language Arts Kit 7-9, \$127.50; sample package of any subject, \$6.95.

**CONTACT:**

John H. Rollifield  
Center for Social Organization of Schools  
3505 N. Charles Street  
Baltimore, MD 21218  
(301) 366-3582

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**PROGRAM AREA:** Staff Development, Reading and Mathematics  
**TITLE:** Utah System Approach to Individualized Learning  
**GRADE LEVELS:** Grades K-9  
**PROGRAM START DATE:** 1970

**BRIEF DESCRIPTION OF PROJECT:** U-SAIL is a system comprised of two essential components for implementing programs in reading and/or mathematics: (1) a planning model of six steps, and (2) a procedure model of five steps. It is not designed for a particular kind of school building or organizational pattern. It is a system for developing individualized instruction. The planning model includes: (1) Ideal Goals: establish terminal goals; (2) Reality Base: determine options and constraints; (3) Reality Goals: establish performance objectives; (4) Work Base: complete task analysis; (5) Work Flow: project time frames; (6) Review, Evaluation, Revision: consider 1-5 above as data base enlarges. The procedure model includes: (1) use of planning model described, (2) organization of resources available, (3) installation of an environment in which individualization is possible, (4) installation of diagnostic prescriptive teaching, (5) installation of learning strategies.

**SPECIALIZED TRAINING OF PROFESSIONAL STAFF:**

Required: Three to five days initial staff training is followed up periodically. Program implementation participants generally make commitments for a two- or three-year period.

Availability: Training can be obtained at the U-SAIL center and at the local sites. Awareness materials are available without cost.

**KNOWN OUTCOMES:** Analysis of evaluation data show, where the U-SAIL system has been installed in pilot settings and at replication sites both in Utah and at other out-of-Utah sites, students have made significantly higher achievement gains in reading and mathematics, as measured by the scores on standardized achievement tests, than students in comparison groups. The results have been uniformly and significantly in favor of U-SAIL students across independent replication sites. Favorable results have been obtained regardless of teacher experience, test used as outcome measure, year of implementation, grade level, geographic location, socio-economic background of parents, and racial-ethnic factors.

**MATERIALS USED:** The materials available at the local school district are identified for maximum utilization. U-SAIL has developed instructional material which are available at low cost for use in the program.

**ORGANIZATIONAL REQUIREMENTS:**

Administrative Support. Administrators are viewed as leaders and teachers of teachers. The administrator needs situational management skills to individualize his/her administrative behavior according to his/her own strengths and limitations and the parents, teachers, and children in the school environment. Administrator training is part of the U-SAIL program.

Space/Facilities. Based upon local school budgets, buildings, and staffing patterns.

Personnel. Uses existing personnel.

Management Framework. All of the existing school staff learns the system planning and procedural models for implementing individualized instruction.

**INSTRUCTIONAL PROCESS:**

Identification. Each learner in the classroom is provided with the most nearly appropriate task possible, given the teacher and resources available.

Remediation. Uses cyclical procedural model which is continuous: planning, organizing, environment management, teaching precision, and learner self-direction.

**RECORDKEEPING PROCEDURE:** Group and individual records are part of the environment management.

**TIME:**

Initial Set-up. Recommend a two- or three-year commitment; first year will implement one content area.

Daily Use. Pervasive classroom use in content area(s) in which implemented.

**COSTS:** Vary--if project-developed materials are used, costs average \$7.00 per pupil. Staff training costs vary and are negotiable. Travel and expenses must be paid by the local school district.

**CONTACT:**

Dr. Carma M. Hales, Director  
U-SAIL Project  
2971 Evergreen Avenue, P. O. Box 8127  
Salt Lake City, Utah 84109  
(801) 486-3331

**PROGRAM AREA:** Reading and Math

**TITLE:** PROJECT R-3: Readiness, Relevancy and Reinforcement

**GRADE LEVELS:** Junior High (grades 7, 8, and 9)

**PROGRAM START DATE:** 1967

**BRIEF DESCRIPTION OF PROJECT:** Project R-3 is a motivational program designed to upgrade essential reading and math skills of junior high school students. It emphasizes student readiness, subject relevance, and learning reinforcement in a laboratory environment. The entire incoming class of seventh graders is involved in the project for three years, through ninth grade. A teaching team of three content area teachers (reading, math, and social studies) stays with the project students for the duration of the project. The R-3 curriculum integrates reading, math, and social studies in such a way that skills learned in one class are practiced and reinforced in another. Individual and small group instruction is promoted by continual use of diagnosis and prescription, insuring that students approach assignments at levels compatible with their developed abilities. Once or twice during each school year, students participate in intensive involvement overnight field trips. These trips submerge the students in situations needing resolution and are often the culmination of weeks of preparatory classwork. Nonproject staff and parents are usually invited on the trips. The teacher-to-student ratio in R-3 classes is no more than one to 22, and a paraprofessional aide is assigned to each project classroom.

**SPECIALIZED TRAINING OF PROFESSIONAL STAFF:**

Required. The training of teachers and aides in R-3 is extensive. Prior to operation, the staff attends a week-long start-up training workshop. During the year, there are weekly inservice training meetings. In addition, each subject area team's daily planning meetings are sometimes partially devoted to training.

Availability. Project staff are available at project site and/or at adopter site. A Project Information Package (PIP) is available which describes the program and the implementation process in detail.

**KNOWN OUTCOMES:** Based on achievement gains, R-3 was one of the top six projects nationally screened and evaluated as suitable for widespread adoption. Project students averaged gains of more than one-third of a standard deviation with respect to national norms, over and above what would have been expected without such treatment.

**MATERIALS USED:** Project R-3 incorporates many instructional approaches, such as contracting, diagnostic/prescriptive teaching, games, simulations, and traditional teaching procedures. These materials are needed, as well as secondary reading curriculum materials and mathematics curriculum materials.

**ORGANIZATIONAL REQUIREMENTS:**

Administrative Support. Principals will need to support the project's philosophy and set aside adequate space for it.

Space/Facilities. Space is needed for three extra classrooms and office requirements.

Personnel. R-3 requires a full-time project director, secretary, and curriculum resource teacher. Three extra full-time teachers (one each in reading, math, and social studies) in addition to current staff are required, as well as an instructional aide for each teacher.

**MANAGEMENT FRAMEWORK:** All incoming seventh graders are in the project. The R-3 staff works with them for three years, each year involving the regular grade level (seventh, then eighth, then ninth) staff in their planning and program objectives.

**INSTRUCTIONAL PROCESS:**

Identification. At the beginning of the school year, all R-3 students are given diagnostic tests to determine their individual strengths and needs. R-3 teachers discuss the test results to plan group and individual learning activities for all students.

Remediation. During the school year, students work on contracts and other individualized activities to match their ability levels and interests. A wide variety of learning materials is available to the students. Maximum class size is 22 students.

**RECORDKEEPING PROCEDURE:** Teacher/aide teams devise in-class record systems that meet their need for information about students. Other records vary with school district.

**TIME:**

Initial Set-up. About six months after project director is hired to beginning implementation in classroom.

Daily Use. Three class periods a day for each student. Planning time for project staff and for staff to plan with regular teachers.

**COSTS:** Project staff and materials not available at local school level.

**CONTACT:**

Pauline Ferrazzo  
1635 Park Avenue  
San Jose, CA 95126  
(408) 287-1111

or for Project Information Packages:

Educational Resources Center, Inc.  
055 Broadway  
Boulder, CO 80302  
(303) 492-8154

**PROGRAM AREA:** Reading and Mathematics  
**TITLE:** High Intensity Tutoring (HIT)  
**GRADE LEVELS:** Sixth, seventh and eighth grade  
**PROGRAM START DATE:** 1970

**BRIEF DESCRIPTION OF PROJECT:** High Intensity Tutoring is a cross-age tutoring project for sixth, seventh, and eighth graders. The project features drill in basic reading and math facts and use of programmed workbooks. Teachers distribute candy and other rewards based on points earned by tutees and tutors. The short instruction period (30 minutes), structured drill materials, tutoring techniques, and candy rewards all contribute to the success of this high intensity instruction. Teachers recruit tutors from the seventh and eighth grades to work with sixth and some seventh grade tutees. Teachers assign tutor-tutee pairs so that the tutor is approximately two years ahead of the tutee in reading and math skills. Tutees often advance to become tutors. Teachers and aides unobtrusively monitor tutoring, keep detailed records of the percent of errors each tutee makes, and assign materials tutees can complete with 90-94 percent accuracy.

**SPECIALIZED TRAINING OF PROFESSIONAL STAFF:**

Required. Start-up and inservice workshops are necessary for project personnel.

Availability: May be provided by project staff or through a Project Information Package.

**KNOWN OUTCOMES:** Local project evaluations showed consistently high gains for HIT and reanalysis confirmed these findings. On the Wide Range Achievement Test in 1971-72, HIT tutees and tutors in reading and math averaged gains of between .334 and .73 of a standard deviation in relation to the national norms. This was well beyond the effectiveness criterion for becoming a nationally-selected effective project.

**MATERIALS USED:** HIT math tutees use drill material, such as flashcards and fact sheets to master basic facts. They use programmed workbooks for problems. In HIT reading centers, they use word lists for drill and programmed books and some other materials for reading paragraphs. Supplementary books and games.

**ORGANIZATIONAL REQUIREMENTS:**

Administrative Support. Need principal's support of philosophy, willingness to spend time on project, and ability to set aside space for it to operate.

Space/Facilities. Each center needs one classroom, located either in the school they serve or in neighboring relocatable classrooms, furnished with 10-12 pairs of student desks, tables and chairs that allow for tutoring; fully furnished office space for project director and secretary.

Personnel. Project director (75% until project underway, then 10% of time); secretarial support for director; one teacher and two aides for each center.

Management Framework. Management is minimal with project run by expert and well-respected teachers from each school; requires principal cooperation and help; requires good public relations within and outside the school.

**INSTRUCTIONAL PROCESS:**

Identification. Teachers and aides nominate as tutors eighth graders who are two years ahead of their tutees in reading or math skills. Nominated tutors may elect not to participate if they wish. Available test scores are used to identify sixth and seventh graders needing tutoring.

Remediation. Teachers and aides assign work to students based on their error rate, which should remain between 90 and 94 percent correct at all times.

**RECORDKEEPING PROCEDURE:** A progress record of all student activity and the results of these activities is kept. Rewards are distributed on a semi-weekly or monthly basis.

**TIME:**

Initial Set-up. Approximately six months from decision to adopt program to actual implementation.

Daily Use. Thirty minutes of tutor and tutee time for each center they work in the program.

**COSTS:** Start-up costs are approximately \$5,000 per center, plus personnel costs.

**CONTACT:**

Hable Kenyon, Director  
 School Board of Highland Park  
 20 Parkett  
 Highland Park, MI 48023  
 (313) 956-0160  
 Educational Resources Center  
 855 Broadway  
 Boulder, CO 80302 (303) 442-0154

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**PROGRAM AREA:** Mathematics  
**TITLE:** Conceptually Oriented Mathematics Program (COMP)  
**GRADE LEVELS:** Grades 1-8  
**PROGRAM START DATE:**

**BRIEF DESCRIPTION OF PROJECT:** COMP is a management system that is both diagnostic and prescriptive. It is designed to meet individual needs in mathematics through small group instruction. This management system includes the following components to support the classroom teacher: (1) a scope and sequence chart which outlines the COMP organization. (2) teacher guide books. (3) placement tests. (4) two post tests. (5) individual record sheets. and (6) summary levels to assist teachers in communicating with parents. This program utilizes cooperative teaching and planning.

**SPECIALIZED TRAINING OF PROFESSIONAL STAFF:**

Required. One day prior to implementation and one day during the school year for administrators and teachers involved in the program.

Availability. Consultant from Project COMP is available to adopter site (costs to be arranged).

**KNOWN OUTCOMES:** Level of achievement in mathematics, as measured by standardized tests, has shown marked improvement compared with previous scores.

**MATERIALS USED:** Ten concept areas are developed vertically through 25 levels of complexity. The program is the materials.

**ORGANIZATIONAL REQUIREMENTS:**

Administrative Support. Must participate in training and determine extent COMP will be used.

Space/Facilities. Existing classrooms.

Personnel. Existing personnel.

Management Framework. Smallest implementation segment would be three grade levels, though can be grades 1-8. Depends on local needs.

**INSTRUCTIONAL PROCESS:**

Identification. Students are placed at instructional level through administration of COMP placement test.

Remediation. Instructions and suggestions for the teacher at each level of the program are included in the teacher guidebook.

**RECORDKEEPING PROCEDURE:** Individual record sheets indicate student's achievements and needs.

**TIME:**

Initial Set-up. Purchase of materials and one-day workshop.

Daily Use. Instructional program for usual math class.

**COSTS:** One set of eight guidebooks, placement, and post tests \$95.00. Cost of reproducing materials for classroom use.

**CONTACT:** Alta M. Harness, Director  
 COMP Consultants  
 1314 I-70 Drive, S. W.  
 Columbia, MO 65201  
 (314) 449-0881

**PROGRAM AREA:** Mathematics

**TITLE:** STAMM--Systematic Teaching and Measuring Mathematics

**GRADE LEVELS:** K-12; basic at 11th grades K-8; high school courses for Mathematics Competencies, Geometry, Algebra I & II, Trigonometry, Applied Math, Vocational Math, and Rapid Calculation

**PROGRAM START DATE:** 1972

**BRIEF DESCRIPTION OF PROJECT:** The major objective of STAMM is to provide continuous progress in mathematics for the entire school experience of all students, kindergarten through senior high school. Each level in STAMM contains a set of objectives with teaching resources including teaching notes, worksheets, activities, games, enrichment, and criterion tests. Textbooks with a high correlation to the objectives have been referenced in the teacher's guide and may be used as an integral part of the program. STAMM's systematic approach emphasizes continuous progress through testing and record-keeping. The program may be used successfully in many different classroom situations including small-group instruction, large-group instruction, individualized instruction, team teaching, math lab, etc.

**SPECIALIZED TRAINING OF PROFESSIONAL STAFF:**

Required. Staff using program will need to learn the organization of the STAMM program, the record-keeping system, and the testing program. A one- or two-day training session prior to implementation is recommended.

Availability. Members of the STAMM project staff may be available for awareness presentations if expenses are paid and scheduling permits. Training sessions will be provided for adopting staffs either at the adoption site or the developer district.

**KNOWN OUTCOMES:** Between two-thirds and three-fourths of all Jefferson County students now score above the national norm on the Comprehensive Test of Basic Skills at grades 4, 5, and 8. This achievement has been consistent since 1973. Previous to implementation, roughly half the students scored above the national norm.

**MATERIALS USED:** Each level in STAMM contains a set of objectives with teaching resources, including teaching notes, worksheets, activities, games, enrichment, and criterion tests. Textbooks with a high correlation to the objectives have been referenced in the guides and may be used as an integral part of the program.

**ORGANIZATIONAL REQUIREMENTS:**

Administrative Support. Commitment to performance objective program in mathematics.

Space/Facilities. Existing classrooms, STAMM materials.

Personnel. Existing faculty (assuming teachers available for courses at high school level, if desired).

Management Framework. STAMM objectives, tests, and resource packets may be used by a single teacher or an entire school system. The more levels that are involved in implementation, the greater will be the gains from the continuous progress aspect of STAMM.

**INSTRUCTIONAL PROCESS:**

Identification. Objectives stating what students can and should do are in the teacher's manual. Pupil needs are diagnosed through records, placement tests, criterion tests, and progress tests.

Remediation. Activities designed for pupils' needs are provided through worksheets and references to textbooks correlated to the objectives in the teacher's manual. Student performance is evaluated with progress tests and criterion tests.

**TIME:**

Initial Set-up. One- to two-day training session prior to implementation is recommended.

Daily Use. During regularly scheduled math classes. Continuing weekly or monthly meetings are recommended for the local staff.

Follow-up. Recommended as continuous progress, K-12 program.

**COSTS:** Elementary and junior high levels \$8 each level. Secondary courses, \$20 each course. Training sessions.

**CONTACT:**

Glyn H. Sharpe, STAMM Project Director  
Jefferson County Schools, 1209 Quail Street  
Lakewood, Colorado 80215 (303) 231-2222

**PROGRAM AREA:** Mathematics  
**TITLE:** Educational Developmental Laboratories Mathematics System  
**GRADE LEVELS:** Skills grade 1-6 mathematics designed to interest young adults  
**PROGRAM START DATE:**

**BRIEF DESCRIPTION OF PROJECT:** A sequential in-depth mathematics system in which learning takes place through perceiving, listening, problem-solving, computing, drilling, model building, and game playing. The system is a comprehensive plan for the instruction of topics which are normally introduced in the first through sixth grades of the standard mathematics curriculum.

**SPECIALIZED TRAINING OF PROFESSIONAL STAFF:**

Required. Complete range of educational consulting services vary from one- to four-day orientation workshops, in-class consultation, through special training materials.

Availability. All available through Educational Developmental Laboratories (McGraw-Hill Publishers).

**KNOWN OUTCOMES:** These materials have been used successfully with junior high and high school students. In one study, all labs at all grade levels (7-12) reported significant gains.

**MATERIALS USED:** EDL Mathematics Laboratory

**ORGANIZATIONAL REQUIREMENTS:**

Administrative Support. Purchase of materials.

Space/Facilities. Existing classrooms; EDL Mathematics Laboratory materials.

Personnel. Existing personnel.

Management Framework. EDL materials to replace existing materials; requires new administration, teacher, and student orientation to mathematics; will have to decide which students and teachers are to participate.

**INSTRUCTIONAL PROCESS:**

Identification. Diagnosis materials included in program.

Remediation. Extensive remediation materials for a wide variety of learning modalities are basic to the program.

**RECORDKEEPING PROCEDURE:** Each student's progress through the levels is recorded individually.

**TIME:**

Initial Set-up. Purchase of materials and aid in implementing are available through Educational Developmental Laboratories.

Daily Use. One class period.

**COSTS:** Materials available are extensive; manual, \$10.00; manual supplements, \$2.00 each. Order through McGraw-Hill area representative.

**CONTACT:**

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