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ABSTRACT

The Demonstration Programs in Reading and Mathematics were initiated in California in an effort to improve the reading and mathematics performance of secondary school students from neighborhoods characterized by high poverty levels, transiency, and low test scores. The programs have operated in California schools for the past 11 years. Each program is evaluated annually using a formula that takes into account both student achievement and cost effectiveness. The report describes Demonstration Programs now being implemented in 21 California junior high schools: 12 reading programs, one reading and mathematics program, and eight mathematics programs. Each report includes a program profile and a general description of program offerings and operation. Some reports include descriptions of methods and materials used, the staff, physical space and hardware, and notes on replicating the program. (MK)

California's
Demonstration Programs
in Reading and Mathematics

California State Department of Education
Wilson Riles--Superintendent of Public Instruction - Sacramento, 1980

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Foreword

One of the most serious problems confronting California—and the nation as well—as we enter the 1980s is a social bomb that cannot be ignored without endangering our future as a dynamic, healthy society.

The problem, which really *is* a time bomb waiting to go off, is the current plight of far too many teenagers and young adults. In some of the most disadvantaged urban areas, as many as 35 to 45 percent of these young people are unemployed. They are resentful, frustrated people who have known little but failure. And certainly one of the major causes of their predicament is that many of them never learned to read or compute at a basic level of competency.

This is an intolerable loss of human potential. Fortunately, junior and senior high schools are beginning to receive the attention elementary schools received through special state and federal programs, starting in the last half of the 1960s.

One major effort began in California in 1974 when I appointed the RISE (Reform of Intermediate and Secondary Education) Commission to study problems in California's junior and senior high schools and to recommend solutions. After nearly a year of hearings and deliberations, the Commission suggested a number of reforms that are being implemented at least in part by 198 secondary schools participating in the state's new School Improvement Process (SIP). Heavy stress is being placed on reading and computation.

Another major effort to improve junior and senior high schools is President Carter's Youth Education and Employment Initiative, which earmarked $900 million for the new federal Department of Education to launch the program in fiscal year 1981. This new program, designed to provide compensatory education and job skills for disadvantaged teenagers, will emphasize basic skills (reading and mathematics) and vocational education.

Because of this new emphasis on improving education at the secondary school level, the highly successful Demonstration Programs in Reading and Mathematics described in this report should be of particular interest—and help—to California educators in the early 1980s. They have a record of improving student achievement that deserves special recognition. Between 1970 and 1980, they reported learning gains that are truly phenomenal. In the 1978-79 school year, for example, the median increase in reading was 141 percent over the predicted gain for similar students. In mathematics, the increase was a dramatic 518 percent over the predicted gain.

Two other resources, both of which offer exemplary programs at the secondary school level, are the National Diffusion Network (NDN) and Title IV-C of the Elementary and Secondary Education Act. Both are federally supported and both provide interested schools with funds for replication of successful practices. Both are also available to California educators through the California State Department of Education.

Thus, as we enter a period when school improvement in our junior and senior high schools is a top priority, we are rich in resources for ideas, for materials and for entire programs.

Obviously, these successful programs deserve close scrutiny by all school administrators, school board members, teachers and parents who are interested in improving reading and mathematics programs in junior and senior high schools.

I urge educators, school board members and parents to study this report. The programs described in the following pages have proved themselves repeatedly as especially successful. They may have the answers you are looking for.

Superintendent of Public Instruction

Contents

Chapter I

The Demonstration Programs:

What Are They? How Do They Work?

What can be done with a youngster who reaches junior high school with barely a fourth or fifth grade competency in reading or mathematics? For twelve-year-old Juan, the chances of catching up with his more successful peers seemed slight.

Juan's struggle with math began in the first grade when he found it difficult to follow the math and reading lessons in English, a language rarely spoken in his inner-city home. By the third grade, he was hopelessly confused, and the next year he gave up trying. In the fifth grade, he received special remedial help, but sixth-grade math and reading lost him again.

By the time Juan entered junior high school, the possibility of his achieving a basic competency in either subject seemed remote, if past experience of young people in a similar predicament was any criterion.

Fortunately for Juan and thousands of other educationally disadvantaged students who enroll each year in the 28 junior high schools participating in the state-supported Demonstration Programs in Reading and Mathematics, the odds have been reversed; the likelihood of their catching up is heavily in favor of a happy outcome.

Legislative Beginnings

The case history of Juan and his many counterparts—a story of major social significance in today's California—is the reason the California State Legislature enacted Assembly Bill 938 in 1969. It wanted to find a way to give educationally disadvantaged youngsters a second chance before it was too late.

AB 938 created the Demonstration Programs in Reading and Mathematics, an effort that has earned an enviable student achievement record in its first 11 years. Students enrolled in the programs are learning to read and perform in mathematics at two to three times their expected rates.

The new programs were limited to student populations exclusively from neighborhoods with high poverty levels, transiency and low test scores. These students are sometimes truant, longtime underachievers, teetering toward drop-out status.

The efforts were deliberately limited to stressing proficiency in reading and/or mathematics for students in the seventh, eighth and ninth grades.

AB 938 was a major statement from California's lawmakers. It told the California Department of Education that special needs were to be recognized and that those needs were critical enough to require a state investment of new dollars. Stringent evaluations documenting success would be the key to continued funding.

AB 938 opened the door for a number of identified California school districts to compete for the first-year appropriation of $3 million. Eligible districts were defined as those having schools "of

greatest need." Program guidelines called for heterogeneous grouping, annual evaluations based on test performance and cost effectiveness, and coordination by the California Department of Education.

Under legislative requirements, Demonstration Program schools had to satisfy a series of goals never before combined in a state-funded education project. To keep their funding, schools had to:

- Show definite academic improvement for underachieving youngsters in reading and/or mathematics.
- Create a highly systematized program which could be replicated at another school site.
- Produce high student achievement.
- Disseminate information to other school people about successful practices learned in the programs.

Why Such a Success?

The success of the 11-year-old demonstration programs is credited at least partially to the state legislative mandate requiring schools in the program to compete with each other on a cost effective basis. The Legislature demanded that funding be granted to schools achieving the most student learning for the least amount of money. To comply with the mandate, program administrators in the California State Department of Education devised a unique formula for determining cost effectiveness (see description on page 3). In free enterprise fashion, state administrators do not dictate to schools how results are to be attained. All progams operate with maximum school-level planning and direction and minimum state interference.

All of the programs feature individualized instruction. No tracking is permitted. All pupils at a specified grade level must be served by the project. And the district agrees to pick up the most cost effective components for nontargeted students in the participating school. Each school selects an on-site director, usually a subject matter specialist with a good record in getting along well with people.

A major outcome of the programs is a new emphasis on school-level planning, according to several program directors. At the very least, the programs enable participating schools to add aides and to reduce student/adult ratios. Staff morale has been raised. Schools emphasize success. And some participating schools have served as change agents for entire districts.

A visit to all 28 demonstration programs would reveal a number of similarities contributing to success. Critics inclined to attribute the programs' effectiveness to increased funds should quickly observe a number of other features often unrelated to money. Among them:

- Amazing levels of energy and commitment on the part of program staffs at each school.
- Creative use of commercial materials and even more creative efforts in locally developed materials.
- Sophisticated levels of individualized instruction.
- Recordkeeping, interim testing and pupil contracts designed to make every instructional minute count.
- School level planning, teacher conference time and flexibility.
- Learning laboratory areas as adjuncts to the classroom.
- Diagnostic and prescriptive approaches.
- Effective and expanded use of aides and auxiliary personnel.
- Higher than usual levels of parent involvement and interaction with project staff.
- Emphasis on the practical aspects of reading and mathematics.
- The everyday applications that make mastery worthwhile.

When *Education USA*, the national weekly education newspaper, asked three directors of demonstration programs how they achieved such substantial learning gains, they offered the following tips for improved student achievement in reading and math in their projects:

- *"Start by finding the right teachers*—those who truly care about kids," suggests Lewis A. Prilliman, former project director of the Demonstration Program in Mathematics at Franklin Junior High School in Long Beach. Because of the high transiency rate of Franklin's students, its demonstration math program is highly individualized and structured. The program has three main components: classroom instruction, a math laboratory and a math center. Students take a "quickie quiz" at the beginning of each daily class. "This settles them down and lets them experience success," Prilliman says. Criterion-referenced pretests are used to diagnose student needs, and individual packets are prescribed. Students get a chance to manipulate materials and equipment once weekly in the lab. At the end of four

classroom lessons, students report to the math center for a "checkpoint" test. If a student scores less than 80 percent on the test, he or she remains in the center for additional work and retesting. Curriculum materials used in the center are written, tried and reworked by staff members. "This is the best possible kind of in-service training for teachers," Prilliman says.

- *Let students learn from life.* In a demonstration program "survival math" course at Pacoima Junior High School, students learn that survival in the course—and in life—may depend on computational ability, according to Elaine Lindsay, project director. Following a teacher-made curriculum called "This Is Your Life," students fill out application forms and obtain jobs as salespersons. They are not "paid" if they are absent because of sickness, "because new employees do not have sick pay." On payday, students compute salary deductions, savings and expenses. When, in the simulation, students have several hundred dollars saved, they embark on a six-week unit in buying a car. Math skills are required as students learn about car selection, loans, gasoline mileage and maintenance expenses. In other units students learn how to budget for a vacation, rent an apartment, shop by comparison and furnish a bedroom. One tip in using the course: make students keep their own records.
- *Make fun and games part of learning to read.* Commercial and teacher-made games are used to motivate junior high students in the demonstration program at Santa Fe Junior High School in Monrovia. The rationale for using games is simple: students like to play games and being able to read instructions is a necessary part of playing. Another successful motivator used in the center is a typewriter. Students will work with lists of vocabulary words, says Project Director Carol Levinski, if they can type rather than write words. Similarly, students will "write" a story for the student newspaper if they can use a typewriter. Other strategies used in the center include: teachers make three-week contracts with students regarding the amount of work to be accomplished and inexpensive field trips are used to pay off completed contracts; students and teachers choose what they want to read on "silent reading day" each week; students do all assignments in a composition book; each student must write something each day in his or her personal journal and teachers respond daily to the journal.

The state administrators emphasize flexibility in planning and directing programs at the local school level. They also say that teaching schedules should be rearranged so all teachers of the same subject matter share a common conference period. This allows teachers time for planning, sharing ideas and developing programs.

The Cost Effectiveness Formula

The formula of the Demonstration Programs in Reading and Mathematics takes into account learning achievement and cost. Both figures are expressed in percent. The percentage increase in student learning represents the difference between expected gains in achievement and actual gain, as measured by pre- and post-test scores on the *Comprehensive Tests of Basic Skills (CTBS).* In effect, the formula considers how much better students are doing in the program than they would have done without it. The percent of increase in achievement is divided by the percent of increase in expenditure; that is, the difference between per-pupil expenditure before and after program funds have been added. The least cost effective schools are dropped from the program each year. Schools continuing in the program are encouraged to lower their costs so more schools can participate.

Dissemination and Replication

"One real test of these programs is their portability," says Earl Watson, manager of the Demonstration Programs at the California Department of Education. "While skilled and enthusiastic teachers are certainly an important element of success, the curriculum materials that have been developed are just as useful at one end of the state as they are at the other."

Watson points with pride at the many program duplications that are successful in districts without special funding. He cites a recent study conducted to determine the extent of program replication. A questionnaire was sent to a sample of 1,000 school people who had visited a Demonstration Program or who had attended a Demonstration Program conference. Questionnaires were returned by 46 percent of the school people.

One-half of the respondents claimed that they had adopted programs which represented total replication or replication with only minor modifications.

The survey found that one Demonstration Pro-

gram was replicated in 63 schools; another program was replicated in 45 schools; and a third program was replicated in 23 schools.

Forty-three percent of those responding said they were actually using materials and/or ideas from the demonstration programs. "Most schools," Watson explains, "apparently attempt to modify a demonstration program to meet the special needs of their own situations and to encourage interest and pride among their staffs."

Questionnaire responses disclosed that more than 35,000 additional students had been involved in the programs developed by the replicating schools. Watson notes that this does not represent the total number of replications in the state, but is only a reflection of the findings from the questionnaire to a sampling of schools.

In rating the effect of the replicated program on student achievement, 25 percent of the respondents noted "great improvement." Seventy percent said achievement "improved somewhat." Forty-eight percent noted a "great improvement" in student attitude. Forty-five percent said attitude was "somewhat improved." In other words, Watson points out, "ninety percent or more of the responses were positive regarding both student attitude and achievement."

Watson says that Long Beach Unified School District's Demonstration Program at Franklin Junior High School served as a model for several other currently funded programs in mathematics. Yet, careful examination shows that the similarity in program stops with the curricular element. The staffs have taken the Long Beach materials and adapted the formats and the facilities to meet the needs and budgetary constraints of their schools.

And all agree, it works.

The legislation for the demonstration programs included a requirement for dissemination. The authors of the legislation agreed that success must be shared. So each program has direct responsibilities to help other schools implement program materials and ideas.

Each year the demonstration programs jointly conduct two statewide conferences to demonstrate successful cost-effective programs to other school district personnel in California serving grades seven, eight and nine. Two or three other smaller conferences are also held in the more remote regions of California.

Program directors encourage educators to visit their schools. They provide their curriculum materials at no charge to other schools. In addition, they visit the schools that are adapting programs to provide on-site assistance to school staffs.

In the 1978-79 school year, program personnel answered more than 6,500 requests for detailed information and curriculum materials. They were visited by 3,500 school people, and they presented nearly 400 workshop sessions in all parts of California.

Watson says the demonstration programs are workable in any California junior high school willing to invest the time to study them and to shape the materials and ideas to local needs.

Funding has continued at approximately $3 million annually since the program began in 1969.

Profiles in Chapter III contain highlights and provide basic information on each of the programs.

Chapter II

Evaluation:

Test Results, Cost Effectiveness and Competition

Nothing is surprising about a requirement that a specially funded program be evaluated and that certain specific evaluation data be submitted to the California Department of Education. But there is something unusual about the evaluation requirements for California's Demonstration Programs in Reading and Mathematics. Unique features include the following:

- A particular test is specified for use by all participants.
- Costs, as well as student achievement, are included annually in the final ratings of schools.
- Participating schools are ranked according to the evaluation results, with state support withdrawn from the lowest rated programs.

To enable the state to comply with the mandate of the legislation—to terminate the least cost-effective programs each year—it has been necessary to collect the same information from each program. All programs, therefore, submit operating cost figures and October and May test score results for all participating students from the mathematics or reading portions of the *Comprehensive Tests of Basic Skills.*

Also, because funds for the demonstration efforts support a program in the seventh grade the first year a school participates, the eighth grade in the second year and the ninth grade in the third (in a three-year junior high), a school would normally collect information not only for a single year but also for students who had spent two or three years in the program. This makes it possible to report changes in scores from the beginning of the seventh grade to the end of the eighth or ninth grades.

At least one meeting is held each year for project directors and evaluators to discuss evaluation requirements and procedures with the leaders of the program at the state level. Agreements are reached at these meetings concerning the acceptable forms and levels of the tests to be used, the appropriateness of various testing and reporting procedures, common testing dates and other matters of concern.

Each June, when the cost and test data are received from the local districts by the state evaluation consultant, programs are ranked in several ways, including:

- Mean gain in test scaled scores for the current year.
- Actual gains in comparison to gains predicted on the basis of pretest scores.
- Months gained in mean grade equivalent scores for each month of instruction.
- Overall achievement—a combination of the above three.

- Costs in excess of districts' average operating costs per student.
- The Cost Effectiveness Index—the percent of increase in achievement for each percent increase in cost.
- Overall effectiveness—a combination of these rankings, which is the final rank order and, hence, determines the refunding or termination of each program.

The degree of effectiveness of the Demonstration Programs in Reading and Mathematics in terms of increased student achievement has been surprisingly consistent over the years. Typically, the students have achieved about 2.0 months of gain, according to the test scores for each month of instruction. The 1978-79 results showed a median of 2.0 months growth in reading and 3.5 months of growth in mathematics for each month of instruction.

The actual increase in scores, when compared with the increase that could be anticipated (in light of the low pretest scores characteristic of students in these programs) is most encouraging. For the 1978-79 school year, the median increase in reading soared 141 percent over predicted scores. In mathematics, the increase was a dramatic 518 percent. For the same year (1978-79), the cost-effectiveness indices indicated a median program increase of 8.6 percent in reading achievement scores and 32.8 percent in mathematics scores for each 1 percent of increase in program operating costs.

The design of the comprehensive local evaluation is determined entirely at the local district or school. Its purpose is to obtain information that will be useful in improving the program and in answering questions the community or the local school district may have about the effectiveness and value of the program. As a result of information from these local evaluations, schools have decided on a variety of adjustments to improve program effectiveness.

Some program administrators who had programs operating for several years have studied their students' test scores and other evaluation data longitudinally. To evaluate the long-term effects of the programs, some administrators have conducted studies of their students' achievement through the senior high school years. Results from these follow-up studies are encouraging. Positive effects from the junior high school programs can be documented—effects that, for the majority of students, last through the senior high years.

These local studies document positive changes in students' attitudes, in the school's atmosphere and in community support for the school. They also provide support in improving local program effectiveness by identifying specific areas of operation in need of greater strength. It is possible that the highly competitive nature of these programs has given impetus to this use of evaluation. The net result: a continuous "polishing" of the programs.

Another interesting feature of demonstration program evaluation is a determination of the extent to which programs are truly serving as demonstration centers for other schools in the state. The method used for this part of the evaluation has been primarily one of counting—counting the number of presentations each program staff has given (at conferences, in other school districts, and so forth); counting the number of visitors observing at each program site; counting the quantity of materials distributed; and counting the number of schools replicating a program.

Figures from a recent study show the extensiveness of the dissemination effort during a single year: 312 presentations; 2,196 visitors (with a median number per school of 123); 57,000 pieces of curriculum materials distributed.

In 1977-78, to survey the extent of replication, questionnaires were sent to a sample of 1,000 persons whose names appeared in the visitor records of demonstration programs. Of those responding, 63 percent stated that their schools decided to replicate all or part of one or more of the programs. When asked what effect they believed the use of the program materials or ideas had on their students, more than 90 percent said there had been "some" or "great" improvement in both achievement and attitude. When asked to rate the overall benefit of the demonstration programs, the same people—those using the materials or ideas—answered as follows: outstanding, 28 percent; very good, 54 percent; somewhat helpful, 18 percent; disappointing, 0 percent.

The various measures of the value of the demonstration programs all point in the same direction—success. There is much evidence that:

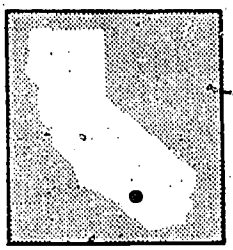
- The students in the demonstration programs have made strong gains in achievement and attitude.
- The ideas and materials from the programs are being widely distributed.
- Many staff members from nonproject schools are sufficiently impressed to use ideas and materials from the programs.
- Students in the schools replicating the programs show improvement in both achievement and attitudes.

All of these favorable findings do not mean that utopia has been reached, but they do reflect programs serving the major purposes for which they were designed—programs which assist and inspire schools across California to develop more effective programs in reading and mathematics.

It should be noted, too, that the annual rankings of the demonstration program schools make it necessary for even the top-rated schools of one year to strive to do even better the following year. If they do not, they may be dropped from the program. In the state's demonstration programs, there is never room for complacency; everyone must try to improve so that accomplishments exceed those of the prior years. Today's successes are the take-off point for future successes.

Demonstration Programs in Reading

- De Anza Junior High School, Ontario
- Edison Junior High School, Los Angeles
- Imperial Junior High School, Ontario
- Santa Fe Middle School, Monrovia
- Central Junior High School, Pittsburg
- Compton Junior High School, Bakersfield
- Franklin Middle School, San Francisco
- Greenfield Junior High School, Bakersfield
- Pelton Academic Middle School, San Francisco
- Roosevelt Junior High School, Oakland
- Sierra Junior High School, Bakersfield
- Santa Barbara Junior High School, Santa Barbara



DE ANZA JUNIOR HIGH SCHOOL DEMONSTRATION PROGRAM IN READING

Ontario-Montclair Unified School District

Program Profile

- School Enrollment: 650 students in the seventh and eighth grades
- Target Population: 312 eighth graders
- Specific Characteristics of Student Population:
  - Ethnic Distribution

Asian or Pacific Islander	Black, not of Hispanic origin	White, not of Hispanic origin	Hispanic
0.7 percent	12 percent	40 percent	47.3 percent

  - Moderate transiency rate, with many students of limited-English-speaking ability, high AFDC rate.
- Project Director: Ann Glaser
- Address and Telephone: 1450 S. Sultana, Ontario, CA 91761 (714) 983-2118

The Program

"I think I've learned a lot from the center. I've learned how to read better, talk better, behave better and like people better." With these words, young Jesus aptly sums up the goals of the De Anza Demonstration Program in Reading. Not only does he recognize his own gains, but his teachers have also charted an astounding 2.0 months of gain for every month Jesus has spent in the De Anza program.

Jesus' progress is not unusual at De Anza. His and other student successes have been recorded by more than just test scores. In a center with 80 windows, considerable furnishings, equipment and books, vandalism is not a problem. There are also virtually no discipline problems at De Anza, even though the school is located in an older, minority neighborhood where such problems could be expected among junior high students. As students work in the reading center, they are self-directed and intent upon assignments they have contracted to complete. Contracts are important motivations. They provide an opportunity to earn highly valued books and field trips.

"A reading center that smiles at children" is how the De Anza program bills itself. This theme illustrates the basic philosophy behind the program in which building a student's self-image is of great importance to the De Anza staff. Success for every student, regardless of reading level, contributes to the goal of improving self-concepts.

"Reading in a Supportive Environment," the title of the program's descriptive booklet, aptly indicates the program's content.

Counseling, both group and individual, personalized instruction, diagnosis and prescription, cross-age tutoring and contracting are some of the more important features of the program.

Methods and Materials

The warm environment that welcomes students to the reading center is well-stocked with diagnostic and prescriptive materials.

As each child enters the program, a battery of diagnostic tests is administered, and self-esteem is charted on special, nonthreatening opinionnaires that focus on personal attitudes.

A student's interests, hobbies, preferences, field trip choices and other information are determined through an overall entrance-level assessment so they can be incorporated into an individualized program by means of materials of high interest to the student.

Each student signs a 20-day contract to complete specific assignments and leisure reading. Each completed assignment is awarded a point value. The points are highly motivational, because they can be

redeemed for personal paperback library books and field trips.

Each student is expected to complete an average of two lessons a day, but the span of contract completion is always flexible enough to accommodate the student who wishes to speed up or slow down. At the completion of each contract, a formal evaluation of his or her performance is made by both student and teacher.

"The textbook approach to reading is definitely out," Ann Glaser, program director, explains. "We use high interest materials. As a result, the center is a favorite class, and students are anxious for their turns in the center."

The schedule provides for three weeks of English instruction in a classroom other than the center, then three weeks in the center, with groups of students rotating, heterogeneously, throughout the year.

Students' records are kept in their folders so they are aware of their progress at all times. Help is at hand immediately with a ratio of one adult to about five or six students.

A full-time counselor, who reports major successes, is part of the reading center team. Her duties include individual and group counseling and communication with parents. The counseling groups meet for one period a week over an eight-week span. About 150 students are active in the counseling sessions. A thread of values, clarification and decision making runs throughout the sessions. The counselor also teaches a nine-week class in human relations which further emphasizes a positive self-concept in relation to success and achievement in reading as well as growth in self-esteem. Student participation is voluntary.

The counseling component includes a concern that general health is not hampering reading progress. The school nurse and counselor often confer when visual or physical screening of a child is considered.

Another unusual feature of the program is the preschool story hour. About 50 De Anza students read to preschool children. Operated in conjunction with the Ontario Public Library, the program is mutually beneficial. It results in increased self-esteem for the junior high school students and reading readiness for the younger set. Parents of the toddlers also benefit with special parent education classes arranged for them by the center. They meet for an hour each week, but several preparatory activities are required for the De Anza readers. Following the story hour, the preschoolers may check out three of some 1,000 books supplied by the public library and housed in the De Anza library specifically for this program.

Parent education classes are a natural component to the preschool reading program, since parents are expected to be in attendance. These classes include films on child development and presentations by the school nurse, the district librarian, local police, the reading center counselor and the paramedics. The program is as widely accepted by the mothers as it is by the children.

Physical Space and Hardware

The De Anza reading center is housed in a building that was originally the school's library. About the size of two and one-half classrooms, it features round tables. Stacks of books and student file folders line the walls, and a special "center-of-the-center" is arranged with comfortable easy chairs and sofas. Attractive carpeting, plants and wall decor add to the "living room" feeling, which makes it a favorite reading and working space for staff and students alike.

Carousels or leisure reading books, displays of magazines and a variety of reading hardware, such as controlled readers and System 80 programmed readers, are all utilized during the class periods.

An out-of-sight storage room houses a major portion of the center's hardware—tape recorders, filmstrip machines, tachistoscopes and other reading machines and devices.

The Staff

The De Anza staff includes the project director, one counselor, three teachers, three aides, a part-time nurse and a part-time psychologist.

Staff members, several of whom are bilingual, work regularly with what is termed a "focus interview" designed to keep them on target with the goals of the program and to keep interpersonal relationships functioning at a high level. The special interviews are considered a communication tool by Ann Glaser. "We meet one-on-one for 15 minutes to an hour every three or four weeks to identify our major concerns, discuss the feeling levels of these concerns and toss around alternatives. The end of the interview results in a commitment of some kind of action by both parties." Glaser says that interviews are held between the director and teachers, teachers and aides and, at several points, staff and students.

"The process, a technique that works in any endeavor with specific goals, has added tremendously to the team spirit," Glaser says.

Replication—Where and How

The De Anza staff believes a major prerequisite to replicating its program is to have the people involved believe that reading can be taught better in an atmosphere different, both physically and psychologically, from a traditional classroom.

The De Anza staff also believes the success of the program is built around an individualized curriculum that is challenging, but not defeating, and is based equally upon interests and needs of the students.

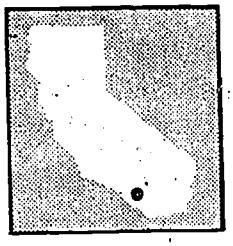
The most notable replication of the De Anza program is in De Anza itself. Since the project serves only one grade level as a state-funded demonstration program, the former school principal, Bob Vislay, working with the center staff, spearheaded a second center for the grade level not served.

The current principal, Ann Flatten, believes the center has become a change agent for the entire school. She also believes that the popularity of the center with parents was a prime motivator for the replication of the program for the other grade level.

The program has been replicated at another junior high school in the Ontario-Montclair Unified School District, and parts of the system are in use throughout the state.

Glaser is happy to offer schools an assortment of center materials for use in replication. For the asking, she will forward her descriptive booklet and recordkeeping systems that include student profile forms, contracting forms, progress charts that correspond to hardware in the center, the "USSR" reading record (uninterrupted sustained silent reading), the self-concept assessment and numerous other organizational management tools.

Replication can be costly if one relies on new purchases and consumable materials. Glaser recommends an inventory of materials available in a school and the consolidation of resources. Many of the materials which are designed to be consumable can be redesigned for nonconsumable use. The lowered pupil-adult ratio can also be costly, but De Anza is using student teachers and college aides to help make the programs more affordable for replication.



EDISON JUNIOR HIGH SCHOOL DEMONSTRATION PROGRAM IN READING

Los Angeles Unified School District

Program Profile

- School Enrollment: 1,830 students in the seventh, eighth and ninth grades
- Target Population: 640 students in the eighth grade
- Specific Characteristics of Target Population:
  - Ethnic Distribution

Black, not of Hispanic origin	Hispanic
54 percent	46 percent

  - Serves a transient, low socioeconomic community on the fringes of the inner city.
- Project Director: Mary Hall
- Address and Telephone: 6500 Hooper Ave., Los Angeles, CA 90001 (213) 588-6795

The Program

One year they called it *Fantasies*. Another year it was *Galaxies*. No matter which title is used, the creative writing anthology produced by Edison's Demonstration Program in Reading is a highlight of the school year for both the staff and the young contributors. Recently, more than 100 students penned original materials which were produced in the *Fantasies* volume.

"It's better than a certificate," says Project Director Mary Hall. "It's real proof that they have succeeded. I'm certain these anthologies will be treasured possessions for many years."

Creative writing is a major emphasis throughout the year. It is a natural blending of all the necessary language that junior high students should master.

The staff feels strongly that creativity cannot be taught. Instead, they provide opportunities for students to take a closer look at elements of life, to think about them, and then to capture them in words. As the Edison teachers' guide to creative writing states: ". . . A good creative writing teacher . . . stimulates, encourages, excites and motivates students to use their senses to form words imaginatively."

As the anthologies prove, each student develops a unique style. A volume includes poetry in rhyme and in the abstract, short fiction, essays, plays and science fiction. For most youngsters, the anthology is their first printed work and as a result, many have developed a fascination with their own innate abilities to create works of art from words.

In addition to developing creative writers, experience in the project's "Reader's Theatre" promotes proficiency in oral language and an appreciation for drama and good literature.

Through some mini-units developed by the Edison staff, students learn the intricacies of television commercials and advertising in general. The staff also offers a potpourri of current interest materials through learning centers in each classroom.

The project seems to have something for everyone—and for a school as large as Edison, that is no small task. Ranked as the largest Demonstration Program in Reading currently operating, Edison has, by necessity, focused on management systems of individualized instruction as well as on the curriculum.

Student testing is done early in the year, with profiles developed and learning organized into five-week blocks. Learners may be assigned to a reading lab or to a regular reading classroom.

The reading lab provides intensive instruction on an individualized contract basis. It offers both

remediation and enrichment, depending on the needs of the student.

Methods and Materials

A class size of about 25, with a teacher and an aide for each of five classrooms, is considered an important aspect of the Edison program. Along with a common daily planning period, the staff credits paraprofessional assistance for the effectiveness of its recordkeeping system.

The reading lab is staffed by a reading specialist and paraprofessional aides. It contains a variety of programmable material—both consumable and recyclable—to provide high interest activities from second grade level reading through high school.

A strong thread of multicultural activity and curriculum permeates the lab, particularly for those students reading above a minimum grade level. The lab teacher is responsible for multicultural curriculum.

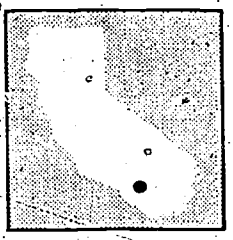
Mini-units developed for the lab are built around five-week time frames. The staff uses popular lesson units on the morphology of reading, vocabulary, study skills and others.

While there is an ample supply of commercial material in use at Edison, Hall believes that "money should be in staff development, not in 'stuff'."

With a common planning period available, staff in-service training is not the obstacle it often becomes in other places. "Staff development can occur when two people on the same staff sit down together to solve a student learning problem and wind up learning from each other about the student *and* the solutions," Hall explains.

The Staff

State funds for the project pay the salaries of the project director, a reading laboratory specialist, one classroom teacher, one education aide, four teacher assistants and a clerk.



IMPERIAL JUNIOR HIGH SCHOOL DEMONSTRATION PROGRAM IN READING

Ontario-Montclair Unified School District

Program Profile

- School Enrollment: 630 students in the seventh and eighth grades
- Target Population: 282 eighth graders
- Specific Characteristics of Target Population:
  - Ethnic Distribution

Asian or Pacific Islander	Black, not of Hispanic origin	White, not of Hispanic origin	Hispanic
0.5 percent	5.5 percent	58 percent	36 percent

  - The school is located in a lower-middle class neighborhood with a high transiency rate. The neighborhood is changing because many middle class families are now moving into newly developed subdivisions.
- Project Director: Lily Higa
- Address and Telephone: 1450 East G St., Ontario, CA 91761 (714) 983-6590

The Program

A reading center where physical education teachers teach reading? A center where in-service training is built into the daily schedule? A reading program where nearly 100 percent of the student clientele is happy and appreciative of the staff?

If all this sounds unlikely, visit Imperial Junior High School. As a replication of its sister program at De Anza, much of the action in the Imperial reading center is closely related to De Anza's. There is a strong emphasis on individual diagnosis with prescriptive follow-through on individual student contracts using a variety of high interest materials. Each student is rotated into the center on a four-to-five-week interval, alternating with language arts/English classes.

Students assigned to the center receive concentrated skill-building lessons and are encouraged to discover the joys of leisure reading. They also benefit from a low pupil-adult ratio.

Impetus for achievement is a reward system, which is similar to De Anza's rewards of paperback books and posters.

Emphasis is placed on developing self-concepts. Each student's profile includes pre- and post-testing on feelings about school, self-image and related aspects that contribute to overall school success.

A unique element in the Imperial program is an in-service aspect which encourages teachers in other disciplines, such as math, music or physical education, to work in the center to help students develop reading skills. It is normal to find a math teacher involved in the center when schedules permit. By working outside their own disciplines, these teachers gain a keener awareness of reading as a true interdisciplinary skill, and their time in the center dramatically increases their ability to understand and teach reading as a skill. Project Director Lily Higa believes that this hands-on in-service training is the best kind, and remarkably cost effective as well.

"Cost cutting is very important here," Higa emphasizes. "We want to offer an effective reading skills program that can be duplicated without large amounts of money."

The program at Imperial emphasizes career awareness at both the seventh and eighth grades. In the eighth grade, students spend an average of three days out of every 20 in the center in a unit called "Career Exploration." They participate in career-related tasks ranging from leisure reading to the preparation of research reports.

Supplemental career learning packets are available that include teacher-made duplicates of material developed by another Ontario district project

funded under ESEA Title IV-C. Commercial materials are also used.

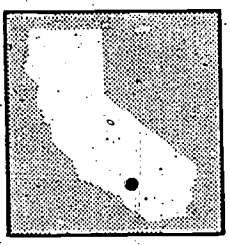
Seventh graders relate to the career aspects of the program by participating in a unit called "Self-awareness," which provides a framework for further career analysis the following year.

Higa credits the center's success to support from all those involved—from administrators to students. The diversified teaching backgrounds of personnel are also considered an asset to the center.

As with any of the successful demonstration programs, there is a concern for communication with parents of students involved. Continual two-way efforts are encouraged to keep parents aware of both negative and positive aspects of student performance.

Wrapping up her formula for success, Higa refers again to the need for individualized programs. "We work as diligently with the high achiever as with the remedial student," Higa explains. "A visitor would view some students learning early reading concepts, while another group learns speed reading techniques."

The reading center staff consists of eight full and part-time teachers, four aides, a secretary and a director, with the demonstration program funding two full-time teachers, three aides, the director and a secretary.



SANTA FE MIDDLE SCHOOL DEMONSTRATION PROGRAM IN READING

Monrovia Unified School District

Program Profile

- School Enrollment: 494 students in the sixth, seventh and eighth grades
- Target Population: 170 students in the eighth grade
- Specific Characteristics of Target Population:
  - Ethnic Distribution

American Indian or Alaskan Native	Asian or Pacific Islander	Black, not of Hispanic origin	White, not of Hispanic origin	Hispanic
.2 percent	.5 percent	10.8 percent	70.2 percent	18.3 percent

  - Lower middle class neighborhood; high transiency rate; high percentage of AFDC recipients, single-parent families and foster homes.
- Project Director: Carol Levinski
- Address and Telephone: 148 W. Duarte Rd., Monrovia, CA 91016 (213) 359-7946

The Program

The staff at Santa Fe's reading center strongly believes reading is "taught," but enthusiasm for reading is "caught." Behind each activity in this highly successful Demonstration Program in Reading are elements of both high interest and needed skills. Emphasis is placed on success for each child in the program's reading center, both for reading and for the development of a better self-concept. The result: popularity as well as improved reading.

Santa Fe's program popularity is backed by more than just staff opinion. It is supported in a formal opinion survey taken by an outside evaluator who asked a random sample of reading center students how they felt about the class. The overwhelmingly positive response (97 percent) was an "A" for the center, for its staff and for its curriculum.

"We are really proud of that survey," states Project Director Carol Levinski. "It has given us feedback beyond test results, and we value the opinions of our students as much as we do the test data."

The reading center program is geared to contracts, contained in student work folders, with each contract containing skill building activities designed to correct diagnosed deficiencies and to reinforce skills and enrich learning. The two-week contracts earn their owners points which are turned in for field trip rewards.

The center's regular program also includes a daily journal of private thoughts and opinions shared only by the student's teacher in the center. The journals form a communications link between teacher and student and usually provide insights into student problems.

"We have to teach the whole child," says Levinski. "And since this is such a difficult age—with all the problems of early adolescence—we have to understand where each child is mentally and emotionally in order to help him or her in reading as well as in developing a positive self-image."

Journal writing usually begins with a theme statement—usually with a positive aspect—written on the board. One day, for example, the theme statement asked each student to write at least one positive thing about every other student at the table. They write about leadership, other cultures and respect.

Santa Fe's staff also believes parents are critically important to the development of reading skills and the creation of a "reading habit." Contracts go home with reading center students. Parents are asked to monitor home reading programs for half an hour each evening. Students who return the finished home contracts signed by parents receive free magazines or paperback books as their reward.

Methods and Materials

Every student at the target grade level attends the reading center on a daily basis—in addition to attending a regular language arts class. Each student is diagnosed by teacher evaluation and formal testing that includes the *CTBS* as well as other criterion referenced tests. An unusual student assessment of reading attitudes, aimed at uncovering a student's basic feelings about his or her own reading skill, rounds out the formal diagnosis.

One of two center teachers prescribes a two- to three-week contract of activities in the student's deficient areas, while enrichment and reinforcement are programmed into the contracts for all students. High interest materials are used for all students, regardless of reading level.

Friday is leisure reading day, when students are engrossed in whatever they choose to read for the 45-minute period.

"This leisure reading time is a favorite time for all of us," Levinski explains. "We find it is helping to foster that enthusiasm for reading we are hoping to instill here."

Bookracks overflow with appropriate reading materials. When a new shipment of paperbacks arrives, there is a continual flow of student requests for the new titles.

Each of the six classes using the lab has a set number of "game days" through the semester in addition to work and related center activities. The game days are lively, often noisy, and definitely popular. Students play the center-developed games of "word-opoly," spelling baseball skills, "reading football" and other reading-related games which can be used to reinforce any skill. The result is a happy blend of good times and reading skills application with an immediate learning payoff.

Other aspects of the daily schedules include work on *Paper Clips*, the center's newsletter. The newsletter is student-produced and deliberately provides students who are not part of other journalism efforts at the school with an opportunity for a "byline." The newsletter, which is both timely and informative, is a regular feature that parents and students alike find worthwhile—from both a "news" and a creative writing standpoint.

Pen pals are a regular feature of the Santa Fe program. Students enjoy the long-distance correspondence so much that some of them juggle letter-writing with several pen pals from foreign countries. The long distance friends often write English with some difficulty, providing yet another "success" feeling for center students who correct the English, vocabulary usage and spelling of their foreign pals.

The Staff

The Santa Fe reading center has seven staff members—a director, two teachers, a secretary, and three full-time instructional aides.

Physical Space and Hardware

The Santa Fe program occupies a double classroom with the connecting wall removed. The carpeted, draped and comfortably furnished area includes round tables, book racks, an audiovisual center, a teacher workroom and secretarial and administrative offices.

Hardware is a combination of traditional reading machines. It includes audiovisual cassettes, tachistoscopes and listening centers. Perhaps the most unusual piece of hardware is the bank of typewriters lining one wall. "We find that there are many students who are not comfortable with a pencil; they have had so much failure in their writing and language effort. But they love the typewriter and we encourage its use for all kinds of reading and skill-building exercises," Levinski explains.

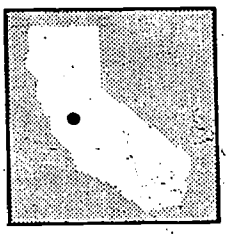
Replication

The most notable replication of the Santa Fe program is found in another Monrovia school—Clifton Junior High School. Materials developed by the Santa Fe center—most notably game units and teacher material on phonetics for upper-grade levels—have been put to use in scores of districts around the state.

The ideas behind the Monrovia program are adaptable to any school with the space and the manpower, though Levinski believes parts of the project could be incorporated into a regular language arts class with a minimum of effort and money.

Student journals require only teacher time, commitment to confidentiality and the price of a composition book. The at-home contracts could be tied into fund raising, such as book fairs and other classroom ventures.

"Our reading center works because we have so much going in our favor," Levinski says. "People are the major aspect; money is secondary. If teachers really want to incorporate our ideas, they need only visit us. They will find ways to take many components of our system and put them to work in their own schools—using their own individual styles."



CENTRAL JUNIOR HIGH SCHOOL DEMONSTRATION PROGRAM IN READING

Pittsburg Unified School District

Program Profile

- School Enrollment: 577 students in the sixth, seventh and eighth grades
- Target Population: 200 students in the eighth grade
- Specific Characteristics of Target Population:
  - Ethnic Distribution

Asian or Pacific Islander	Filipino	Black, not of Hispanic origin	White, not of Hispanic origin	Hispanic
1 percent	3 percent	34 percent	36 percent	26 percent

  - Neither urban nor suburban; economy mainly industrial, providing a low to middle socioeconomic base.
- Project Director: Julia Lally
- Address and Telephone: 1201 Stoneman Ave., Pittsburg, CA 94565 (415) 439-9195

The Program

"It boils down to priorities," says Project Director Julia Lally. "When one decides where reading ranks, everything else falls into place."

It's certainly no secret that reading is a number one priority at Central Junior High School.

PREP, the Pittsburg Reading Enrichment Program, emphasizes curriculum that is expandable, adaptable and, best of all, highly popular with students.

Through a combination of talented staff and creative curriculum, the Pittsburg program offers its students an opportunity for reading skill development and self-image building. The intent: to make students independent learners.

The program offers regular daily reading classes and a reading lab. Both follow the philosophy that students are capable and that reading can be fun.

"We teach with intensity," Lally explains. "Everything we do has a purpose. When we test our students, we make certain that testing is accurate, painless and useful. We respond to needs as they arise, using current trends and interests to build new curriculum units. As a result, we have developed so many mini-units to bring life to our classroom program that we are just about out of storage space."

The program provides something for everyone, including the development of study skills, staff-developed language games, reader's theatre and student-picture bulletin boards. The atmosphere in the reading center is one of cooperation and pleasant conditions conducive to learning.

Skill building is monitored through student contracts. Software and hardware back up the curriculum in the classrooms and the lab. Paperbacks, newspapers and magazines are available. Evidence of a multimedia approach to reading is everywhere. "We are careful," Lally says, "to see that our use of a contract system does not create what we call the 'solitary learner'. Our classrooms are communicating centers designed to foster group interaction. Students often work together in pairs and in small groups."

Methods and Materials

The first step for students enrolled in PREP is testing. Students are tested in the lab with the *SPIRE* test in the first three weeks of the school year. From that point forward, teachers plan for cycling students in and out of the lab from their heterogeneously grouped reading classes.

PREP students are assigned to the lab for two-week periods. They spend a total of six to eight

weeks there throughout the year, regardless of their academic standing. The first step in the lab is training students to use the hardware. Then they use audiovisual materials and a commercially produced series of skill builders. The end result of the training in use of the equipment is an operator's license, a popular card usually kept among the treasures in a teenager's wallet.

Fifteen students work in the lab at one time and complete separate contracts written by the lab teacher. Points earned in the lab are converted to a letter grade, which is given to the regular classroom reading teacher. This grade is combined with grades from the school's regular reading class for a total reading grade.

In the regular reading classes, teachers make use of skill-building material and the multitude of special units the staff develops to enable students to apply the skills that are being taught. The curriculum is largely student-centered. The four language processes provide an integrated approach to learning, and oral language development becomes the base for progress in reading and writing. Students also learn study skills and how to evaluate their reading by means of an oral reading self-evaluation technique. They gain in comprehension and oral language skills by such methods as teaching others how to play complicated games (first one must read the directions, comprehend them, learn the skills and then orally relate all that to others).

One of the classrooms occasionally serves as the "award room" where all the reading students congregate to receive awards for citizenship, for academic progress and for numerous other image-building reasons.

Field trips round out the program, adding opportunities for map reading, oral discussion, written composition, a broadening of student awareness and the development of social behavior. Alcatraz, universities, museums, Muir Woods, the beach and a ride on the Bay Area Rapid Transit system were trips that resulted in numerous popular individualized assignments.

Physical Space and Hardware

PREP occupies four classrooms and office space. The classrooms are typical of those found in 1955 vintage schools. They face each other across a wide hallway that displays smiling faces from photo bulletin boards proclaiming PREP students of the week. The proximity of the classrooms allows for an easy flow of students, teachers and materials.

The PREP classrooms and lab differ from the other school classrooms in that they lack traditional desks. Instead, they have round tables, sofas and comfortable chairs. All rooms are also equipped to provide multimedia instruction.

The lab's hardware is unobtrusive. At first glance the room seems more like a reading area than a lab. Undoubtedly, this atmosphere is one reason why the students enjoy the lab. Teachers say it is void of any of the social stigma which is often associated with reading labs that work solely with remedial students.

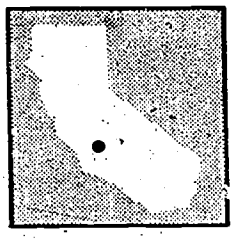
Staff

PREP has four teachers—one in the lab and three in the classrooms. Four aides support the classroom teachers and the lab instructor. Three of the four teachers are funded by the district; the remaining teacher, the aides, the project director and the project secretary are supported by project funds from the state.

Central's program has been replicated within the school itself for other grade levels. Combining district and federal ESAA funds, the district opened a second reading lab for students not served at the target grade level. In addition, the response to a PREP presentation given to the Pittsburg School Board resulted in reading teachers and aides being placed in the secondary schools. The most significant fact about replication of the Pittsburg program is that it can be adopted in part, and those parts can be as large or as small as the staff desires.

Lally reports that Central's mini-units and study skills are in use throughout California, and parts of the program—scheduling, organization, and teaching techniques—are also found in other states.

"A high priority must be given to planning time," emphasizes Lally. "If a program like ours is to succeed here—or anywhere else—all of those involved must have some time together to plan, to share and to develop their creative ideas. Other than that, we offer our materials, our techniques and our moral support. I think," she adds, "that one would find it worth the effort."



COMPTON JUNIOR HIGH SCHOOL DEMONSTRATION PROGRAM IN READING

Bakersfield City Elementary School District

Program Profile

- School Enrollment: 445 students in the seventh and eighth grades.
- Target Population: 215 students in the eighth grade
- Specific Characteristics of Target Population:
  - Ethnic Distribution

American Indian or Alaskan Native	Asian or Pacific Islander	Black, not of Hispanic origin	White, not of Hispanic origin	Hispanic
1 percent	1 percent	18 percent	52 percent	28 percent

  - The Compton neighborhood is urban, featuring a low transiency rate but a high AFDC rate.
- Project Director: Bill McLean
- Address and Telephone: 3211 Pico St., Bakersfield, CA 93306 (805) 872-4690

The Program

When asked to name one thing that makes the Compton reading center successful, staff members agree: "The kids just love it."

The center's program is carefully structured, but it does not let the students know that! They are deep into studies on drag racing, motorcycles or Helen Keller. While learning is going on, they are often so involved they do not notice it.

Compton's Demonstration Program in Reading is geared to a fast pace. Students rotate from one station to another every three weeks while teachers rotate in the opposite direction. There are four stations in all, each occupying a corner of the room.

The four stations cover: (1) literature, using high interest and unusual materials; (2) basic reading skills from the school district's continuum; (3) mini-units; and (4) Plus-Four, a commercial word-attack skills program handled by a teacher who monitors individual student progress.

Project Director Bill McLean says boredom is eliminated because of the fast clip at which students move from station to station. The 55-minute daily period races by and the end result is unusually high achievement. Compton's students enter the program at the seventh grade and are usually more than three years below reading grade level. At the end of the two-year program, the average student is approaching the expectancy level if not at grade level.

Students are assigned heterogeneously into the reading center; then they are divided into three different groups as they proceed around the stations. The wealth of materials built into every three-week interval is one reason the program is so popular, as well as successful, according to McLean.

Methods and Materials

The usual reading center hardware—controlled readers, tachistoscopes and other teaching machines—are a part of the Compton program. Meticulous recording is made of pupil progress by the teachers. Different units of high interest materials provide something for everyone.

At the literature station, the school staff provides a collection of novels, poems, mysteries and short stories applicable to the levels and abilities of students in each classroom group. Several complete teaching guides complement the study in the literature unit. Pages of resource materials in bibliographical form also are available.

The skills station is designed around "BIP," the Bakersfield Individualized Process. This district-developed continuum includes work sheets, testing and recording materials and stated objectives tied to work completed at the station.

"Units" is a favorite station. Teachers provide high interest materials based completely on the interests and preferences of their students. Completed units cover other cultures, Africa, drag racing, motorcycle racing, toys, sharks, travel, adventure and a number of teacher-developed skills games.

Because of the rotation, every child is exposed to each teacher. "This is a vitally important strength of our center," McLean says. Another strength: The ratio of pupils to adults is low—an average of four teachers to a classroom of about 33 students.

In addition to the traditional skill-building work, the staff works on self-concept building as an important priority for students. Several special units, designed to build the self-image of each student, are provided at the stations.

Daily conduct and effort grades are given. At the end of each three-week interval those who have completed their assignments and have maintained A's and B's in daily grades are rewarded.

Hardware complementing the program includes the usual teaching machines, along with software that is largely "homemade." Many games invented or adapted by the staff are also included. *Clue Magazine, Reader's Digest Skill Builders,* and the *Target Skill Series* are important to the program.

Physical Space

The reading center spans a two-classroom area, with the dividing wall removed. Carpeted floors, many bookshelves, sofas and easy chairs add to the deliberately nontraditional atmosphere. Also included are paperback book carousels, periodical racks and study carrels along the walls.

Staff

The staff includes the director, who also serves as a teacher, and three teachers.

Replication

The four-station classroom and the low pupil-adult ratio at Compton can be duplicated without a great deal of extra funds if a school has a high energy level and a generous amount of community enthusiasm, McLean says. Stations can be operated by volunteers, by high school cross-age tutors, by paid aides, by student teachers and by rotating teachers. The low pupil-adult ratio is not considered as important as the three-week, high interest intervals. A team of two teachers can make the system work.

Staff members at Compton have assembled a storehouse of helpful materials, ready-made units, overviews of skills programs and bibliographies. They are available on request.

Actual replications of the Compton program can be found in several other schools in the Bakersfield area.

"Costs for replicating the program are minimal," McLean says, "and while we don't usually use state texts, software costs can be lowered with more emphasis on state materials."

FRANKLIN MIDDLE SCHOOL DEMONSTRATION PROGRAM IN READING

San Francisco Unified School District

Program Profile

- School Enrollment: 816 students in the sixth, seventh and eighth grades
- Target Population: 260 students in the eighth grade
- Specific Characteristics of Target Population:
  - Ethnic Distribution

Asian or Pacific Islander	Filipino	Black, not of Hispanic origin	White, not of Hispanic origin	Hispanic
51.9 percent	1.4 percent	42.8 percent	1.8 percent	2.1 percent

  - Typical inner-city school; integrated through district busing.
- Project Director: Paul Dees
- Address and Telephone: 1430 Scott St., San Francisco, CA 94115 (415) 565-9654

The Program

"Reading is not an isolated subject," reports Franklin's Program Director Paul Dees. "And diagnosing student needs doesn't always require some kind of special test."

That somewhat iconoclastic approach to reading represents a large part of the philosophy undergirding the successful reading project at Franklin.

The aim of Franklin's Demonstration Program in Reading centers around communication, with staff members working together, particularly in reading and social studies, to develop a cross-disciplinary program that benefits both subject areas and builds skills as well.

Franklin's program hinges on effective diagnosis of student needs with a few unorthodox, but useful, measures. For example, Dees cites the first week of school when seventh graders from the feeder elementary schools meet for the first time in their new school.

"We list all their names; then we have them alphabetize and organize the names," Dees explains. "We check out their communication skills by asking them to talk to each other. The end result is that we have an unofficial yardstick by which we can judge their ability to read, conceptualize, write and communicate. We can also assess sociability, if we choose to."

An integral part of both diagnosis and remediation is a laboratory center with both hardware and software and a variety of teacher-made materials. The lab accommodates those students with greatest need as well as those with good reading skills. The lab focuses on behavior modification on several levels of remediation, skill building and, for some, enrichment. Each project student receives special reading instruction in his or her English, math and social studies classrooms. The lab teacher and regular teacher work as a team within the classroom in teaching reading.

The program relies on a low pupil-adult ratio to maintain a high degree of individualization. It includes the use of cross-age tutors, student teachers and volunteers.

Methods and Materials

The curriculum in the laboratory center is deliberately tied to social studies as well as traditional English subjects and math. The staff can easily relate map reading, graphing, library skills, expository writing and reporting to reading level and to skills building. Short units offered to students include social studies related plays in which oral reading skills are both assessed and developed.

Student interests often prompt the development of mini-units in which the students, guided by the

staff, write the materials. Last year, 20 project students developed a five-day intensive unit on American Indians for the lab. Such flexibility is an important adjunct to the typical curriculum materials.

Dees believes the key to good cross-disciplinary reading programs is staff motivation. "Only reading teachers taught reading here eight years ago," he states. "Now everyone is paying attention to reading because we believe it is the key to success in every subject." Staff cooperation and in-service training for specialists in other disciplines are essential to the effectiveness of such an approach. This cooperation is evident at Franklin, and in-service training is an integral part of the program. Time is set aside for meeting together and planning appropriate individual programs for target students. High interest materials are available for students in the lab, with an emphasis on books that range from the reference variety to comic books.

The Staff

The project funds three certificated staff members—two lab teachers and the project director. Other Franklin teachers also are part of the project, even though they are regular staff members paid from general operating costs of the district.

The project employs six part-time teacher aides; two work in the lab and the other four work in classrooms. A clerk is also employed.

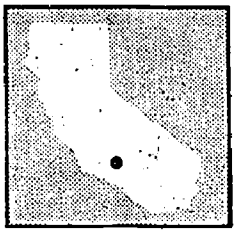
While the number of additional personnel varies from time to time, the project always involves paraprofessionals, cross-age and peer tutors, high school "cadets," volunteers and student teachers.

Replication

"More help in the classroom" ranks high on Dees' list of how to duplicate Franklin's program. His materials are available at no cost, so the rest relies on philosophical attitudes toward reading and multidisciplinary approaches.

"It takes more time to implement this kind of program," he says, "and it takes teachers who are willing to work together and share." The Franklin program is considered by Dees to be a system in which the classroom programs are geared to develop independence in the students, and the teacher is viewed as a resource, rather than, to use Dees' terms, "the fount of all knowledge."

The Franklin project staff believes its primary goal is to provide each student with the tools to deal with future educational opportunities and challenges.



GREENFIELD JUNIOR HIGH SCHOOL DEMONSTRATION PROGRAM IN READING

Greenfield Union School District

Program Profile

- School Enrollment: 544 students in the seventh and eighth grades
- Target Population: 278 students in the seventh grade
- Specific Characteristics of Target Population:
  - Ethnic Distribution

American Indian or Alaskan Native	Filipino	Black, not of Hispanic origin	White, not of Hispanic origin	Hispanic
1 percent	1 percent	2 percent	85 percent	11 percent

  - The area has a moderate transiency rate because of the agricultural economy.
  - There is also a broad socioeconomic spread from low to upper-middle income. The student population is half suburban and half rural.
- Project Director: Evelyn Ferguson
- Address and Telephone: 1109 Pacheco Rd., Bakersfield, CA 93307 (805) 834-0109

The Program

The Demonstration Program in Reading at Greenfield, "The Greenfield Express," is based on a management system, carefully structured time blocks, development of study skills and a vast assortment of high interest and relevant materials.

The classroom program is built around a daily two-period time block utilized twice each week to provide basic instruction in reading skills. The other three days offer a variety of reinforcement and supplementary activities ranging from individual and whole-class mini-units to free library reading and research work. Students are also involved on a scheduled basis in supplemental laboratory work that offers popular hands-on equipment, software and games.

The foundation of the program rests upon a skills sequence. Specific ingredients used include competition, rewards, certificates and some individual contracting, along with regular quizzes and carefully programmed materials to move students from one skill to the next in sequence. A reading clinician offers specialized help in the reading lab, and comprehensive in-service training is offered to the full-time aides who work with small groups in both remedial and enrichment activities.

Methods and Materials

The skills sequence that forms the backbone of Greenfield's program is built around an eight-level continuum originally developed by "Prime Reading" in the Fresno Unified School District, a former state Demonstration Program in Reading. Adapted to local needs, it is constantly updated and now uses non-consumable materials.

Each of the sequence levels in the Greenfield program includes subskills in:

- Vocabulary
- Phonetic analysis
- Structural analysis
- Factual comprehension
- Inference
- Research skills

Each of the subskills in the major sequence ranges from simple to difficult. Subskill objectives within each unit are stated in performance goals for the student.

When starting the program, students are placed in the reading skills sequence by a wide range of testing procedures. They move from one skill to the next when all objectives in the continuum are mastered at a level above 80 percent.

Reinforcement and enrichment to the classroom program are provided by the reading lab. The lab is staffed by a clinician and an instructional aide who schedule students for four to nine weeks in the lab, according to each student's need. The clinician and the aide are prepared to offer remediation, enrichment, self-concept and responsibility development. Students move from station to station through the lab, with ability-level materials available from the first grade through high interest adult-level offerings. Pupil/teacher ratio in the lab is low. About 18 students are scheduled for each hour.

Students are pre- and post-tested for each lab session, though no grades are given. Parent contact is by letter and conference.

Evelyn Ferguson, project director, points to the program's relevant subject matter as one reason for high student interest. Mini-units, developed by the project staff, include the following: "Karate," "Finding Your Way Around" (maps), "Who Was Melvin Dewey?" (Dewey Decimal System), "Ding A Ling" (telephone) and "World Records."

Ferguson says the reading lab provides immediate reinforcement—both for skills learned and for positive behavior. Progress is individualized in a controlled atmosphere, and great emphasis is placed on student success.

Physical Space and Hardware

Greenfield Junior High School was built in 1967. It is an attractive school in the suburbs of Bakersfield, where agribusiness is a principal industry. Located in what appears to be a typical middle class neighborhood, the school uses portable classrooms as well as existing classrooms to house the program. The project's office is located in a trailer. A resource center, located nearby, provides a work area for the instructional aides as well as storage space for materials and equipment. The reading lab is located in a portable classroom adjacent to the trailer and resource center. Classrooms are arranged to meet student and teacher needs and to facilitate innovative teaching techniques.

Major materials in the lab are the components of Educational Development Laboratory Learning 100 and Reading 300 series. Machines include Aud X, Tach X, controlled readers, tape players and their accompanying student study guides and supplementary materials. Leisure book carousels and a large assortment of learning games are also provided.

The Staff

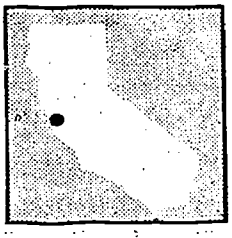
The project-funded staff includes the project director, laboratory clinician, seven instructional aides and one project secretary.

Replication

Greenfield's mini-units can be found in use from coast to coast. The lab component of the program has been replicated by two schools in the area. The most obvious replication of the classroom program is found in Greenfield itself, where a tandem program serves another grade level.

Replication of the program can be done in whole or in part. Both the classroom and reading lab can operate independently. The reading skill sequence and/or mini-units can be adapted to work with any existing school program. Any of the reading lab components can also be used alone or with other materials. Instructional aides are a great asset and a lab teacher is extremely important. The staff, working as a team and utilizing materials as indicated, should lead to a successful reading program, Ferguson believes.

Visitors are always welcome to the project. Ferguson says she will gladly distribute samples of the Greenfield mini-units and will even send the compendium of skills sequence materials to those seriously interested in using the "Greenfield Express" Management System in their own schools.



PELTON ACADEMIC MIDDLE SCHOOL DEMONSTRATION PROGRAM IN READING

San Francisco Unified School District

Program Profile

- School Enrollment: 671 students in the sixth, seventh and eighth grades
- Target Population: 250 students in the seventh grade
- Specific Characteristics of Target Population:
  - Ethnic Distribution

American Indian or Alaskan Native	Asian or Pacific Islander	Filipino	Black, not of Hispanic origin	White, not of Hispanic origin	Hispanic
0.7 percent	3.5 percent	10.3 percent	53.1 percent	21.4 percent	11 percent

  - Pelton is a former junior high school recently converted into a fundamental school where a strong emphasis is placed on basic skills. As such, it draws from all areas of San Francisco. The school had experienced a dramatically declining enrollment until the fundamental approach was launched. In a single year, Pelton doubled its enrollment.
- Project Director: Geraldine Jackson
- Address and Telephone: 45 Conkling St., San Francisco, CA 94124 (415) 648-2709

The Program

Pelton's switch to a fundamental and academic program did not cause the demonstration program staff to make any significant changes.

"We've been emphasizing reading here ever since we've been in operation," says Geraldine Jackson, program director. "It did jump our enrollment some, but our emphasis remains exactly the same."

Pelton's program has five major components: classroom instruction, reading laboratory instruction, staff in-service training, research and evaluation, and community involvement. All go hand in hand and require the full cooperation of the project staff, as well as the school staff in general.

A number of diagnostic and survey tests help teachers pinpoint student reading levels. The classroom teacher and the lab teacher, with the added advantages of small class size and a vast array of learning materials, prescribe specific objectives for each student.

Focus is on comprehension, vocabulary, sound discrimination, study skills and logical/critical thinking skills. Under Pelton's plan, students not only must attain higher scores in these areas, but they must also improve their attendance records.

The Pelton project concentrates on skill building, and teachers reinforce those skills with homework.

"While we stress the academic here," Jackson explains, "we have a nearly equal emphasis on the development of good study habits and the home-school relationship. Our students have teachers who believe strongly in the positive reinforcement philosophy of education and who are sensitive to each student's unique problems and needs. As a result, our project is helping students to know—often for the first time—that education is worthwhile and that reading can be fun."

Methods and Materials

Last year, the staff worked through a pleasantly frustrating experience when it attempted to select one student out of 40 to receive a trophy for improving reading scores 2.5 years or better in a single year. The staff solved the dilemma by giving an award to all 40 students.

Recognition of success is an important element of the Pelton program. Certificates have been awarded for attendance, punctuality, cooperation and class participation. The result: a sudden break in the failure syndrome by many students.

Central to the entire program at Pelton is the reading lab. It tests students and provides intensive instruction on the specific reading skills they need.

In the classroom, each teacher has individual student profiles from the lab, progress reports, class summary sheets for grouping purposes and a wide variety of materials to use.

Classroom teachers give pre- and post-tests each week in vocabulary and reading comprehension.

Because the Pelton program is individualized, not all students are treated in exactly the same fashion. Some may be working on individual contracts, while others, who have not exhibited the same degree of self-direction, work in small groups or alone with a teacher or an aide.

Keeping the staff on target is an on-site evaluator, a member of the project's staff who also serves as a research assistant to the teachers. She helps administer the individual diagnostic tests and the *CTBS* for all students, and she assists in the interpretation of the data gleaned from the testing. She observes in the classrooms for program monitoring purposes, not for teacher evaluation. She is also helpful in maintaining an awareness of the program goals for individualization.

The five-day cycles for attendance in reading lab classrooms are spent in remedial work, in enrichment, in leisure reading, in multisensory equipment use, in reinforcement and in the introduction of new skills.

The community involvement component of the project has resulted in less absenteeism and a high level of parent support for the program. Open houses, supper get-togethers, home visits and special counseling, when necessary, have given parents a clear perspective of the program goals. As a result, parents are trying to help reinforce the goals at home.

Physical Space and Hardware

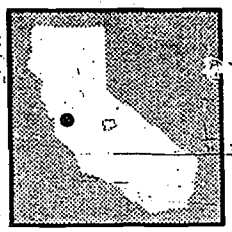
Pelton Academic Middle School is located in a multistoried building, built in the traditional style of the 1940s. Reading classrooms are standard. The reading lab is a double classroom adjacent to the reading rooms. All are fitted with tables, and the atmosphere is less formal than in other classrooms at the school.

The hardware available to students in the lab offers something for everyone: viewing/listening/study carrels for individual work, a variety of film loops and viewer programs and a large selection of leisure reading books.

Pelton students enjoy the reading lab and rank it as a popular spot, due largely to the variety of equipment. Students are learning in new ways through the lab, finding that reading can be absorbed aurally, visually and kinesthetically.

The Staff

Staff members include the project director, an evaluator/resource teacher, a reading lab teacher, a reading teacher, a secretary and six aides.



ROOSEVELT JUNIOR HIGH SCHOOL DEMONSTRATION PROGRAM IN READING

Oakland Unified School District

Program Profile

- School Enrollment: 650 students in the seventh, eighth and ninth grades
- Target Population: 190 students in the ninth grade
- Specific Characteristics of Target Population:
  - Ethnic Distribution

American Indian or Alaskan Native	Asian or Pacific Islander	Filipino	Black, not of Hispanic origin	White, not of Hispanic origin	Hispanic
0.6 percent	1.0 percent	2.1 percent	80.6 percent	3.4 percent	12.3 percent

  - Roosevelt Junior High School serves a residential community of homes and apartments on a hill not far from downtown Oakland. While the area is low on the socioeconomic scale, many of the homes are the well-kept residences of stable, blue-collar workers.
- Project Director: Thaxton King
- Address and Telephone: 1926 19th Ave., Oakland, CA 94606 (415) 261-8516

The Program

What 13-year-old can resist a card trick?

Better still, how about card tricks during class time? If it sounds like an undisciplined, unscholarly activity worthy of school board wrath, then you have not talked to the staff of Roosevelt's Demonstration Program in Reading.

According to Ann Halpern, reading resource teacher, there is more to card tricks than sleight of hand. That is particularly true when the student has to decipher the trick from reading the directions. The next step is practice. And the final "lesson" is oral language—teaching the trick to a partner or to the class.

"Reading must be interesting. It must be something more than books for many of our students who have already felt such failure in reading," Halpern explains. So Roosevelt's staff relies on individual contracts aimed at offering a variety in learning materials. Card tricks are one of those options.

Emphasis in the Roosevelt program is on vocabulary, comprehension and decoding skills. Frequently, lessons are presented through staff written multicultural units and other mini-units which have a greater appeal than the standard reading textbook.

Working from the core of a language arts classroom, the teachers pinpoint student weakness with a battery of tests and prescribe appropriate learning activities. Students are also programmed on a regular basis into a reading center where a resource teacher, a bilingual instructional assistant and members of the community involve students in programs intended to boost skills, improve attitudes and enhance self-concepts.

Students also enjoy an abundance of electronic tutors, audiovisual aids and manipulative games and puzzles in the reading center.

Methods and Materials

Each classroom teacher at Roosevelt has the services of an instructional assistant and peer tutors. The resultant learner-helper ratio is often quite low. With a reading accomplishment level that spans nine grades, from two through eleven, the extra help of both adults and peers is essential in individualizing the program.

Each student is launched in a program following an evaluation of his or her placement on the school's diagnostic tests. A progress chart is developed for students, and they receive both group and individualized instruction in areas of greatest need. Students are encouraged to evaluate their own

achievement on a weekly basis by completing personalized progress profiles. Students are frequently asked to evaluate units of study or a class activity, enabling them to participate in classroom planning and management.

Self-image enhancement is another important adjunct to the methods incorporated into the Roosevelt design. The staff is responsive to student opinions, and values clarification activities are a regular part of the classroom program. Students look forward to a monthly presentation of awards. "Almost as important as our academic goals are our goals of building responsibility, cooperation and initiative in our students," emphasizes Project Director Thaxton King.

Another feature of the Roosevelt program is a commmunity and counseling component. Serving as support to the program staff are a nurse's aide, a school psychologist and a community assistant. They work with health problems and learning disabilities, and they provide a liaison between home and school to help further the program's instructional goals.

The staff schedules monthly in-service training in which motivational lessons can be developed and the necessary research can be conducted for developing multicultural units. According to the Roosevelt staff, the exchange of ideas and information in this planning time is an essential element of its success.

Physical Space and Hardware

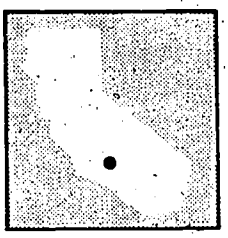
Roosevelt Junior High School is housed in an older, two-storied building with a row of standard classrooms serving as the demonstration program facility. With room dividers, a sofa serving as a leisure reading area and movable tables, the reading center is a flexible space housing a multitude of commercially prepared learning aides and motivational materials. Audiovisual study carrels and listening posts complement the table spaces.

The Staff

The project pays for the salary of a reading resource teacher and a portion of the director's salary. Three full-time instructional assistants, a part-time psychologist, a clerk and a part-time community assistant are also funded by the project.

Replication

The multicultural and career units are of particular importance for schools interested in replicating the Roosevelt program.



SIERRA JUNIOR HIGH SCHOOL DEMONSTRATION PROGRAM IN READING

Bakersfield Unified School District

Program Profile

- School Enrollment: 510 students in the seventh and eighth grades
- Target Population: 267 students in the eighth grade
- Specific Characteristics of Target Population:
  - Ethnic Distribution

American Indian or Alaskan Native	Black, not of Hispanic origin	White, not of Hispanic origin	Hispanic
4 percent	3 percent	41 percent	52 percent

  - Stable neighborhood; low socioeconomic base; many agricultural and single-parent families.
- Project Director: Barbara Clark
- Address and Telephone: 3017 Center St., Bakersfield, CA 93306 (805) 323-4838

The Program

"Sometimes I feel like Dear Abby," chuckles one teacher in Sierra's Demonstration Program in Reading. "Yet, I am really gratified when I realize the students are paying attention to our written responses in their journals."

The journals at Sierra are vital elements in a program that stresses success. They serve multiple purposes at the school's reading lab. Attendance is taken daily from them. They often serve as therapy for troubled preteen children and teenagers. They also serve "to settle the students down" to business at the beginning of class. And, of course, the journals present prime opportunities for teachers to diagnose student strengths and weaknesses in written language expression. In addition, the staff gains insight into student problems and interests.

The journals are read by the lab staff at the end of each day. Responses are written, and the journals are locked away for the next day.

The journals are just one part of a popular program where, for many students, success is not the hard uphill climb it had been in previous years. Success is "programmed" at an individual rate for each lab student.

Students come to the reading lab in cycles usually lasting 12 days. Classes run for 45 minutes and serve all target students over a five-period day.

"Our lab is not a substitute for other regular reading and language arts classes," emphasizes Project Director Barbara Clark. "It is an adjunct to them. Since our students average 2.5 years behind grade level when they come to us, our task requires something extra in the way of lab activity."

Often the regular classroom teacher joins the lab staff while his or her class is in the lab, allowing the project to maintain an enviable pupil to adult ratio of seven-to-one. Each child is tested and diagnosed, and the two lab teachers prepare a contract using high interest supplemental materials and curricula from other reading demonstration programs.

"The students have many options," Clark says. "They select daily tasks on their teacher-written contracts. As long as the work is done, we don't care on which day they do any specific task."

Immediate help or reinforcement is given by aides or teachers in the lab. Points at the end of each 12-day contract are turned in for rewards ranging from field trips to books and posters. The rewards add sparkle to lab visits for most students.

Some hard-to-measure intangibles add to Sierra's effectiveness. The program is clearly popular with the students. And the staff delights in the progress students achieve.

Students are building better study habits, learning to understand competition through the point-reward system, and—best of all—after two years

most are leaving the program at or close to grade level.

Methods and Materials

The materials used in Sierra's reading lab are a collection of curricula and ideas taken from other successful Demonstration Programs in Reading: De Anza Junior High School in Ontario-Montclair, Santa Fe Middle School in Monrovia and Lincoln Junior High School in Bakersfield.

Along with teaching techniques considered innovative by most standards, a variety of purchased materials complement the program. The student's daily journal is an important 5-to-15 minute segment of each lab period. Then students pick up their folders and undertake lab assignments that range from reading comics, *Club Magazine* and numerous high-interest commercial readers to cassette and video lessons on various reading skills.

Lab teachers write prescriptive contracts with help from a carefully cross-referenced set of materials which tie individual skills to the materials in the lab.

Basic diagnosis of each student is accomplished with a review of the *CTBS* pretest and several other commercial tests designed to point out reading deficiencies.

The reading lab coordinates its lessons with the regular language arts program at Sierra. It emphasizes developmental and corrective reading skills as well as opportunity to apply learned skills through reading. In the school's regular language arts classes, the stress is on vocabulary development, literature and the refinement of comprehension skills.

Use of the daily journal is ranked high by each lab staff member as a motivator and an indicator of both problems and progress. The journal, a composition book, is a compendium of student feelings, gripes and thoughts; it establishes a direct communication link between student and teacher. Since it is "strictly personal, its contents are held in utmost confidence," Clark says.

Physical Space and Hardware

Sierra Junior High School is housed in a sprawling, 27-year-old single story building. The reading lab is probably the most unusual part of the building, largely because it is the only area of the school with carpet, comfortable chairs and sofas and a relaxed atmosphere.

The lab occupies two joined classrooms. Bean bag chairs and round tables instead of desks add to the informal atmosphere. Curtains on the windows help create a general feeling of "this is your place." The warmth is deliberate and supports the lab philosophy that a low-pressure atmosphere for these students is more conducive to success.

The learning hardware that supports the Sierra program includes tachistoscopes and other mechanical devices designed to increase reading speed, accuracy and comprehension.

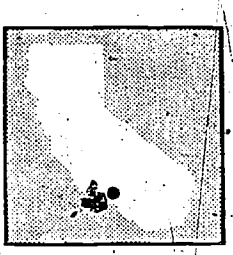
The Staff

In addition to the project director, the lab staff includes two full-time teachers and two full-time aides.

Replication

The Sierra program is an example of effectiveness in replication, and the school's staff members credit earlier state-supported demonstration programs as their inspiration. They also used materials developed by other projects to start their reading lab; teaching ideas were borrowed from other successful demonstration programs. The daily journal concept, for example, began at the Santa Fe Reading Center in Monrovia.

To obtain a compendium of materials used by the Sierra program, call or write the project director.



SANTA BARBARA JUNIOR HIGH SCHOOL DEMONSTRATION PROGRAM IN READING

Santa Barbara City High School District

Program Profile

- School Enrollment: 1,104 students in the seventh, eighth and ninth grades
- Target Population: 380 students in the eighth grade
- Specific Characteristics of Target Population:
  - Ethnic Distribution

American Indian or Alaskan Native	Asian or Pacific Islander	Filipino	Black, not of Hispanic origin	White, not of Hispanic origin	Hispanic
1 percent	1 percent	1 percent	8 percent	53 percent	36 percent

  - The school is located on the east side of Santa Barbara in a low-income neighborhood comprised of small, well-kept homes. While some of the students come from disturbed, impoverished families, there are also large numbers of students representing average middle class homes and even a few from wealthy neighborhoods. In many respects, the school is integrated—in racial/ethnic balance, in socioeconomic status and in the ratio of ethnic balance of the staff to the students.
- Project Director: Dorothy Ross
- Address and Telephone: 721 E. Cota St., Santa Barbara, CA 93103 (805) 963-3084

The Program

Where do the students at Santa Barbara Junior High School learn to disco dance? And where do they perfect their cheerleading skills? Where can they find remedial help in almost any subject and have counseling and medical services for the asking? Finally, where do they catch up from below grade-level reading ability while discovering that reading is not nearly as boring or frightening as it was in years past?

It may be hard to believe, but the answer for the past few years has been the school's reading center. One of the original projects funded under Assembly Bill AB 938, the Santa Barbara Junior High School Demonstration Program in Reading is a model effort that has been replicated in whole and in part by scores of other schools.

"Eclectic best describes our program," explains director Dorothy Ross. "We have something for everybody based on interests and skills. We consider the whole world our classroom."

Just as important to the program as textbooks are newspapers, the private journals that record student feelings on a daily basis and the paperback books that become student property as leisure reading assignments are completed. Small class size, the opportunity for one-on-one sessions with a counselor, help from the nurse for more than just a bandage, and substantial communication with other staff members not involved in the program are all critical elements in the Santa Barbara story.

An aspect of the program that the staff feels is, in part, responsible for improving test scores is the relationship between personnel in two different departments—English and reading. The two departments, while working together, function as separate entities, working from different curriculum. English and reading are separate periods of the instructional day, often back-to-back.

Another component is the nurse-practitioner-home liaison. More than just a surveyor of basic health, the nurse gives physicals and provides counsel on numerous aspects of teenage health—from

obesity to sexuality. She is a frequent visitor in the homes of the target students and provides an element of concern for the "whole student"—even the student's family—that is somewhat unique in a reading program.

A counselor is a full-time adjunct to the reading center staff. He or she works to solve learning problems, family problems and the universal difficulties of the young teenager.

Each teacher works with a well-trained paraprofessional, and each student works from a contract prepared specifically to address his or her needs as well as interests. The goal is to provide a full measure of success rather than failure in the reading lessons.

Methods and Materials

The first stop for target students entering the reading center is diagnostic testing. In addition to formal assessments, interest inventories are given and the all-important conversations occur between teacher and student. Cumulative records are checked for difficulties in other subjects that could be language-related. Students discuss their goals. From that point, contracts and mini-units are developed which are geared to increasing vocabulary, improving critical reading skills and study skills, and gaining comprehension. Often the reading center works in tandem with another subject area—such as science, where research reports due in science class are prepared with the help of the reading center staff.

Each class usually begins with a 10-minute period of silent reading. Part of the silent reading is tied to an incentive book program. For each book a student completes, he or she may choose a paperback book to keep.

Contract work follows the silent reading period. Two contracts are completed each semester. A strong homework policy augments the classroom work. Parents are kept up to date through frequent letters.

Journals are kept by most students with the option of keeping them private or sharing them with staff members.

Mini-units relating the world to reading and to survival are an important element in the program. Developing such essential skills as using the telephone book and understanding the motor vehicle code are popular units of work. Current events form the basis for oral language discussion and for more vocabulary building.

As important to the staff as the curriculum are the noncurricular aspects that make the reading center the heartbeat of the school. Some examples:

- The reading center opens at 7:30 a.m. for last-minute studiers or for those needing some extra help.
- The reading center becomes a tutorial center after school. Honor students serve as peer tutors under the direction of a center staff member.
- Students are invited to the reading center twice a week for disco dancing at noontime.
- The drill team members and cheerleaders meet and practice in the center.
- Twice a year, the students undertake a charitable activity aimed at helping fellow citizens. It may be sewing gifts for sick children, planting seeds and potting the seedlings for gifts to a local hospital, repairing toys and doing similar activities.

"The poverty of our school is not like that of the inner city," Ross says. "It is a low-income area, but there are proud families with too many mouths to feed, language barriers and a common lack of experience. That is why our program must reach beyond the classroom into the neighborhood. It is also why our staff spends evenings attending the neighborhood concilio (town council) meetings. We must be involved with them to counteract their inexperience and to help their children learn to read with fluency and skill."

Physical Space and Hardware

The reading center consists of four classrooms in two side-by-side buildings. Each classroom is a self-contained reading classroom and lab with portable walls to accommodate team teaching and other large group events. There are no desks. Instead, there are round tables and several comfortable reading areas with easy chairs and sofas.

"Our program relies almost solely on people, not machinery," Ross says. While there are a number of commercial audiovisual programs and some popular reading games, the program also uses standard textbooks and worksheets as well as the district's reading continuum materials.

The Staff

The major expenditure of the program is for the salaries of the staff: project director, four teachers, four full-time aides, a nurse-practitioner, a counselor, a clerk and an assistant director.

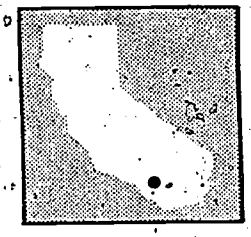
Replication

"Replication of our program rests as much in attitude as it does in curriculum," Ross says. Each reading center teacher has a reading specialist credential. Each aide has had extensive training.

There is virtually nothing, however, which the program uses that is consumable, except the incentive books. Curriculum costs are low. Ross is convinced that the right people with the right attitudes can replicate most of the program.

Chapter IV

A Demonstration Program in Reading and Mathematics



TERRACE HILLS JUNIOR HIGH SCHOOL
DEMONSTRATION PROGRAM IN READING AND MATHEMATICS

Colton Unified School District

Program Profile

- School Enrollment: 620 students in the seventh and eighth grades
- Target Population: 203 students in the eighth grade
- Specific Characteristics of Target Population:
  - Ethnic Distribution

Asian or Pacific Islander	Black, not of Hispanic origin	White, not of Hispanic origin	Hispanic
.5 percent	.5 percent	55 percent	44 percent

  - The area features a high transiency rate, and the nature of the community is undergoing a change from rural to suburban. There are extremes in socioeconomic status ranging from the professional class to the disadvantaged.
- Project Director: Opal Thompson
- Address and Telephone: 22579 DeBerry St., Colton, CA 92324 (714) 824-4245

The Program

Good things come in pairs at Terrace Hills:

- There is a double-barreled effort in the basics, with both reading and math part of the state-funded demonstration program.
- With an ungraded system made possible by combining district money with state money, the program helps both seventh and eighth graders.

This approach is both effective and popular with staff and students alike. Continuing high achievement of the students has resulted in an equally high enthusiasm level. Those who visit the program are likely to find the enthusiasm contagious.

The reading and mathematics programs operate separately, each using materials from different sources, with different staff members, teaching techniques and learning alternatives.

The unifying element is a basic philosophy that both the reading and math programs should offer a blend of highly motivating materials, self-image building activities and individualized diagnostic-prescriptive skill building.

Methods and Materials

The reading component at Terrace Hills, originally developed by the reading teachers and school and district administrators, provides each student with an array of learning options aimed at specific skills building and remediation.

Following *CTBS* testing, the students are assigned to classrooms and a reading lab. The lab tends to work toward remediation of identified deficiencies, while the classroom work offers reinforcement, enrichment and directed work on reading skills enhanced with the continual use of mini-units.

In the lab, the teachers use individualized assignments. Student work is checked several times in a class period by either a reading teacher or an aide. Daily evaluation is important to charting each pupil's progress. Emphasis is placed on observing how the students learn best—visually, aurally or in combinations.

Both the classrooms and the lab use a reward system, with free class periods, posters, ditch days and trips serving as motivation and reinforcement.

Teachers of the developmental reading classes concentrate on some remediation, but [illegible]arily on the more sophisticated skills of comprehension and critical thinking. Mini-units make these classes popular and relevant. The staff has been building the mini-unit collection to a point where continual mini-units can be offered over a two-year period without repeating the same materials. The language approach to reading is utilized in developmental classes.

The math component at Terrace Hills is composed of 150 separate contracts made less formidable by highly refined organizational techniques, effective storage and a liberal sprinkling of hands-on manipulative lessons and mini-units.

The math contracts, each 2 to 20 pages, were developed by the Madera Unified School District. The contracts consist of diagnostic tools, of pretests and worksheets, post-tests and manipulative lessons.

The Terrace Hills math program includes teacher-prepared mini-units that offer the opportunity for occasional large group instruction. Samples of the mini-units offered include probability, income tax, money magic, metrics, consumer math and construction projects. Last year, the math classes designed the brick wall that rims the basketball court. By the time district maintenance crews arrived to build the wall, the students had figured out the linear feet, the number of bricks, the curve involved and computed the costs As a result, they feel as if it is "their" wall.

Physical Space and Hardware

The reading and math programs blend into Terrace Hills in a way in which few would notice them as "special." They use six classrooms in all, plus storage and office space. Since there is no math "lab" in terms of computers, teaching machines and other devices, the program requires little hardware. The typical classroom has a modest proportion of equipment to support the program, but for the most part the success of the program is well-designed curriculum, effective recordkeeping and enthusiastic teachers working in a typical classroom situation with the help of aides.

The Staff

Funding uniqueness at Terrace Hills, with equal components of state and district money, has resulted in a balance sheet that shows the district paying the salaries of the programs' six teachers, while the project funds nine six-hour instructional aides. Four of these aides work in the reading lab to provide intensive one-on-one assistance on a continuing basis for those students working there. The salaries of the project secretary and half the project director's time are also included in the state funding.

Replication

The Terrace Hills program should be helpful for those hoping to achieve a strong boost in achievement at their own schools without large amounts of extra financial assistance.

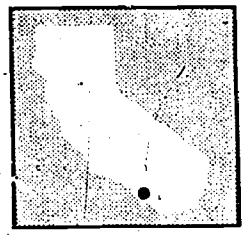
"When we decided to apply for funds as a Demonstration Program in Reading and Mathematics," explains Project Director Opal Thompson, "we wrote the project with the underlying thought that people learn from people, not from machines."

That makes the project very portable—in either reading or math or both. The staff is happy to share the materials that have formed the basic curriculum. It emphasizes the adaptability of the materials to unique situations.

"Our math contracts require lots of paper," Thompson says, "but it doesn't have to be consumed. Our reading mini-units are ready to go as they are, and our help and enthusiasm are available in large quantitites."

Demonstration Programs in Mathematics

- Franklin Junior High School, Long Beach
- Washington Junior High School, Long Beach
- Mission Junior High School, Riverside
- Pacoima Junior High School, Los Angeles
- Sierra Middle School, Riverside
- Carter Middle School, Oakland
- Hoover Junior High School, San Jose
- Peter Burnett Junior High School, San Jose



FRANKLIN JUNIOR HIGH SCHOOL DEMONSTRATION PROGRAM IN MATHEMATICS

Long Beach Unified School District

Program Profile

- School Enrollment: 775 students in the seventh, eighth and ninth grades
- Target Population: 255 students in the eighth grade
- Specific Characteristics of Target Population:
  - Ethnic Distribution

American Indian or Alaskan Native	Asian or Pacific Islander	Filipino	Black, not of Hispanic origin	White, not of Hispanic origin	Hispanic
1 percent	5 percent	1 percent	36 percent	35 percent	22 percent

  - There is a high percentage of transiency in the Franklin area. Entering students are, on the average, two years below grade level in math.
- Project Director: Roger Shickler
- Address and Telephone: 540 Cerritos Ave., Long Beach, CA 90802 (213) 437-8212

The Program

They cannot play "hide and slide" in Franklin Junior High School's Demonstration Program in Math. The old classroom trick of sitting silently in a corner and passing through math unnoticed, unchallenged and unmotivated is an impossibility with the structured, individualized program offered at Franklin.

Franklin's program is not only effective, but it is also popular. It is fun for just about everyone enrolled. It qualifies as a dream come true for the staff, and district administrators are justifiably proud of the achievement levels critics said "could never be reached."

The Franklin program is designed to achieve cost effectiveness and student achievement—two factors highly popular with parents and the tax paying public. Its combination of instructional and organizational components are efficient and portable and, best of all, they work with kids. The curriculum is as applicable to the serious gifted child as it is to the unmotivated remedial student. The record-keeping system that complements the instructional component ensures that each student's performance is recorded with such detail that it is impossible to lose a student "in the cracks," according to Project Director Roger Shickler.

Instructional aspects of the program are varied—classroom instruction in small group and one-to-one situations, practical hands-on experience weekly in the math lab and checkpoint-testing in a math center designed just for that purpose.

Individualized instruction is truly making a significant difference at Franklin. The sophistication level of its programming is a highlight that visitors find particulary unusual—and often inspiring.

Methods and Materials

The custom-designed curriculum materials line the window walls in each of four classrooms at Franklin. They consist of 23 advancement tracks that take the students from arithmetic through algebra and geometry. They range in difficulty from fourth to ninth grade levels. Each track includes a number of behavioral objectives supported by study packets.

The paper and pencil activity of the 750 study packets includes easy-to-read directions and practice exercises. Each packet is designed to help students achieve a specific behavioral objective. Most students are expected to complete three study packets each week.

The Franklin system also includes 20 criterion referenced pretests. Student profile sheets allow a

teacher to note individual student progress at a glance.

"Quickie" quizzes, which take five minutes or less, are used at the beginning of each classroom period. Shickler says the quizzes tend to settle the students down immediately. Test content allows a maximum amount of success for even the less able students. Approximately 180 different quizzes are available for each grade level.

Materials in the math lab include programmable calculators, filmstrips and cassettes, credit card machines and stacks of tote trays filled with enticing lessons with such names as "Houdini Squares."

"The lab is a hands-on, motivating experience," according to Bill Cass, the lab teacher. It is not uncommon to hear groans when the bell rings to end the period. Math lab activity offers students the link between the abstract classroom concept and the practical application of that concept. Students see the survival aspects of arithmetic when they compute a gas station invoice, order from a catalog, decide the fastest driving route from Barstow to San Bernardino or determine their own weight in grams.

Each student has a prescribed lesson in the lab once each week that is geared to current classroom work. Each classroom contributes five students each period to the lab and about as many to the checkpoint testing center. This leaves fewer students in the classroom with the teacher and the aide.

The program's "safety valve" is the checkpoint testing center. This is where students prove their mastery of specific math concepts. Students who score lower than 80 percent are "re-programmed," usually in the center itself with new study packets that re-teach the concept.

Other materials in the program include refresher sheets. A regular adjunct to classroom offerings, they concentrate on drill and practice.

Grading reports are sent home every 20 days, reflecting student attitude as well as skill mastery. Since there is usually no homework in the program, the reports are important for parental understanding and for reinforcement of the program goals for each pupil.

Physical Space and Hardware

The second floor of the school's 40-year-old building is home to the program. Four classrooms and a lab are used, in addition to office and inventory space. Originally located in two traditional classrooms, the lab now features teachers' work space, lesson storage space and individual carrels, round tables and rectangular tables and bench work spaces for students.

The checkpoint testing center is a classroom arranged with tables rather than desks. The round tables permit ease of passing and provide a visual atmosphere that sets the center apart from a typical classroom or "testing area."

The Staff

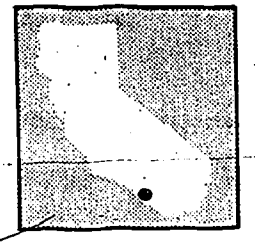
The state-funded project staff numbers 15—a director, two teachers, one lab teacher, 10 college math aides (working 15 hours weekly) and one clerk.

Replication

Literally hundreds of schools, including four other Long Beach junior high schools, have duplicated the Franklin program. The Long Beach replications are funded from district and state compensatory education appropriations, with one school qualifying for funding as a replication program under the state's Demonstration Programs in Reading and Mathematics.

Shickler estimates that 400 complete sets of math curriculum materials were sent in 1978-79 to educators studying possible replication of the program. A set of materials is available at no cost. It includes study packets, tests, quizzes, lab lessons, refreshers, grading reports, student profiles—everything required to replicate the program.

Shickler attributes Franklin's success to the effectiveness of these materials and to staff dedication to the program. Additional money, he believes, plays only a secondary role. "The right teachers, a willing administration, some physical space and the will to make it work—these are the major qualifiers for duplicating the program," he adds. Some projects get along with donated lab materials and by consolidating what is already in a school. Printing can be done in a district print shop or by a high school vocational program. The use of inexpensive newsprint keeps printing costs for student material to $9 per student per year. Shickler suggests that a school does not have to use the materials consumably. Another way to save money: use volunteers instead of paid aides.



WASHINGTON JUNIOR HIGH SCHOOL DEMONSTRATION PROGRAM IN MATHEMATICS

Long Beach Unified School District

Program Profile

- School Enrollment: 940 students in the seventh, eighth and ninth grades
- Target Population: 280 students in the ninth grade
- Specific Characteristics of Target Population:
  - Ethnic Distribution

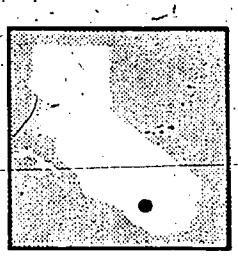
American Indian or Alaskan Native	Asian or Pacific Islander	Filipino	Black, not of Hispanic origin	White, not of Hispanic origin	Hispanic
2 percent	7 percent	5 percent	30 percent	26 percent	30 percent

  - Washington's neighborhood population has a high AFDC rate.
- Project Director: Roger Shickler
- Address and Telephone: 1450 Cedar Ave., Long Beach, CA 90813 (213) 591-0907

The Program

Washington Junior High School's Demonstration Program in Mathematics is identical to the one at Franklin Junior High School, which is also located in Long Beach. Washington's program is a state-funded replication of the Franklin effort, according to Roger Shickler, project director for both programs. Two other Long Beach schools, supported by district funds, are also replicating the Franklin program.

The Long Beach Demonstration Programs in Mathematics switched from hand-scored drills and tests to computer scoring. To do this, all 400 instructional packets, from whole numbers through pre-algebra, were rewritten, computer programmed and placed in operation.



MISSION JUNIOR HIGH SCHOOL DEMONSTRATION PROGRAM IN MATHEMATICS

Jurupa Unified School District

Program Profile

- School Enrollment: 827 students in the sixth, seventh and eighth grades
- Target Population: 318 students in the eighth grade
- Specific Characteristics of Target Population:
  - Ethnic Distribution

Asian or Pacific Islander	Black, not of Hispanic origin	White, not of Hispanic origin	Hispanic
2 percent	15 percent	59 percent	24 percent

  - There is a high transiency rate in the area; students entering Mission Junior High School average two years below grade level in math skills.
- Project Director: Lucille Shearer
- Address and Telephone: 5961 Oso Lane, Riverside, CA 92509 (714) 781-1811

The Program

Teachers who observe Mission Junior High School's Demonstration Program in Mathematics are usually struck with the high level of computerized assistance given the program. But the students notice those Snoopy trophies which proclaim: "World's Greatest Math Student." Last year the program awarded 80 of the six-inch whimsical awards to students who mastered pre- or post-tests.

The trophies, along with buttons awarded for proficiency, are coupled with a highly individualized program that allows students to move along quickly or to take the time necessary to master the difficult assignments. The math classes rank among the favorites for nearly all students at Mission.

Originally built upon the 23 "math tracks" developed by the Demonstration Program in Mathematics at Franklin Junior High School in Long Beach, Mission's program was revised and expanded into 30 units. Further revision included changing the worksheets and tests to accommodate the Tracer computer management system which backs up the program staff with amazing speed and detail.

The program includes a number of other features found in the Franklin program. These include the "quickie quiz" concept, designed to give students consistent exposure to new math concepts and review. At the end of each week students are given a review test of that week's quizzes. A math lab supplements the classroom program; students are programmed into the lab for week-long periods.

The complex scoring, grouping and tracking of students in the Mission program are a teacher's dream. Says one teacher of the Tracer system: "It's just like having a teacher aide who works nights to grade papers and record them for you before the next morning class."

Tracer is a special feature of the Jurupa program, made available through the Office of the Riverside County Superintendent of Schools. Its developmental costs were largely supported by county funds. Now that it's operational, Project Director Lucille Shearer feels that the ongoing cost for the system is highly cost effective.

Methods and Materials

The foundation of the Mission program is 30 units ranging in difficulty from fourth grade level arithmetic to ninth grade algebra and geometry and beyond.

Each unit includes a pretest, seven or eight lessons to teach and provide practice in the unit's concepts, supplemental references and a post-test. In order to move from one unit to the next, a student must master the post-test with at least 80 percent proficiency.

Placement for an entering student is determined through a diagnostic placement test.

The materials and lessons in the math lab highlight hands-on activities which supplement or illustrate classroom concepts. The lab is an adjunct to the classroom. It offers a wide assortment of programmable calculators, math games, measuring devices and lessons to teach the mastery of these tools.

The daily output of Tracer provides an alphabetical list of students and the units they are currently studying. A second daily list prints out the units and the names of the students working on them. A third sheet indicates the units that each student has completed. The system also scores tests and gives the test takers further instructions in one of three categories: study, review and mastery.

Physical Space and Hardware

Mission Junior High School is housed in a relatively new building, attractively and functionally designed in the modified open plan. The math program occupies a four-classroom cluster. A central storage area, which separates the four classrooms, accommodates all curriculum materials, except supplemental lessons. They are stored in the project office.

The project office is the equivalent of half a classroom and doubles as working space, occasional lounging space for the staff and a storage area. The math lab is another full classroom, located adjacent to the four-classroom wing housing the program.

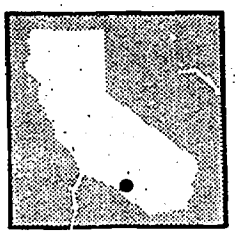
The Tracer system's hardware that scores the daily math work is unique to the state's Demonstration Program in Reading and Mathematics. Initial programming time ran 240 hours, including rewriting the test components into multiple choice answers, thus permitting the system to score them. Shearer emphasizes that the Tracer program is providing computer management, not computer assisted instruction.

The Staff

The project's budget supports the salaries of the project director, six instructional aides working six hours daily, a clerk and half of the salary of the lab teacher.

Replication

Mission will share its 1,000 pages of computer-ready curriculum with interested schools. The staff believes the program has immediate benefits—even without the computer. "The major components for success," Shearer says, "are the commitment to individualization and additional clerical help with the necessary paperwork that makes individualization effective."



PACOIMA JUNIOR HIGH SCHOOL DEMONSTRATION PROGRAM IN MATHEMATICS

Los Angeles Unified School District

Program Profile

- School Enrollment: 1,300 students in the seventh, eighth and ninth grades
- Target Population: 400 students in the eighth grade
- Specific Characteristics of Target Population:
  - Ethnic Distribution

American Indian or Alaskan Native	Asian or Pacific Islander	Black, not of Hispanic origin	White, not of Hispanic origin	Hispanic
0.7 percent	0.9 percent	4.1 percent	28.8 percent	65.5 percent

  - The school is situated in a suburban area with typical inner-city problems—a high transiency rate and a low socioeconomic level.
- Project Director: Elaine Lindsay
- Address and Telephone: 9919 Laurel Canyon Blvd., Pacoima, CA 91331 (213) 896-5816

The Program

Math is more than just a four-letter word at Pacoima Junior High School. It is 40 weeks of "This Is Your Life," a curriculum designed to tempt young teenagers into learning more about math.

"This Is Your Life" involves students in the practical arithmetic inherent in everyday situations, and, since the circumstances of life vary from student to student, the curriculum is completely personalized.

When "Your Life" is launched at the beginning of the school year, students are catapulted three years ahead into their own futures. For most of the Pacoima students this means graduation from high school without definite ideas about what to do with their lives. The majority are not college bound. So, imagining themselves working and eventually on their own is both realistic and attractive. The end result of the program is a math curriculum which is honest, realistic, useful and multidisciplinary.

A full year of applied math is built around the typical situations a new high school graduate would encounter: deciding on a job, figuring out paychecks, budgeting, recordkeeping, dream shopping, buying a car, planning a vacation, even moving into an apartment.

The curriculum is divided into seven units, each with its own introduction, chronology, objectives and lesson plans. There is very little preprinted drill work. Instead, students obtain necessary information by their own investigation.

Abundant opportunitites are provided to learn how and when to apply the principles of arithmetic. Though the class is tremendously popular and often seems to be teaching more about life than arithmetic, intensive math instruction is involved. Supplemental math textbooks help the students understand banking, measurement (will the new couch fit on that wall?), ratio, percentage and the other real-life applications of math for survival.

Career investigation and exploration of personal values are logical parts of the curriculum. Naturally, reading and writing tie in. As a result, the program lends itself well to team teaching.

Project Director Elaine Lindsay considers "This Is Your Life" to be a program in which pupils can recognize for themselves the value of math and of education in general.

Methods and Materials

The backbone of "This Is Your Life" is a compendium of seven units that take the student

through the following procedures of real life:

- PAYDAY—a unit continuing throughout the year that involves computing payroll deductions, recording living expenses, completing tax forms, banking and managing money.
- $1,000 FACELIFT—a four-week unit on linear measurement, bedroom furnishings, scale drawing and room arrangement.
- $1,000 SHOPPING SPREE—a four-week unit on consumer education that includes comparison shopping, unit pricing and graph construction.
- CAREER BOUND—an eight-week unit to promote self-awareness and to provide for career investigation.
- WHEELS-FOR-REAL—one of the most popular sections of the class. Since most teenagers are preoccupied with cars, this unit covers car selection, purchase, loans, insurance and maintenance. "Some kids decide on bikes after this unit," chuckles Lindsay.
- SPRING VACATION—a two-week unit on planning a vacation, reading maps, compiling an itinerary and filling out expense forms.
- FIRST PLACE—a five-week unit on investigating permanent living, selecting an apartment, computing utility bills and ordering furniture.

The classes are enhanced by the enthusiastic teaching styles of the six project teachers. The program has been so successful and so simple to organize that the staff is currently branching out into a "This Is . . ." series for the other grade levels at the school. Example: "This Is Your Community" and "This Is Your School."

Software that enhances the program is sparse but practical, reflecting the priorities of the staff. There are calculators, both hand-held and desk models, reference materials, mail order catalogs, advertisements and brochures. Also included: a generous collection of state-adopted mathematics textbooks, which Lindsay believes serve a useful purpose. "When the students are having trouble with the calculation aspects of a specific week's work, they can hit the books for immediate help," she explains.

The Physical Space

The large junior high school building housing "This Is Your Life" is fringed with bungalow buildings that serve as home to the program. Of the five relocatable classrooms, four accommodate students. The offices are housed in the main building. A math learning center, which complements the program, uses the equivalent of one additional classroom.

Staff

Energy and enthusiasm are particular hallmarks of the staff at Pacoima. The staff's commitment to the program is contagious. Undoubtedly, their own attitudes make significant contributions to the program's achievement. The staff includes the director, six teachers (only two are funded by the state's Demonstration Program in Reading and Mathematics; the rest are funded by the district), four aides who work a six-hour day, three aides who work a three-hour day and one secretary.

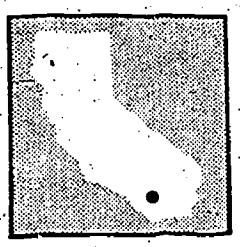
Replication

Pacoima's program can be easily duplicated by adjustments to fit a school's population and a staff's time constraints. It requires little more than basic textbooks for reference, catalogs, newspapers and the dittoed sheets used for the activities.

Lindsay has visited serveral schools that are replicating the Pacoima program success and popularity. All the materials that have been developed by the project are available for the asking.

"This Is Your Life" has been replicated in schools in Bakersfield, San Diego, and McKinleyville. A prison school adopted the program in its entirety.

A real plus for duplicating the program is its low cost. "All it takes is a half ream of ditto paper per student, a dollar's worth of supplies, some time and enthusiasm," Lindsay says.



SIERRA MIDDLE SCHOOL DEMONSTRATION PROGRAM IN MATHEMATICS

Riverside Unified School District

Program Profile

- School Enrollment: 705 students in the seventh and eighth grades
- Target Population: 300 students in the eighth grade
- Specific Characteristics of Target Population:
  - Ethnic Distribution

American Indian or Alaskan Native	Asian or Pacific Islander	Filipino	Black, not of Hispanic origin	White, not of Hispanic origin	Hispanic
0.5 percent	0.5 percent	0.5 percent	11 percent	68.5 percent	19 percent

  - The neighborhood, which has a high transiency rate, is considered "blue collar," though in years past it contained many professional people.
- Project Director: Betty Masters
- Address and Telephone: 4950 Central Ave., Riverside, CA 92504 (714) 788-7501

The Program

In an era of public doubts about the achievement of students in the public schools, the Demonstration Program in Mathematics at Sierra Middle School provides solid proof that good programs produce results that should delight parents.

In a recent testing period, all but eight students gained 1.5 months of instruction or more for every month in school. And what about those eight? "We're still working with them, and eventually they will make that leap," declares Project Director Betty Masters.

How do they do it? It is a careful combination of testing, instruction, evaluation and hard work. Masters claims that it is a workable blend for any staff with the will to give it a try.

The curriculum at Riverside is not unique, at least in its original form. The Sierra program is yet another spin-off from the popular and successful Demonstration Program in Mathematics in Long Beach. It has been altered and refined to meet the specific needs at Sierra, but it remains similar to the original program in that it still includes pre-tests, worksheets and post-tests. All the lessons are supplemented by regular work in a math lab. It differs from Long Beach by combining seventh and eighth graders in the same class and by the absence of a checkpoint testing center midway through a major lesson "track."

Methods and Materials

The curriculum providing the foundation for the Sierra program is available upon request. It is based on the 23 tracks that take the student from the addition of whole numbers through highly complex pre-algebra work. Lessons are filed in the classroom and teachers prescribe work for each student, as identified by the results of the pretests.

After an opening "quickie quiz," five or six students from each classroom are sent to the lab, thus lowering the total number of students in a given classroom at any one period. The lab offers a variety of teaching alternatives and a tempting array of "free time" options—balance scales, fraction bars, Cuisenaire rods and other manipulative materials to clarify concepts. Tapes, flash cards and self-correcting drill sheets give students a boost when they are faced with basic memorization tasks.

Sierra's math teachers expect their students to do weekly homework, which reinforces and provides drill in the work done during class. To encourage productivity in the math tracks, there is a need for continuous correcting of student work, for immediate feedback and reinforcement. To assist in the

correction of student work, Sierra's program includes an auxiliary class of "cadets," eighth grade students who assist the teacher and aides in the paperwork. The "cadets" learn organization and responsibility—and reinforce their own math knowledge at the same time.

Physical Space and Hardware

The classrooms are located in two pairs of carpeted double classrooms and two regular-sized, uncarpeted rooms. The 20-year-old building features the banks of windows familiar to buildings of that era. The math lab is a double, uncarpeted classroom fringed by rows of shelves below the windows. Tables replace the traditional desks, and there are nooks and spaces where students can pursue personal study programs or work in small groups with audiovisual materials. Office space is adjacent to the main entrance to the school.

Very little special hardware is required for Sierra's program, but the program offers an abundance of software geared to raise student enthusiasm levels and ultimately to close the learning gaps that many Sierra students bring into the math program.

The Staff

The program's staff includes four district-funded teachers. State funds provide five aides who work six hours per day, a secretary and the project director. Supplemental to the staff, though not funded by the state Demonstration Program in Reading and Mathematics, are the many "cadets" who assist with the program in each classroom. A college work-study program augments the corps of aides. Several college students are employed to work with students needing one-to-one math tutoring.

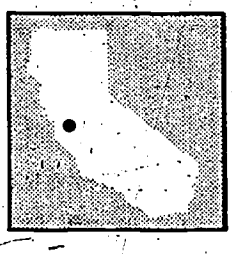
Replication

In addition to the printing efforts necessary to duplicate the tracks that comprise the project's curriculum, Masters says replication requires "cadets," volunteers, college students and staff members committed to individualized instruction.

"Paperwork can be burdensome without clerical back-up," she admits, "but when dedicated teachers see students pack three months of learning into one month of instruction, the filing, recording and progress information forms for parents seem worth the time and thought."

Some other Riverside schools have already replicated the Sierra program in large part. Replication of the Riverside curriculum is also evident in schools in Etiwanda, Elsinore and Los Angeles.

"They have done what we did initially," Masters explains. "We began with the Long Beach program, but we rewrote the tracks to personalize the towns and the people to us in Riverside. Schools that take our materials for their own use can do the same with a minimum of effort."



CARTER MIDDLE SCHOOL DEMONSTRATION PROGRAM IN MATHEMATICS

Oakland Unified School District

Program Profile

- School Enrollment: 399 students in the seventh and eighth grades
- Target Population: 200 students in the seventh grade
- Specific Characteristics of Target Population:
  - Ethnic Distribution

Filipino	Black, not of Hispanic origin	White, not of Hispanic origin	Hispanic
1.0 percent	97.5 percent	.5 percent	1.0 percent

  - Carter is a new middle school located in Oakland's inner city. The neighborhood has many single parents. Despite a low economic base, half the neighborhood is considered stable and family-centered. The other half is transient and troubled. Most of the dwellings around the school are single family homes rather than apartments..
- Project Director: Carolyn Getridge
- Address and Telephone: 4521 Webster St., Oakland, CA 94609 (415) 654-8936

The Program

With as many as 30 percent of the students absent on a given day, and 90 percent of the math students more than two years below grade level, staff members of the Carter Middle School's Demonstration Program in Mathematics confronted a tough assignment when they launched their project. Now, however, the absentee rate is dropping and significant progress has been charted for large numbers of Carter students.

The Carter program is a spin-off from the Franklin Demonstration Program in Mathematics at Long Beach, but it has differences. Carter features an open plan and serves a more transient population than Franklin does. Student turnover is 50 percent in a single year.

A community component is included in Carter's program: Staff members counsel absent students. The goal: to reduce absenteeism.

"We have Telegraph Avenue backing up to the school," notes Project Director Carolyn Getridge. "When the going gets tough, or when the sun is shining brightly, students can simply hop the fence." Not hopping the fence is a program goal for the staff at Carter. "We arm ourselves with a fistful of lesson plans," Getridge explains. "We have plans that individualize math for the seriously remedial students, the below average, the average, the eager, the gifted, the usually absent and the emotionally deprived. We find that all this individualization is really helpful in keeping the class on target."

The Carter program is a transplant from another site in Oakland. It was previously located at Oakland's Hoover Junior High School.

Methods and Materials

As an open-plan school, Carter is geared to team teaching in most subjects, and the Demonstration Program in Mathematics is no exception. The "math pod," as the instructional area is called, features learning centers aimed at basic skills development, an audiovisual area and a "control center" where materials, daily lessons and student records are maintained.

A math lab supplements the learning centers in the classrooms, and a math resource teacher plans the activities in both areas, assisted by a corps of aides who are considered part of the team.

Weekly in-service training and planning time are important parts of the Carter system. During in-service training periods, the staff analyzes individual student assessments from the evaluation center, sets goals for each student and documents progress. An outside consultant provides additional training for the instructional staff members, helping them to understand the instructional goals for each student and the best means to reach them.

Physical Space and Hardware

The math area of the school is a pod arrangement of four classrooms without the separation of doors. Students from all heterogeneously grouped classrooms go to learning centers in various corners of the pod. Which one they go to depends on their needs. In this arrangement, the four classrooms are, in effect, treated as a single classroom, allowing teachers to simultaneously focus on learning in several areas. The math lab currently occupies an adjacent self-contained classroom.

An assortment of audiovisual materials, along with hands-on experiments, round out the curriculum. These materials are found in the learning centers as well as in the math lab.

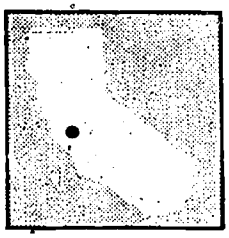
The Staff

In addition to district-funded math teachers regularly assigned to the program, the project funds a math resource teacher, the project director, two full-time and two part-time aides, three part-time college assistants and a clerk typist.

Replication

Carter Middle School is another example of replication in action—taking the success of another project, Long Beach's Franklin, and putting it to work in another environment with different kinds of students.

Carter is also providing assistance to other Oakland schools which have decided to replicate the program.



HOOVER JUNIOR HIGH SCHOOL DEMONSTRATION PROGRAM IN MATHEMATICS

San Jose Unified School District

Program Profile

- School Enrollment: 620 students in the seventh and eighth grades
- Target Population: 310 students in the eighth grade
- Specific Characteristics of Target Population:
  - Ethnic Distribution

American Indian or Alaskan Native	Asian or Pacific Islander	Black, not of Hispanic origin	White, not of Hispanic origin	Hispanic
1 percent	1 percent	1 percent	27 percent	70 percent

  - The school's neighborhood has a stable population with a fairly low income.
  - There is a mixture of homes and apartments occupied by many single-parent families.
- Project Director: Pauline Perazzo
- Address and Telephone: 1635 Park Ave., San Jose, CA 95126 (408) 287-1111

The Program

When a program can offer high accomplishment for students in the basic skills, prepare them for some realities of life and be the highlight of the school day, obviously it is a winner. For Hoover Junior High School's Demonstration Program in Mathematics, that recipe for success has resulted in national acclaim, continuous refunding as a state program and youngsters who know the "whys" as well as the rote memory requirements of math. National recognition came in 1974 when it joined the federal government's National Diffusion Network (NDN). To be part of the NDN, the Hoover program had to pass rigorous evaluation requirements of the federal Joint Dissemination Review Panel, which passes only the most effective programs developed with federal funds.

Hoover's program is called "Project R-3," coined from the staff commitment to make sure that students are *ready* for the concepts and that they can see *relevance* in what is taught. The third "R" stands for *reinforcement,* which is considered a necessity if children are going to learn what has been taught.

The readiness aspect of the program relates to the testing and diagnosis that is part of the individualized instruction approach. The relevance of the program is built by providing learning opportunities that have students apply learned concepts to practical situations. The reinforcement element is given through special activities that provide enjoyable, hands-on and investigative action through games, simulations and math experiments.

Central to the whole program is a community involvement component, which has math aides and teachers visiting the homes of their students at least once a year. A class size—about 25 students per teacher, and one aide in each class—has obvious advantages for both teachers and students. The R-3 staff exhibits a strong belief in an educational philosophy that curriculum must meet needs, provide a concrete context for learning and be generously laced with success for each student.

Methods and Materials

Laughter punctuates the lessons in many of the simulation games that make concepts clear to Hoover students. In one game designed much like Monopoly, the players are bank tellers. The chance cards included with the game elicit howls of laughter as a student reads:

- "You have lunch at your desk, and you accidentally eat three $100 bills."

- "A man calls up from the city zoo and says his name is Mr. Wolf. You have a laughing fit. He is insulted and sues the bank . . . Subtract $100 for legal battle."

Fun is part of the learning process at Hoover. The gaming and simulation aspects of the project include long and short games, win/lose games and win/win games, decision-making simulations, chance and probability games and experiments, and generous opportunities for learning center activities that vary as student needs and interests change.

R-3 was designed jointly by the San Jose Unified School District and Lockheed Missiles and Space Company's Educational Systems. Included in the vast array of program-developed materials are expansive career activities and simulations useful as interdisciplinary links in the basic skills.

These materials put school-related activities in the perspective of ultimate career choices and rewards. Each game or simulation contains a summary of the activity, a statement of learning objectives keyed to skill areas, a teacher's guide, student activity sheets and playing materials. Games and simulations are centered around 17 career clusters, such as marketing, personal finance and transportation. Each career cluster consists of a group of games or simulations that can be infused into various subjects and can be expanded and modified for high school students as well.

The Hoover demonstration program is keyed to a district-developed math continuum which takes the students from whole numbers through pre-algebra and geometry. Each R-3 contract includes a review of previously learned materials, a new concept, the application of the concept, high interest activities to reinforce relevancy, a review and a visit to the "testing station" where the student must demonstrate a proficiency level that is 85 percent or higher.

While state money funds the Demonstration Program in Mathematics at Hoover, it is important to note that a similar program, using the same techniques and undergirded by the same philosophy, also operates in reading. This allows the Hoover staff a unique opportunity for interdisciplinary approaches that are as popular with the students as they are effective.

Physical Space and Hardware

Hoover is a new school, with open-plan architecture. The math classes are held in a large laboratory type room, with three teachers working in tandem around the room. The desks are gone. In their place are tables and chairs. The general atmosphere is warm and informal.

While typical math lab hardware—calculators, scales, audiovisual programs and other commercial materials—are available in the R-3 program, the main focus is on the gaming and simulation activities that require little more than paper, pencils, rulers, dice and space.

The Staff

The Demonstration Programs in Reading and Mathematics' funds are used to pay the salaries of the project director, a secretary, two teachers and four aides.

Replication

One of the most significant elements of the R-3 program is its adaptability to replication. It ranks high nationally among programs that have been duplicated throughout the country, thanks in part to its role as one of the 163 National Diffusion Network (NDN) projects funded for dissemination and replication purposes. With this funding, R-3 can help interested schools with adoption costs. The list of schools replicating R-3 is seven pages long. Because of national interest in R-3, it was featured in national magazines and newsletters.

The project staff is delighted to share all or part of its materials with interested educators. Copies of simulations, the teacher's manual, the contracting forms, the diagnostic testing instruments and record-keeping materials are available free of charge.

"We encourage our visitors to take any part of our program that is immediately useful to them," project director Pauline Perazzo says. "A full replication," she adds, "is possible without vast sums of new money. It helps to have a director and secretarial backup. The time to duplicate the games and other materials is essential. From there on, R-3 can be replicated with resourcefulness, enthusiasm and staff commitment."

PETER BURNETT JUNIOR HIGH SCHOOL DEMONSTRATION PROGRAM IN MATHEMATICS

San Jose Unified School District

Program Profile

- School Enrollment: 796 students in the seventh and eighth grades
- Target Population: 396 students in the eighth grade
- Specific Characteristics of Target Population:
  - Ethnic Distribution

American Indian or Alaskan Native	Asian or Pacific Islander	Black, not of Hispanic origin	White, not of Hispanic origin	Hispanic
1 percent	10 percent	8 percent	17 percent	64 percent

  - The neighborhood is mixed with homes and apartments and features a large number of single-parent families.
- Project Director: Richard Cirigliano
- Address and Telephone: 850 N. Second St., San Jose, CA 95112 (408) 998-3155

The Program

As a replication of the Hoover Junior High School Demonstration Program in Mathematics, Burnett Junior High School's project utilizes Hoover's basic materials and follows most of the same procedures. The Burnett staff, however, modified and expanded the Hoover program to include a system of prescribed and individualized daily drills, homework and basic skill back-up units. There is an emphasis on documentation, recordkeeping and progress reporting made manageable for a busy staff with limited hours available for aides.

As in the Hoover program, there is strong emphasis on parent involvement through a series of parent nights, conference nights and home visits. Burnett, like Hoover, holds a yearly math fair where student projects in mathematics are on display for parental review.

Burnett, an older school with a traditional architectural style, is deeply committed to a strong fundamental approach. A "basic unit" program of daily drills, math contracts in the basics, exams and back-up units for those needing more reinforcement are assigned on an individual basis.

The staff will share its class management and recording system with interested educators. By replicating the Hoover program at Burnett, the Burnett staff believes it has obtained a sound program enhanced by hands-on material that could be modified easily to reflect the desires and needs of its school's clientele.

Chapter VI

Information at Your Fingertips

Detailed information on the successful junior high school programs operating under the state's Demonstration Programs in Reading and Mathematics is easily obtainable—either through the individual project directors or through the computer retrieval system operated by the San Mateo Educational Resources Center (SMERC). Information on the statewide program and the legislation under which it operates is available from Earl Watson, manager of the Demonstration Programs in Reading and Mathematics, California Department of Education, 721 Capitol Mall, Sacramento, CA 95814; (916) 322-6797.

Many of the programs have prepared materials, including curriculum guides and research results, for storage in the SMERC system.

Schools which subscribe to SMERC services should contact their county or district SMERC linking agent to order materials. Districts in nonsubscribing counties should write or call SMERC, San Mateo County Office of Education, 333 Main Street, Redwood City, CA 94063; (415) 364-5600, extension 4404. The charge for nonsubscribers is 75 cents per card, plus a $2 handling charge. Payment must accompany each order.

Note: One title may consist of more than one microfiche card. Order by "ID" number. Example: ID #005780—1 microfiche card. Hard copy of this material is not available from SMERC.

Bibliography of SMERC Materials

The following materials have been reproduced on microfiche and are available through SMERC:

Central Junior High School (Pittsburg) Demonstration Program in Reading:

Building Instructions for Resource Room Equipment
ID #005756—one microfiche
Description: Collection of instructions for constructing inexpensive classroom furniture.

The Content Area Reading Fair
ID #005758—one microfiche
Description: Procedures for setting up a reading in-service program for subject area teachers at the secondary level, including bibliography.

Dogs
ID #005747—two microfiche
Description: Integrates many types of reading around the topic of dogs. Includes skills taught through brainstorming and classifying.

Earthquake!
ID #005748—one microfiche
Description: Specific activities in map preparation, vocabulary, word analysis, comprehension and use of reference materials.

A First Step: Parts of a Book
ID #005753—one microfiche
Description: How to use a table of contents, an

index, glossaries, sections and chapters. Includes puzzles and sample exercises.

Following Directions and Detecting the Sequence
ID #005752—one microfiche
Description: Ideas designed to keep the student's attention while teaching the student how to follow directions.

Games Can Be Fun
ID #005751—one microfiche
Description: Guide to the use of games in the classroom.

How to Think a Book
ID #005754—one microfiche
Description: Describes reading comprehension strategies known as mapping—a method of organizing information which can be substituted for notetaking or outlining.

Learning Comprehension Through Word Study and Vice Versa
ID #005750—one microfiche
Description: Summaries of teaching ideas using word meaning, context clues, dictionaries and reinforcement.

Sample Forms for Recordkeeping and Assessment
ID #005755—one microfiche
Description: Collection of forms used at Central Junior High School's PREP (Pittsburg Reading Enrichment Program).

Science Fiction, A Mini-Unit
ID #005749—one microfiche
Description: How to use science fiction to motivate students to read.

The Study Guide
ID #005745—one microfiche
Description: How to prepare a list of questions on materials that students have read.

Compton Junior High School (Bakersfield) Demonstration Program in Reading:

Africa
ID #005732—two microfiche
Description: Information regarding stories, movies and filmstrips on Africa and its people.

Animals
ID #005730—two microfiche
Description: Animal units on Arctic animals, bear, desert animals, dog, dinosaurs, falcon, horse, lamb, lion, owl, robin, skunk, snake, turtle, wolf, whale, dolphin and seal. Includes a bibliography

I Am I
ID #005728—two microfiche
Description: A two-section unit that includes a personal reflection book aimed at focusing the student's attention on himself/herself.

Mystery
ID #005731—two microfiche
Description: Story samples, vocabulary lists, test questions, a list of reference books, audiovisual materials and a list of publishers of mystery books.

Science, Our Friend the Atom
ID #005729—two microfiche
Description: Selection of readings and study questions in science. Includes material on earthquakes, volcanoes, atomic structure, weather and snakes.

Toys for Men and Boys
ID #005733—two microfiche
Description: Mini-unit on automobile racing and mechanics, including reading selections and questions relating to the readings.

De Anza Junior High School (Ontario-Montclair) Demonstration Program in Reading:

Assessment Instruments and Student Profiles
ID #005766—one microfiche
Description: Variety of informational reading assessment instruments used at the reading center, including student questionnaires, self-concept tests and English/Spanish report cards.

De Anza Designs: Resources in Reading
ID #005763—three microfiche
Description: Bibliography of high-interest materials for remedial, corrective or developmental readers. Notations on materials suitable for students who speak Spanish, the poorly motivated or those with perceptual handicaps.

De Anza Preschool Library and Story Hour
ID #005768—one microfiche
Description: How to organize a library story hour for preschools, developed by junior high school reading students.

Future Print 4th Annual Report
ID #005764—two microfiche
Annual evaluation of entire program.

Group Counseling Program
ID #005765—one microfiche
Description: Descriptive article on group counseling program, including student counseling contract, post counseling questionnaire, readings for parents and teacher outlines for student workshops. Some materials in Spanish.

Insights and Suggestions for Teaching ESL Students
ID #005767—two microfiche
Description: Packet of tools and ideas for teachers of limited-English-speaking students whose primary language is Spanish.

Reading in a Supportive Environment
ID #005762—one microfiche
Description: Descriptive overview of the reading center, with emphasis on descriptions of specific program components: diagnosis, prescription, scheduling, high-interest materials, counseling and cross-age tutoring.

Edison Junior High School (Los Angeles) Demonstration Program in Reading:

Multicultural Unit
ID #005759—one microfiche
Description: Review of five-week unit presenting Indian, Mexican-American, Asian-American and black minority cultures in the United States.

Reading Continuum
ID #005757—one microfiche
Description: Three-part reading continuum, including phonetic and structural analysis, basic reading, and study and thinking skills.

Franklin Junior High School (Long Beach) Demonstration Program in Mathematics:

Evaluation
ID #005711—one microfiche
Description: Describes the student population, instructional materials, staffing, staff development, auxiliary services and evaluation of dissemination of information.

Program Description and Materials
ID #005712—two microfiche
Description: Instructional materials based on 23 advancement tracks which encompass key learnings in arithmetic, algebra and geometry, ranging in difficulty from the fourth through the ninth grades. Includes 750 learning activity packets with daily and weekly quizzes, reviews, math lab lessons and student profile and reporting forms.

A Special Evaluation
ID #005713—two microfiche
Description: Students who had spent three full years in the program and who were enrolled in a local high school were individually matched with students in a control group who had received traditional mathematics instruction at other junior high schools. A majority of the comparisons favored the demonstration program students.

Franklin Junior High School (San Francisco) Demonstration Program in Reading:

Family Recipes
ID #005708—one microfiche
Description: 66 recipes for everything from main dishes to dessert.

The Library
ID #005707—one microfiche
Description: Activities to teach the use of the Dewey Decimal System, card catalogue, dictionary, encyclopedia, atlas and the *Reader's Guide to Periodical Literature*. Includes sample research assignments.

Native American Ethnology
ID #005709—one microfiche
Description: A unit designed to be presented by a single teacher over a period of one week, seven periods a day; aimed at students of superior reading ability.

Reading in Social Studies and English
ID #005705—two microfiche
Description: Description of the program; materials on diagnosis, instructions for administering an informal reading inventory and sample forms for recordkeeping.

We Wear the Mask (Self-Image)
ID #005706—one microfiche
Description: A series of introductory activities to familiarize students and teachers with each other and to establish class rapport; activities about judgments, stereotypes, self-image and self-awareness.

Greenfield Junior High School Demonstration Program in Reading:

Overview
ID #005710—one microfiche
Description: General overview of reading program, its staff, facilities and skills objectives.

Hoover Junior High School (San Jose) Demonstration Program in Mathematics:

Flowcharting Handbook
ID #005803—two microfiche
Description: Motivational tools to reinforce mathematics vocabulary, including behavioral objectives, definitions, symbols, application samples, classroom procedures in a flow chart and student exams.

Mathematics Component
ID #005802—two microfiche
Description: Contains objectives, instructional

strategies, flowchart, placement and progress test, individual student profile sheet, diagnostic tests, contracts and sample worksheets and puzzles.

Personal Finance Unit
ID #005801—two microfiche
Description: Games and simulations linked to math and reading that help put school-related activities in the perspective of career choices and rewards.

The following materials feature games and simulations geared to career study, with direct links to the basic skills:

Recreation Occupations
ID #005800—two microfiche
Manufacturing Occupations
ID #005799—two microfiche
Transportation Occupations
ID #005798—three microfiche
Communication Occupations
ID #005797—two microfiche
Personal Service Occupations
ID #005796—four microfiche
Agricultural Occupations
ID #005795—two microfiche
Scientific Occupations
ID #005794—two microfiche
Public Safety Occupations
ID #005793—three microfiche
Business and Office Occupations
ID #005792—three microfiche
Marketing Occupations
ID #005791—three microfiche
Environmental Occupations
ID #005790—four microfiche
Public Utilities Occupations
ID #005789—three microfiche
Marine Occupations
ID #005788—two microfiche
Community Planning Occupations
ID #005787—two microfiche
Electronic Data Processing Occupations
ID #005786—three microfiche
Career Preparation Occupations
ID #005785—two microfiche

Mission Junior High School (Jurupa) Demonstration Program in Mathematics:

ID #005761—two microfiche
Description: Review of Michigan Math Program, including copies of recordkeeping systems and student profile materials.

Pacoima Junior High School (Los Angeles) Demonstration Program in Mathematics:

Basic Algebra Mini-Unit Capsules (Grade nine)
ID #005701—two microfiche
Description: A basis for the average ninth grade student to study the central ideas of algebra without being threatened by a comprehensive textbook.

Curriculum for Seventh Grade
ID #005700—three microfiche
Description: Designed to improve the educational outlook of inner-city youth who would otherwise have little chance for success in high school.

Mini-Lessons for Grade Seven
ID #005702—two microfiche
Description: Four sets of little lessons involving 90-second warm-ups to begin a class, counting room numbers and lunch tables, metric olympics and electronic calculator practice.

Project-A-Puzzle
ID #005703—two microfiche
Description: A set of math puzzles helps search for strategies rather than quick answers; develops logical and perceptual skills.

This Is Your Life: Modern Math
ID #005704—four microfiche
Description: This mathematics curriculum from the Los Angeles Unified School District was designed to provide realistic and practical math experiences for non-college-bound ninth and tenth grade students

Pelton Junior High School (San Francisco) Demonstration Program in Reading:

Contracts and Approach to Individualization
ID #005783—one microfiche
Description: Sample student contracts in English and reading used to individualize instruction in writing skills, grammar, reference work and comprehension.

Evaluation Report
ID #005784—two microfiche
Description: Review of all statistical data on this project as well as complete project description.

Learning to Read Through Language Experience
ID #005782—one microfiche
Description: Activities illustrating the integration of all communication skills, including suggested student projects.

Overview
ID #005780—one microfiche
Description: Reviews all components of the Pelton reading program, including a list of all instructional materials by grade level.

Sample Units and Skills Survey
ID #005781—one microfiche
Description: Two units on the adolescent books *Zeeley* and the *Contender*, including activities, discussion questions, vocabulary lists and skills survey.

Sierra Junior High School (Riverside) Demonstration Program in Mathematics:

ID #005760—three microfiche
Description: Sample materials, diagnostic tests, lessons, lab cards, pre- and post-tests, as well as a summary of the program itself.

Santa Barbara Junior High Demonstration Program in Reading:

An Approach to Oral Language Development
ID #005775—one microfiche
Description: Objectives, lesson sequence, philosophy and evaluation; and suggestions for oral language activities. (Not suitable for immediate teacher use without other program guides and information.)

Bibliography
ID #005778—one microfiche
Description: Listing of all resources used by the program in two distinct sections, one for teacher material and one for student material, each containing author, title and publisher.

Dictionary and Telephone Survival Skills
ID #005777—two microfiche
Description: Two units containing a rationale and the activities for using and learning from the dictionary and the telephone book.

Reading Handbook for Teachers
ID #005771—three microfiche
Description: Collection of papers on varied aspects of teaching reading.

Reading in the Content Area
ID #005779—two microfiche
Description: Focuses on three areas of reading: preview skills, vocabulary development and signpost language. Includes sample lessons in several subject areas.

Reading Strategies
ID #005770—three microfiche
Description: Teaching manual for various Santa Barbara program components, including language experience approach, directed reading activities, reading-center programs and assessment and student profile forms.

Rebajando con Gusto (Delicious Dieting)
ID #005772—one microfiche
Low-calorie recipes in both English and Spanish.

Sample Instructional Units
ID #00576—two microfiche
Description: High-interest teaching units on the mysterious and the occult, dune buggies, and teen etiquette. Includes objectives, puzzles and student worksheets.

Something has . . .
ID #005769—two microfiche
Description: Reviews of ideology, specific lessons and suggested approaches which have been effective in this reading program. Includes staffing, facilities, organization, support services and motivational ideas.

Spanish-English Word Study
ID #005773—one microfiche
Description: Reference material for teachers of multicultural and multiethnic backgrounds geared to cultural awareness by Spanish-speaking students and to provide Spanish as a second language to English-speakers.

Student Contracts in Reading
ID #005774—one microfiche
Description: Program descriptions of student contracts and organizational patterns for them.

Santa Fe Middle School (Monrovia) Demonstration Program in Reading:

"D" Reading Activities
ID #005716—two microfiche
Description: 29 activities to be used individually or with small groups, including such activities as a library search, crossword puzzles, Morse Code and a synonym search.

Samples of Units and Recording Forms
ID #005718—one microfiche
Description: Included are bulletin board ideas, activity units, worksheets, student contracts and diagnostic profiles.

Tips for Parent Volunteers
ID #005719—one microfiche
Description: This handbook, developed by the Santa Fe Reading Center in Monrovia Unified School District, answers questions for volunteers and tutors. It explains the duties of a reading center aide and defines basic reading terminology.

Vivacious Vowels
ID #005717—two microfiche
Description: Simplified information to aid educators in understanding English vowel sounds and their vocal production.

Terrace Hills Junior High School (Colton) Demonstration Program in Reading and Mathematics:

Overview
ID #005714—two microfiche
Description: Review of instructional program in both reading and mathematics, their scheduling, evaluation and educational philosophy.

Sample Units
ID #005715—two microfiche
Description: Four sample mini-units: word origins from Greek and Latin, radio/TV evaluation of commercials, newspapers and magazines and math unit on paycheck budgeting.

Other Publications Available from the Department of Education

California's Demonstration Programs in Reading and Mathematics is one of approximately 450 publications that are available from the California State Department of Education. Some of the more recent publications or those most widely used are the following:

Accounting Procedures for Student Organizations (1979)	$ 1.50
An Assessment of the Writing Performance of California High School Seniors (1977)	2.75
Bicycle Rules of the Road in California (1977)	1.50
California Guide to Parent Participation in Driver Education (1978)	3.15
California Master Plan for Special Education (1974)	1.00†
California Private School Directory (1980)	5.00
California Public School Directory (1980)	11.00
California School Accounting Manual (1978)	1.65
California Schools Beyond Serrano (1979)	.85
Child Care and Development Services: Report of the Commission to Formulate a State Plan (1978)	2.50
Computers for Learning (1977)	1.25
Discussion Guide for the California School Improvement Program (1978)	1.50*†
District Master Plan for School Improvement (1979)	1.50*
English Language Framework for California Public Schools (1976)	1.50
Establishing School Site Councils: The California School Improvement Program (1977)	1.50*†
Framework in Reading for the Elementary and Secondary Schools of California (1973)	1.25
Genetic Conditions: A Resource Book and Instructional Guide (1977)	1.30
Guidance Services in Adult Education (1979)	2.25
Guide for Multicultural Education: Content and Context (1977)	1.25
Guide for Ongoing Planning (1977)	1.10
Guidelines for Evaluation of Instructional Material with Respect to Social Content (1980)	1.15
Guidelines: Towards Excellence in Reading Programs (1978)	1.50
Handbook for Instruction on Aging (1978)	1.75
Handbook for Planning an Effective Reading Program (1979)	1.50*
Handbook for Reporting and Using Test Results (1976)	8.50
A Handbook Regarding the Privacy and Disclosure of Pupil Records (1978)	.85
Health Instruction Framework for California Public Schools (1978)	1.35
Improving the Human Environment of Schools (1979)	2.50
Mathematics Framework for California Public Schools (1975)	1.25
Mathematics Scope and Sequence Charts (1975)	1.25
A New Era in Special Education: California's Master Plan in Action (1980)	2.00
Parents Can Be Partners (1978)	1.35†
Pedestrian Rules of the Road in California (1979)	1.50
Pedestrian Rules of the Road in California, Primary Edition (1980)	1.50
Physical Education for Children, Ages Four Through Nine (1978)	2.50
Planning for Multicultural Education as a Part of School Improvement (1979)	1.25*
Planning Handbook (1978)	1.50*
Publicizing Adult Education Programs (1978)	2.00
Putting It Together with Parents (1979)	.85†
Relating Reading and the School Library Program (1973)	.85
Report of the Ad Hoc Committee on Integrated Educational Programs (1978)	2.60
Science Framework for California Public Schools (1978)	1.65
Site Management (1977)	1.50
Social Sciences Education Framework for California Public Schools (1975)	1.10
State Guidelines for School Athletic Programs (1978)	2.20
Student Achievement in California Schools (1979)	1.25
Students' Rights and Responsibilities Handbook (1980)	1.50†
Teaching About Sexually Transmitted Diseases (1980)	1.65
A Unified Approach to Occupational Education: Report of the Commission on Vocational Education (1979)	2.00

Orders should be directed to:

California State Department of Education
P.O. Box 271
Sacramento, CA 95802

Remittance or purchase order must accompany order. Purchase orders without checks are accepted only from government agencies in California. Sales tax should be added to all orders from California purchasers.

A complete list of publications available from the Department may be obtained by writing to the address listed above.

†Also available in Spanish, at the price indicated.
*Developed for implementation of AB 65.

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