

DOCUMENT RESUME

ED 053 459

32

EA 003 687

TITLE California Evaluation of ESEA Title I Projects.
Annual Report 1969-70.

INSTITUTION California State Dept. of Education, Sacramento.
Bureau of Compensatory Education Program Evaluation.

PUB DATE 70

NOTE 103p.

EDRS PRICE EDRS Price MF-\$0.65 HC-\$6.58

DESCRIPTORS Academic Achievement, Achievement Gains, Community
Involvement, *Compensatory Education, Delinquent
Rehabilitation, *Disadvantaged Youth, *Federal
Programs, Language Development, Mathematics
Instruction, Parent Participation, *Program
Evaluation, Retarded Children, Staff Improvement,
Standardized Tests

IDENTIFIERS California, *Elementary Secondary Education Act
Title I, ESEA Title I

ABSTRACT

This report evaluates California's ESEA Title I compensatory education program for 1969-70 and disseminates the results of activities designed to strengthen the educational programs for children from disadvantaged backgrounds. While most of these activities were planned for those disadvantaged youngsters regularly enrolled in grades K-6, specialized programs were also conducted for children of migrant agricultural workers, handicapped children in State schools and hospitals, and neglected and delinquent children in State and local institutions. Program components included language development, mathematics, staff development, auxiliary services, intergroup relations, and parent involvement. (Author/JF)

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIG-
INATING IT. POINTS OF VIEW OR OPIN-
IONS STATED DO NOT NECESSARILY
REPRESENT OFFICIAL OFFICE OF EDU-
CATION POSITION OR POLICY

ANNUAL REPORT 1969-70

Evaluation of ESEA Title I Projects of California Schools

EA003 687

CALIFORNIA STATE DEPARTMENT OF EDUCATION
Wilson Riles, Superintendent of Public Instruction, Sacramento, 1971

ED053459

ANNUAL REPORT 1969-70

Evaluation of ESEA Title I Projects of California Schools

Prepared by the

Bureau of Compensatory Education Evaluation
and Research
California State Department of Education

This publication was funded under provisions of the Elementary and Secondary Education Act, Title I, and published by the California State Department of Education, 721 Capitol Mall, Sacramento, California 95814.

Printed by the Office of State Printing
1971

FOREWORD

This report of the evaluation of pupils' progress in the compensatory education programs offered by California schools during the 1969-70 school year contains data that may be used to advantage by the schools that are offering compensatory education programs as well as those that are planning to offer such programs. It is our hope that all individuals responsible for the development and implementation of a compensatory education program will find in this report some information that will be used to advantage in meeting this nation's obligation to provide every student an opportunity to develop his social and intellectual potential to the maximum degree possible.

Wilson Files

Superintendent of Public Instruction

CALIFORNIA STATE BOARD OF EDUCATION

Howard Day, President

Thomas G. Harward, M.D., Vice-President

John R. Ford, M.D.

Henry T. Gunderson

Mrs. Donald P. Krotz

Clay N. Mitchell

Rev. Donn Moomaw

Eugene N. Ragle

Mrs. Jeanette S. Ritchie

Tony N. Sierra

Bruce Lymburn, Student Representative

CALIFORNIA STATE ADVISORY COMPENSATORY EDUCATION COMMISSION

H. E. Jackson, Chairman

Mrs. Charlie Mae Knight, Vice-Chairman

Mrs. Ruth Barr

Mrs. Llewelyn Barrackman

Assemblywoman March K. Fong

Richard E. Goodwin

Sam Hamerman

Father C. J. Howard

Dr. Robert Infelise

Armando Lopez

Senator Milton Marks

Isadore Pivnick

Mrs. Elisa L. Sanchez

Jess Vela

Mrs. Cordia Wade

PREFACE

An annual evaluation of California's compensatory education program under the Elementary and Secondary Education Act, Title I, is required by federal law and by California law (the McAteer Act of 1965). The Division of Compensatory Education has the responsibility of evaluating and disseminating information to school districts and other interested parties on the results of activities designed to strengthen the educational program for children from disadvantaged backgrounds.

California's ESEA Title I program was initiated in the spring of 1966. This report contains an evaluation of the program during the 1969-70 school year. Most of the Title I activities were operated by school districts for disadvantaged children regularly enrolled in school. Specialized programs were also conducted for children of migrant agricultural workers, handicapped children in state schools and hospitals, and neglected and delinquent children in state and local institutions. The evaluation of compensatory education programs operated by state institutions for neglected and delinquent youths and for children residing in state mental hygiene facilities and residence schools are included in a separate report.

Major responsibility for the preparation of the state report was assumed by J. Vincent Madden, Hubert Reeves and Gerald S. Rider, consultants in the Bureau of Compensatory Education Evaluation and Research; and Ralph D. Benner, consultant in the Bureau of Community Services and Migrant Education. Acknowledgement also is expressed for the contributions made by Howard Quan, Associate Statistician in the Bureau of Compensatory Education Evaluation and Research.

LEO R. LOPEZ
Associate Superintendent and Chief
Division of Compensatory Education

ALEXANDER I. LAW
Chief, Bureau of
Compensatory Education
Evaluation and Research

CONTENTS

	<u>Page</u>
Foreword	iii
State Board of Education	iv
Advisory Compensatory Education Commission	iv
Preface	v
A General Look at Title I in California, 1969-70	1
Big City Districts	21
Language Development Component	31
Mathematics Component	48
Auxiliary Services	53
Intergroup Relations Component	57
Parent Involvement	61
Staff Development Component	65
Programs for Neglected and Delinquent Youths in Local Institutions	80
California Plan for the Education of Migrant Children	84

A General Look at Title I in California , 1969-70

Programs funded under the Elementary and Secondary Education Act of 1965, Title I, were first implemented by California in the academic year 1965-66. Title I is aimed at insuring that every child will receive an equal opportunity to succeed to the full extent of his potential -- regardless of his economic, social or cultural background. To accomplish this endeavor, schools must give special attention to the effects that poverty has on a child's learning progress.

A child from a low-income family generally does not come to school as prepared for successful learning as do his more advantaged classmates. He may not have had many of the educational experiences common to children of his age group. For example, he tends to lack the verbal skills necessary for successful classroom performance. His parents generally have a low educational background and may not be familiar with the educational process. Poor health and inadequate nutrition may also be his plight. Whatever may be the combination of factors which put him at a disadvantage -- poverty, community attitudes, low educational level of his parents, health, poor self-image and low educational aspiration -- he did not have the experiences and verbal skills needed to learn at the same rate as the middle-class child.

In the academic year 1969-70, substantive changes were made in the guidelines under which school districts operate and develop their programs. Districts were required to develop programs providing:

- An expenditure of at least \$300 per child
- Six components:
 - Language Development
 - Mathematics
 - Staff Development
 - Auxiliary Services
 - Intergroup Relations
 - Parent Involvement
- Program emphasis in kindergarten through grade six
- Development of performance objectives

In addition, school districts were required to select only the most disadvantaged students for participation; hence only about one-third of those potentially eligible were actually provided services. These were the students with the lowest achievement and expectancy for achievement in school. In the past, the students selected for Title I had a past achievement rate of .7 of a year's growth for each

year in school. The students selected for the program in 1969-70 averaged .5 or .6 of a year's growth for each school year.

School districts with small Title I allocations have found it difficult to implement a comprehensive compensatory education program. More and more such districts have been joining cooperative programs. For example in 1967-68 there were 211 school districts that participated in cooperative programs; this increased to 217 during 1968-69 and to 539 districts in 1969-70. These 539 school districts were grouped into 86 programs. A majority of the districts were in cooperative programs administered by county offices of education.

In each of the past three years there was an increase in number of cooperative programs with a funding level of \$25,000 or more. The percent of cooperatives reporting Title I funding at this level increased from 30 percent in 1967-68 to 45 percent in 1968-69 and 66 percent in 1969-70.

FUNDING

Because of late Congressional action on appropriations, districts started their programs with less money than at any time in the history of the program. In 1969-70 the amount of Title I funds available to California school districts under the advanced funding authority contained in Public Law 90-247 was \$64,590,796 for compensatory education programs. This included \$772,556 for neglected and delinquent youth in local institutions. The State also received \$6,076,211 for programs for children of migrant agricultural workers; \$899,111 for handicapped children in State schools operated by the State Department of Education and State hospitals operated by the State Department of Mental Hygiene; and \$1,223,380 for delinquent youth in California Youth Authority institutions. Funds for these specialized programs increased California's total Title I allocation to \$72,789,498.

In March of 1970 California received its final allocation for Title I programs resulting in an increase for the various programs. The amount available to California school districts after the final allocation was \$87,531,244, including \$1,046,735 for programs serving neglected and delinquent youths in local institutions. The State also received \$6,709,604 for programs for children of migrant agricultural workers; \$1,153,713 for handicapped children in state operated schools and hospitals; and \$1,476,195 for delinquent youth in California Youth Authority institutions. The total final allocation to California for Title I was \$96,870,756.

Since the full amount of the funds was not released to the districts until the latter part of April, this report is based on the operations of the districts funded under the initial grant level.

Migrant education programs are analyzed on pages 84 through 96 and programs for neglected and delinquent youths in local institutions are discussed on pages 80 through 83. With these two exceptions, the remainder of the report is devoted to the evaluations of school district Title I programs for regularly enrolled students.

PARTICIPANTS

In 1969-70 school districts reported that a total of 223,723 students were involved in Title I activities. This was an 11 percent decrease from the 251,311 students reported for the previous year. Of the total students reported in the 1969-70 school year, 96.4 percent were enrolled in the public schools; 3.6 percent were enrolled in non-public schools. In addition to the enrolled students, 5,402 ungraded students were served and 4,675 parents and other adults were directly involved in programs.

Enrollment statistics are presented in Tables 1 and 2. Table 1 shows the grade by grade distribution of the participating students both in public and non-public schools. Table 2 shows the percent of students receiving services by grade level. It can be seen from Table 2 that there has been a dramatic shift from the junior high school and high school grades to the elementary levels. This reflects the guideline changes. There was also a decrease in the number of non-public school children served. Historically, a large proportion of the non-public school participants were in the secondary schools. The percentages in Table 2 are exclusive of preschool participants; thus, the total percents in each column do not equal 100.

OBJECTIVES

In previous years, districts stated their Title I objectives in a very general fashion, such as to improve performance as measured by standardized tests, or to improve classroom performance in reading beyond usual expectations. In 1969-70 a change in the guidelines required that the districts state specific performance objectives for each component. These performance objectives stated a specific terminal level of performance for the student.

Some examples of these performance objectives were:

- To develop a readiness for reading by kindergarten pupils equal to a score at the 50th percentile or better, as measured by the revised Metropolitan Test of Reading Readiness
- To decrease the average days of absence by two days per pupil

TABLE I
 NUMBER OF STUDENTS ENROLLED IN TITLE I PROGRAMS
 1969-70

Grade	Number of Students		Total	Percent of Students	
	In Public Schools	In Non-Public Schools		In Public Schools	In Non-Public Schools
P	2,930	4	2,934	99.86	.13
K	23,713	55	23,768	99.76	.23
1	28,973	663	29,636	97.76	2.23
2	29,272	1,130	30,402	96.28	3.71
3	27,701	1,248	28,949	95.68	4.31
4	25,542	1,307	26,849	95.13	4.86
5	23,797	1,163	24,960	95.34	4.65
6	20,983	1,016	21,999	95.38	4.61
7	5,398	473	5,871	91.94	8.05
8	4,464	446	4,910	90.91	9.08
9	8,988	101	9,089	98.88	1.11
10	4,213	122	4,335	97.18	2.81
11	2,789	31	2,820	98.90	1.09
12	1,776	23	1,799	98.72	1.27
Ungraded	5,130	272	5,402	94.96	5.03
Total	215,669	8,054	223,723	96.40	3.60

TABLE 2
 DISTRIBUTION OF TITLE I STUDENTS, BY GRADE LEVEL
 1967-68, 1968-69 and 1969-70

Grade Level	Percent of Total Title I Enrollment, by School Year		
	1967-68	1968-69	1969-70
K - 3	40.4	41.8	52.34
4 - 6	22.8	23.7	34.26
7 - 9	19.9	20.7	9.23
10 - 12	12.4	10.9	4.16

- To develop the ability in the kindergarten and first grade children to recognize a square, rectangle, triangle, circle and to count and identify elements of sets with 80 percent accuracy

PROGRAM COMPONENTS

The six mandated components are described in detail in the sections that follow. Summaries of these sections are presented here to complete the "general look" of the Title I programs.

LANGUAGE DEVELOPMENT COMPONENT

The language development component was one of six required components in each of the 1969-70 projects. The basic objectives of the language development component were to improve reading and oral language skills of Title I students. The language development component consisted of reading instruction and/or English language instruction for students with a limited understanding of English.

The language development component received 54.23 percent of all Title I expenditures. Funds were used for additional personnel and materials to provide more concentrated language development instruction beyond that normally provided by the districts.

Districts continued to emphasize instruction in the elementary grades. In grades K-12, 210,417 students participated in the language development component; 87.72 percent of the students receiving instruction were in grades K-6 and 12.28 percent were in grades 7-12.

Reading instruction continued to be the major emphasis of the component. Ninety-three percent of the Title I students in the language development component received reading instruction. Fifty percent of all Title I funds were used for reading instruction at an average cost of \$155 per student.

English language instruction was provided for students with a limited understanding of oral and written English in 344 target schools.

Reading Activities

Basic objectives of reading activities were the improvement of the following reading skills: (1) auditory discrimination; (2) visual discrimination; (3) syllabication and other phonetic skills; (4) vocabulary development; and (5) paragraph comprehension.

Responsibility for reading instruction of Title I students was usually shared by a team of instructional personnel. Local districts selected their own personnel and organized the personnel into various types of organizational systems for reading instruction.

Summary of Findings

Objectives

- The primary objective of the language development component continued to be reading instruction.
- Only six percent of the students in the component received English as second language instruction.

Characteristics of Pupils

- Instruction was concentrated on elementary students. Students in grades K-6 comprised 87.72 percent of the participants in the component.
- In some target schools all students participated in the language development component, while in other target schools less than ten percent of the students participated in the component.

Organizational Systems

- Reading instruction for disadvantaged students has changed from the use of a single classroom teacher to the use of multiple personnel.

Problem Areas and Recommendations

The major problem areas and recommendations identified in the component were:

- Differences among target schools, student populations, and student needs require individual project planning, implementation and evaluation by target school.
- English as second language activities should be planned, implemented and evaluated separately from the language development component. Techniques, materials and evaluation systems appropriate for the reading activity are not necessarily appropriate for ESL. Likewise, techniques, materials and organizational systems which were successful for students in an ESL activity were not necessarily successful for students in a reading activity.

- The local districts need a standardized system to identify costs per student of the regular district reading program. Cost data from the regular district reading program are also necessary to identify the total cost of reading rather than just the per pupil cost of reading instruction from Title I and other supplemental funds.

MATHEMATICS COMPONENT

School districts were required to include mathematics as one of the six components in their 1969-70 Title I programs. It was the first time that this requirement had been made. A total of 196,609 students participated in the mathematics component and \$17,637,384 was spent in support of the component. Of this amount approximately 13.3 million dollars was encumbered from Title I funds. This amount represented 22 percent of the statewide Title I expenditures; the average per student was approximately \$70.

Standardized achievement test data for the mathematics component indicated that approximately 66 percent of the students gained at least one month's growth per month of instruction.

Most of the compensatory education funds for mathematics were expended at the elementary school level. In comparison with reading the mathematics component received limited resources.

AUXILIARY SERVICES COMPONENT

Auxiliary services provided library, guidance and counseling and health services for about 95 percent of the Title I students. Most of these students received some type of health service, usually in the form of diagnostic screening tests. Relatively few of these students benefited from follow-up care. Pupil personnel service provided pupil and parent counseling, individual psychological testing, group counseling and speech therapy.

Libraries were used to reinforce the various academic components, primarily the language level component.

While quantitative achievement data cannot be obtained from this component, it is obvious that a significant impact was made.

INTERGROUP RELATIONS COMPONENT

Major emphasis was placed on establishing positive attitudes toward ethnic groups through multicultural experiences. In general, the objectives could be grouped into four categories: curriculum, informational, inservice education and integration. This was implemented in the districts through:

Curriculum

- Increase contacts of different groups through involvement in curriculum study projects.
- Improve linguistic skills.
- Include in the curriculum contributions made by minority ethnic groups.
- Provide reading materials that contain contributions by persons from many ethnic groups.

Informational Services

- Increase information regarding the contributions of all ethnic groups.
- Assist groups in making surveys relating to the educational and occupational aspirations of their children, including information about scholarships.

Inservice Education

- Provide visitation day for school staffs to visit schools with different ethnic populations.
- Promote parent and staff workshops aimed at achieving a better understanding of school and community aims.
- Increase school staffs' and aides' understanding and skills in effecting better intergroup relations.

Integration

- Alleviate identifiable social, linguistic and racial isolation.
- Decrease racial and ethnic imbalance in schools.
- Increase contacts among different groups through social, recreational and instructional activities.

The general feeling was that such programs were beneficial. Reactions of teachers, administrators and pupils indicated that they believed effective work was being done in a variety of intergroup approaches and activities.

School districts made the following recommendations for improvement of intergroup relations components:

- More instructional materials that reflect contribution of many ethnic groups
- Ethnic studies developed for use by all students
- Increased interactions of persons of the various ethnic groups
- Less sporadic efforts - such as infrequent visitations and assemblies
- Recruitment and employment of minority group people from the community for work in the school program
- Involvement of more parents, teachers and administrators in the intergroup relations activities

PARENT INVOLVEMENT COMPONENT

In general the parent involvement component was designed to enhance learning conditions for children through pupil-parent-teacher activities related to the instructional component, with parents used as resource persons and aides. These activities were implemented by:

- Teacher-parent conferences
- Parents serving as resource persons to school-community advisory councils
- Instructional classes for parents conducted by reading specialists and classroom activities
- Parent assistance in classroom activities and study trips
- Home visitations by school staff and aides
- Workshops by parents to construct teaching materials
- Group meetings for non-English speaking parents

Most districts felt the component was positively received by parents and school aides. Some specific results as stated by districts were:

- Increased participation in school affairs
- Better understanding of the school's program
- Improved attitudes toward schools
- Better advisory committees
- Teachers and school aides gained more insight into family and home situations which might affect school learning
- Improved attitudes of pupils toward school

STAFF DEVELOPMENT COMPONENT

The 1969-70 school year was the second year the staff development component was required in all Title I projects. Public school employees, non-public school employees, parents, and volunteers were included in a school-community effort to improve the skills and understanding of adults serving disadvantaged students. Special training of project personnel continued to be a major factor in developing new concepts and new teaching skills in Title I projects.

Participants

- The staff development component provided training for 34,962 public school employees, non-public school employees, parents and volunteers.

Objectives

- Major objectives of the staff development component were to improve understanding of the special problems of disadvantaged students and improve skills in planning and organizing for instruction.

Hours of Instruction

- Most projects provided 30 hours or less of staff development instruction while 12-18 percent of the projects provided 51 hours or more of staff development instruction.

Organizational Systems

- Project personnel continued to emphasize a workshop approach in staff development activities. Forty-four to 63 percent of all project personnel participated in workshops. A trend toward scheduling workshops at the individual target school continued.

Grouping and Frequency of Instruction

- Staff development activities were conducted in groups of 16 or less by a majority of all participants. Thirty-one to 40 percent of the personnel in the projects participated in staff development activities every two to four weeks.

Instructional Techniques

- The major instructional techniques used in staff development activities have shifted from "sit and listen" techniques to discussion-participation techniques. Group discussion of problems and development of solutions by participants were selected by 44-60 percent of the projects as a major instructional technique.

Cost Factors

- Title I funds were used to finance 74 percent of the estimated cost of staff development components. The average cost per participant was \$75 from Title I funds or \$100 per participant when other funds were included.

Recommended Changes

- Changes most frequently recommended by local districts in the staff development component were in the area of component management and the selection of component objectives.

PERSONNEL

To implement their Title I programs, school districts increased their staffs by 8,989 persons, including volunteers. The number and types of personnel supported by Title I funds during the 1969-70 school year are shown in Table 3. Of the 3,154 teachers, a total of 2,024 were employed full time. Teacher aides comprised the largest category of non-credentialed personnel with 5,959 employed, 2,153 of whom were full-time. School districts again this year utilized parent volunteers to assist in the classroom; 4,250 of these volunteers were used half-time or less, while about 200 were used more than half-time.

State guidelines require that school districts establish advisory committees for Title I to insure community involvement in planning programs for disadvantaged children. This year, in addition to the district advisory committees, school districts were asked to establish committees at each of the target area schools. A total of 7,445 persons served on the district advisory committees, 5,839 of whom were residents of eligible attendance areas, and 3,512 of whom were parents of children participating in the Title I programs. At the target school level there were 1,372 separate advisory groups organized, consisting of 7,329 parents of children participating in the Title I program.

FINDINGS

Each project was analyzed by the Bureau of Compensatory Education Evaluation and Research and categorized as to the magnitude of achievement gain of participating students as measured by standardized tests.

The categories were:

- Substantial Improvement - Growth was equal to or greater than 1.5 years for the school year or 1.5 months per month of instruction.
- Moderate Improvement - Growth was equal to or greater than one year for the school year or one month per month of instruction.
- Little or No Improvement - Growth was less than one year during the school year or one month per month of instruction.
- Irregular Data - The evaluation report submitted by the school district was inadequate for any determination to be made as to the project's effectiveness. This included incomplete reports, use of inappropriate measurement instruments, contradictory data and general statements of success without supporting documentation.

TABLE 3
 NUMBER OF POSITIONS SUPPORTED
 BY ESEA TITLE I FUNDS
 1969-70

POSITIONS	Full-Time	More than Half-Time Less than Full-Time	Half-Time or Less
Teaching:			
Preschool	119	26	36
Kindergarten	30	2	12
Elementary	849	133	261
Secondary	239	57	297
Speech Correctionist	7	1	11
Teacher of the Handicapped	9	-	-
Reading Specialist	605	46	131
Other than above	166	12	105
Total Teaching	2,024	277	853
Non-Teaching:			
Teacher Aide	2,153	1,450	2,356
Librarian	69	12	49
Supervisor or Administrator	149	57	206
Counselor	155	11	92
Psychologist	39	16	115
Testing Assignment	10	2	42
Social Work Assignment	45	19	28
Attendance Assignment	48	17	10
Nurse	77	14	98
Dental Hygienist	4	1	8
Clerical Position	492	61	341
Volunteers	196	229	4,250
Other than Above	253	92	541
Total Non-Teaching	3,690	1,981	8,136
Total of all Positions	5,714	2,258	8,989

Ratings were made for both the language development and the mathematics components; the results for the past three years are presented for all grades combined in Table 4.

The 1969-70 results show that approximately 61 percent of the children in the language development component achieved at least one month's growth for every month they were in the project. Almost nine percent made greater than 1.5 month's growth per month of instruction. Approximately 30 percent of the students made less than month for month growth, and approximately nine percent could not be classified.

In mathematics more than two-thirds of the students made at least month per month gain. About five percent made more than 1.5 month per month, and about one-fourth made less than month per month gains. As in reading, approximately nine percent could not be classified.

This year ratings were obtained by grade level. The data may be analyzed in two ways. Tables 5 and 6 show the number and percent of students in each of the rating categories receiving each rating, by grade level and subject area. From Table 5 it is clear that the largest number and percent of students who receive a substantial or moderate improvement rating in reading were in grades 3, 4, 5 and 6. For example, of the 8,949 students who received a rating of substantial improvement, 1,532 or 17.12 percent were in grade 4. Similarly, 11,394 or 20.94 percent of the 54,410 students who received a moderate rating were also in grade 4.

Because the number of students who were served at each grade varied substantially, the distribution of ratings may also be categorized by the percent of students who received each of the four ratings, by grade. These data are shown in Tables 7 and 8. For example, in reading, nine percent of the 16,995 fourth graders served obtained a substantial improvement rating. In the twelfth grade, while only 77 of the students made substantial progress, they comprised almost 24 percent of the twelfth graders served.

In addition to the findings and conclusions presented in each of the component sections, the evaluation reports of the school districts also led to these general conclusions about Title I in the 1969-70 school year:

- Once again late Congressional action on appropriations for Title I persisted as a major problem in program implementation. When funds are appropriated in the middle or last quarter of a school year, it is most difficult for school districts to design comprehensive programs in that instructional staffs cannot readily be acquired at those times. In the 1969-70 school year,

\$23 million of California's Title I allocation was not available to school districts until April.

- For the second consecutive year evaluation results from the big city projects were encouraging. The average achievement rate for Title I students in the elementary schools approached one and a quarter months of growth per month of instructional time between the pre and post intervals.
- In 1969-70 school districts were required for the first time to include a mathematics component. Because of late funding not all districts maintained a mathematics component for the full school year. Although the evaluation results were promising, the full effectiveness of the mathematics component cannot be determined at this time. A shortage of mathematics teaching specialists at the elementary school level was a hindrance to some districts in implementing their mathematics component. Others indicated that classroom teachers did not receive in-service training in mathematics that was as intensive as similar programs for language development. In general pupils received less instructional time in mathematics than in language development.
- The greatest gains in achievement in both reading and mathematics were seen in grades 3, 4, 5 and 6. In part this reflects the impact of longitudinal programs for pupils. Such programs are more discernible in the large city compensatory education programs than in the smaller districts.

TABLE 4
 READING AND MATHEMATICS ACHIEVEMENT OF STUDENTS
 IN TITLE I PROJECTS
 1967-68 -- 1969-70

Rating	Percent of Students in Projects Given Rating			
	Reading Achievement			Mathematics Achievement*
	1967-68	1968-69	1969-70	
Substantial Improvement	9.6	14.1	8.6	5.0
Moderate Improvement	35.8	50.1	52.4	61.5
Little or No Improvement	42.8	26.5	30.1	24.6
Irregular	11.8	9.3	8.9	8.9

*1969-70 was the first year in which mathematics was a required component.
 There are no comparable data from previous years.

TABLE 5

READING ACHIEVEMENT OF STUDENTS IN TITLE I PROJECTS,
BY NUMBER AND PERCENT OF ALL STUDENTS
RECEIVING THAT ACHIEVEMENT RATING

1969-70

Grade	Substantial		Moderate		Little or No		Irregular		Total	
	No. of Students	% of Students	No. of Students	% of Students	No. of Students	% of Students	No. of Students	% of Students	No. of Students	% of Students
1	382	4.27	2,008	3.69	2,076	6.64	5,658	61.33	10,124	9.75
2	572	6.39	4,961	9.12	10,719	34.30	1,115	12.09	17,367	16.72
3	1,392	15.56	10,374	19.06	4,763	15.24	616	6.68	17,145	16.51
4	1,532	17.12	11,394	20.94	3,679	11.77	390	4.23	16,995	16.37
5	1,535	17.15	11,228	20.63	2,428	7.77	303	3.28	15,494	14.92
6	1,320	14.75	10,316	18.96	1,805	5.78	302	3.27	13,743	13.24
7	678	7.58	1,258	2.31	1,600	5.12	82	.89	3,618	3.48
8	419	4.68	284	.52	1,546	4.95	107	1.16	2,356	2.27
9	615	6.87	1,319	2.42	2,167	6.94	259	2.81	4,360	4.20
10	273	3.05	720	1.32	366	1.17	198	2.15	1,557	1.50
11	154	1.72	359	.66	82	.26	166	1.80	761	.73
12	77	.86	199	.37	18	.06	29	.31	323	.31
Total	8,949	100.00	54,420	100.00	31,249	100.00	9,225	100.00	103,843	100.00

TABLE 6
 MATHEMATICS ACHIEVEMENT OF STUDENTS IN TITLE I PROJECTS,
 BY NUMBER AND PERCENT OF ALL STUDENTS
 RECEIVING THAT ACHIEVEMENT RATING
 1969-70

Grade	Substantial		Moderate		Little or No		Irregular		Total	
	No. of Students	% of Students	No. of Students	% of Students	No. of Students	% of Students	No. of Students	% of Students	No. of Students	% of Students
1	484	11.82	1,989	3.97	2,457	12.26	1,938	26.52	6,868	8.42
2	186	4.54	6,026	12.02	3,068	15.30	975	13.34	10,255	12.57
3	835	20.39	11,665	23.27	2,096	10.46	419	5.73	15,015	18.40
4	518	12.65	10,836	21.61	2,228	11.11	990	13.55	14,572	17.86
5	563	13.74	9,562	19.07	2,569	12.81	1,522	20.82	14,216	17.42
6	491	11.99	7,381	14.72	3,769	18.80	821	11.23	12,462	15.27
7	320	7.81	695	1.39	1,567	7.82	242	3.31	2,824	3.46
8	241	5.88	397	.79	1,233	6.15	172	2.35	2,043	2.50
9	259	6.32	1,081	2.16	512	2.55	187	2.56	2,039	2.50
10	30	.73	295	.59	204	1.02	22	.30	551	.68
11	127	3.10	98	.19	233	1.16	11	.15	469	.58
12	42	1.03	109	.22	113	.56	10	.14	274	.34
Total	4,096	100.00	50,134	100.00	20,049	100.00	7,309	100.00	81,588	100.00

TABLE 7

READING ACHIEVEMENT OF STUDENTS IN TITLE I PROJECTS,
BY NUMBER AND PERCENT OF STUDENTS
IN EACH GRADE WHO RECEIVED RATING

1969-70

Grade	Substantial		Moderate		Little or No		Irregular		Total	
	No. of Students	% of Students	No. of Students	% of Students	No. of Students	% of Students	No. of Students	% of Students	No. of Students	% of Students
1	382	3.77	2,008	19.83	2,076	20.51	5,658	55.89	10,124	100.00
2	572	3.29	4,961	28.57	10,719	61.72	1,115	6.42	17,367	100.00
3	1,392	8.12	10,374	60.51	4,763	27.78	616	3.59	17,145	100.00
4	1,532	9.01	11,394	67.04	3,679	21.65	390	2.30	16,995	100.00
5	1,535	9.91	11,228	72.47	2,428	15.67	303	1.95	15,494	100.00
6	1,320	9.61	10,316	75.06	1,805	13.13	302	2.20	13,743	100.00
7	678	18.74	1,258	34.77	1,600	44.22	82	2.27	3,618	100.00
8	419	17.78	284	12.06	1,546	65.62	107	4.54	2,356	100.00
9	615	14.11	1,319	30.25	2,167	49.70	259	5.94	4,360	100.00
10	273	17.53	720	46.24	366	23.51	198	12.72	1,557	100.00
11	154	20.24	359	47.17	82	10.78	166	21.81	761	100.00
12	77	23.84	199	61.61	18	5.57	29	8.98	323	100.00
Total	8,949	8.62	54,420	52.41	31,249	30.09	9,225	8.88	103,843	100.00

TABLE 8

MATHEMATICS ACHIEVEMENT OF STUDENTS IN TITLE I PROJECTS,
BY NUMBER AND PERCENT OF STUDENTS
IN EACH GRADE WHO RECEIVED RATING
1969-70

Grade	Substantial		Moderate		Little or No		Irregular		Total	
	No. of Students	% of Students	No. of Students	% of Students	No. of Students	% of Students	No. of Students	% of Students	No. of Students	% of Students
1	484	7.05	1,989	28.96	2,457	35.77	1,938	28.22	6,868	100.00
2	186	1.81	6,026	58.76	3,068	29.92	975	9.51	10,255	100.00
3	835	5.56	11,665	77.69	2,096	13.96	419	2.79	15,015	100.00
4	518	3.56	10,836	74.36	2,228	15.29	990	6.79	14,572	100.00
5	563	3.96	9,562	67.26	2,569	18.07	1,522	10.71	14,216	100.00
6	491	3.94	7,381	59.23	3,769	30.24	821	6.59	12,462	100.00
7	320	11.33	695	24.61	1,567	55.49	242	8.57	2,824	100.00
8	241	11.80	397	19.43	1,233	60.35	172	8.42	2,043	100.00
9	259	12.70	1,081	53.02	512	25.11	187	9.17	2,039	100.00
10	30	5.45	295	53.54	204	37.02	22	3.99	551	100.00
11	127	27.08	98	20.89	233	49.68	11	2.35	469	100.00
12	42	15.33	109	39.78	113	41.24	10	3.65	274	100.00
Total	4,096	5.02	50,134	61.45	20,049	24.57	7,309	8.96	81,588	100.00

Big City Districts

Eleven school districts in California received a Title I entitlement for 1969-70 exceeding one million dollars. These projects were analyzed separately because they represent a significant portion of the funds expended and the children served. The entitlements for 1969-70 ranged from one million to nearly 21 million dollars. The total approved for the eleven districts was \$39.5 million which represented 45.7 percent of the Title I funds in California for 1969-70. The districts were Bakersfield Elementary and Fresno, Long Beach, Los Angeles, Oakland, Richmond, Sacramento, San Bernardino, San Diego, San Francisco and Stockton Unified School Districts.

PARTICIPANTS AND STAFF

Participants. Title I programs in the big city school districts served 110,315 children from preschool through grade 12. There were 105,097 public school participants and 5,218 non-public school participants.

The grade level breakdown of public and non-public school children participating in the big city programs is presented in Table 9.

TABLE 9

NUMBER OF CHILDREN SERVED BY TITLE I ACTIVITIES IN ELEVEN
BIG CITY SCHOOL DISTRICTS DURING 1969-70

Grade	Number of Students Served, by Type of School		
	Public	Non-Public	Public and Non-Public
P	1,743	-	1,743
K	13,459	40	13,499
1	14,790	350	15,140
2	14,285	682	14,967
3	13,449	800	14,249
4	12,854	881	13,735
5	12,191	787	12,978
6	11,593	713	12,306
7	2,359	331	2,690
8	2,015	300	2,315
9	1,622	15	1,637
10	381	69	450
11	373	-	373
12	185	-	185
U	3,798	250	4,048
Total	105,097	5,218	110,315

Staff. Additional staff members were hired to implement Title I programs. These included both teaching and non-teaching positions. Teaching positions included both teachers and specialists from preschool through secondary school; non-teaching positions included teacher aides, librarians, counselors, nurses, and community liaison personnel.

Volunteers contributed their services to the program. The number of volunteers decreased from 3,800 in 1968-69 to 1,801 during 1969-70. Table 10 shows the number of positions supported by ESEA Title I funds in eleven big city school districts during 1969-70.

TABLE 10
NUMBER OF POSITIONS SUPPORTED BY ESEA TITLE I FUNDS IN
ELEVEN BIG CITY SCHOOL DISTRICTS DURING 1969-70

POSITIONS	Full-Time Positions	More than Half-Time Less than Full-Time	Half-Time or Less
Teaching:			
Preschool	87	-	18
Kindergarten	9	-	-
Elementary	394	1	28
Secondary	121	1	-
Speech Correctionist	12	-	1
Handicapped	8	-	-
Reading Specialist	141	2	61
Other	54	-	3
Total teaching	826	4	111
Non-Teaching:			
Teacher Aide	788	301	889
Librarian	27	-	3
Supervisor or Administrator	58	4	6
Counselor	82	1	-
Psychologist	8	1	7
Testing Assignment	5	1	3
Social Work Assignment	6	8	9
Attendance Assignment	38	-	-
Nurse	42	3	17
Dental Hygienist	2	-	-
Clerical Position	342	3	21
Volunteers	110	-	1,801
Other	151	64	58
Total non-teaching	1,659	386	2,814
Total of all positions	2,485	390	2,925

DISTRICT ADVISORY COMMITTEES

Each of the city districts had a district advisory committee that served the interest of the district-at-large; in addition, each of the target schools had an advisory committee. The concerns of the target school advisory committee were to be more germane to concerns at the school level.

In the eleven districts, 545 persons served on district advisory committees. Of these persons, 371 resided in the attendance areas served by the Title I program. There were 285 (52 percent) parents of Title I participants serving on district advisory committees.

There were 167 target school advisory committees organized in the city districts; 1,792 parents of Title I participants served on these committees.

Other persons serving on advisory committees represented community organizations, anti-poverty programs, non-public schools, service clubs and administrative personnel from the district.

OBJECTIVES AND ACTIVITIES

Because of changes in guidelines the 1969-70 programs focused more than ever on improving the achievement level of students. Two of these changes were: (1) a concentration of services and activities on specifically identified participants; and (2) the inclusion of language development, mathematics, auxiliary services, parent involvement, intergroup relations, and staff development activities for each participant.

Not all participants received all services, nor did all services extend over the academic year for all participants. A saturated school, which provided all services to all participants to the degree of their individual need, was offered by several city districts.

While efforts were concentrated at the elementary level, four districts had junior high school participants and one district had senior high school participants. Six of the big city districts conducted preschool educational programs funded at least partially by Title I.

FINDINGS

Language Development. The language development component generally consisted of several distinct activities: structured teaching of reading at the primary grades, remedial reading at the intermediate grades, and English as a second language programs for non-English speaking children. An individualized approach to teaching through the assessment of individual needs, diagnostic profiles, and prescriptive teaching permitted districts to concentrate on particular problems of the learner. Services to participants were provided by classroom teachers, language development specialists, teacher aides, and "cross-age" tutors and included the use of language masters, tape recorders, filmstrips, puppets, and reference stations. While children remained in the language development program for varying periods of time during the day and days during the week, one district reported that many participants were in the program for only nine weeks of the year.

An analysis of standardized achievement test data for the city districts indicated that median gains for the elementary schools approached one and a quarter months of growth for each month of instruction. The greatest gains were attained by students in grades 3, 4, and 5, and were generally greater than a month per month. Students in grades 1, 2 and 6 evidenced the least amount of gain, generally at or less than a month of growth for each month of instruction.

There was considerable variance in the amount of absolute growth reported by the districts because of the differing amounts of time between pre and post testing. The lack of a pretest in grade one provided some difficulty in measuring growth, but in most instances students attained a 1.8 median grade placement score on the post-test. Students in grades 2 and 6 generally gained three quarters of a month to one month of growth for each month of instruction. Three districts reported substantial gains at several grade levels, while two other districts reported minimal gains at the same grade levels.

Selected district reports showed the following results:

- Out of five target schools, two months or more of growth was achieved by at least 34 percent of the third graders in three schools, at least 20 percent of the fourth graders in four schools, at least 20 percent of the fifth graders in three schools, and at least 27 percent of the sixth graders in four schools.
- At least 42 percent of the students in grades 3 through 6 gained one month or more and 15 percent of the students gained two months or more of growth.
- Nearly 70 percent of the participants in grades 1 through 6 achieved eight or more months of growth in a seven and one-half month testing period. The greatest median growth was nearly 15 months at the fourth grade level, while the least median growth was seven months for sixth graders.
- Of nearly 1,600 students in grades 1 through 6, 35 percent were brought up to grade level or above and 30 percent were brought to within one year of grade level. However, 35 percent were still one year or more below grade level.
- When data from comparable non-target students were contrasted with data from target participants, one year differences slightly favored Title I participants and increased after two years of Title I participation.

One district reported data on first graders who were taught by the Initial Teaching Alphabet (i/t/a). The data for first graders in 1969-70 favored the participants over the non-(i/t/a) children; a follow-up study at the end of third grade favored the former (i/t/a) participants over non-(i/t/a) children by three months. Since (i/t/a) is a highly coordinated and structured system of teaching reading, its apparent effectiveness occurs when teachers are trained in the method and the materials are totally directed toward the same method.

In a study of 1,100 students who had participated in Title I programs for one, two, three, or three and one-half years, it was found that most of the students were achieving better than month for month for the year. Prior to such programs, their growth rate had been between four and seven months in a ten month school year. Ninety percent of the students showed ten to eighteen months of growth, while the other 10 percent had a growth rate of eight or nine months for the school year.

The apparently successful approaches that were used to attain student growth in reading scores may be attributed to a carefully and completely developed diagnostic-prescriptive process that directs itself toward individualized instruction. The effective classroom person, whether it be reading specialist, classroom teacher, or teacher aide remains the most important link between repeated failure and successful reinforcement.

Teachers, parents, and students were satisfied with the increased efforts in the language development components. Teachers and parents responding to questionnaires reported that the students showed an increased interest and effort in school over previous years, that the students had improved their reading skills considerably, and that their attendance and enthusiasm had increased.

Mathematics. The organizational patterns, selection procedures, and experience gained in the administration of the language development component in previous years were helpful in the development of the mathematics component for 1969-70. A considerable portion of the year was spent in procuring supplementary materials and equipment, and in providing inservice training to resource personnel and classroom teachers. In most city districts, the mathematics component was looked upon as an effort supplemental to the language development component and therefore received considerably less attention.

Diagnostic and prescriptive procedures were used for mathematics participants. The most frequent mode of instruction was the discovery approach, where students used manipulative materials, puzzles, and games for learning abstract concepts and fundamental principles.

The results measured by standardized achievement tests consistently yielded a month for month growth pattern in grades 2 through 5, with the greatest growth occurring in grades 3, 4, and 5. Generally, growth evidenced in grades 1 and 6 was at or slightly below a month for month achievement level.

One district reported that nearly 60 percent of the students achieved eight or more months of growth over a seven and one-half month period between tests. Fourth graders attained nearly 13 months of growth while sixth graders attained less than seven months of growth. Another district reported that gains of one month or more were achieved by at least 50 percent of the participants in grades 3 through 6. Eleven percent of the fourth and sixth graders and twenty-two percent of the third and fifth graders achieved growth of two or more months.

Responses to interviews indicated that more than eight out of ten parents believed their children were more interested in mathematics over the school year, and nearly five out of ten stated that student interest in school had increased. Additional help from teachers, materials, books, and improved programs was recognized by parents as contributing to increased student aspirations and initiative.

The analysis of data by school districts indicated the mathematics component has demonstrated effectiveness in achieving better learning in mathematics. The effectiveness of the program over a longer period of time will have to be considered in future years.

Preschool. The selection factors for preschool participants included housing conditions, family circumstances, economic status, and cultural background. Classes had a maximum of 15 children and were conducted by a teacher and an education aide. Indoor and outdoor activities were planned to aid the individual child in developing conceptual and motor skills and in acquiring a social-emotional behavior. Classroom experiences included readiness programs to prepare children for successful academic performance. Consultants, counselors, and health services personnel served several preschool classes. Parents were required to assist several times during the year.

Results based upon the Caldwell Preschool Inventory Test and the Peabody Picture Vocabulary Test indicated generally that: (1) preschool programs were effective in raising the verbal ability scores of participants; and (2) there was a substantial increase in the mean scores in the areas of personal-social responsiveness, associative vocabulary, and concept activation.

Questionnaires completed by teachers and administrators and responses by parents were nearly unanimous in indicating the usefulness of the program for children. Teachers rated aides as highly effective in the program and praised parent participation as providing more opportunities for parent-teacher conferences.

Longitudinal data reported by three city districts showed that preschool programs helped children in kindergarten and first grade.

Individual district reports indicated that:

- Children with preschool experience made higher scores on a readiness test in kindergarten than did children without preschool experience.
- A larger percentage of children with preschool experience (74 percent) attained readiness scores of average or better than did children without preschool experience (60 percent).
- Fifty-five former preschool participants attained a median reading score of 1.8 while 67 non-preschoolers attained a 1.7 score at the end of first grade.
- On a test at the end of second grade, ninety-nine preschool participants achieved a median difference of three months over 135 non-preschoolers.

Another district reported that although there appear to be no differences in scores between preschool participants and non-preschoolers in first and second grades, differences were found favoring preschool children at the third grade. This may suggest that there are long-range favorable effects of preschool.

The articulation of preschool and kindergarten programs should be studied and developed for greater effectiveness in maximizing and sustaining preschool benefits through kindergarten, first grade, and beyond. Kindergarten programs should augment, not repeat, preschool programs.

Auxiliary Services. Developed for the purpose of enhancing the instructional components, auxiliary services included counseling and guidance, health services, library services, and school-community liaison.

Counseling and guidance activities included individual analysis of learning and behavior problems, individual or group counseling with students and parents, and interpreting the counselor program to staff and parents. Workshops were provided for staff members and offered assistance in psychological testing, reporting and writing, behavior modification, and prescriptive teaching based upon performance objectives. In most city districts, the personnel responsible for the counseling and guidance activities served several schools, both public and non-public; spent nearly half their time on test administration; and were not able to serve adequately all project participants.

While teachers and principals indicated that the services were effective, they also indicated the need for increased services and improvement in certain areas of service.

Health services were primarily administered by nurses and included medical and dental referrals, health and safety education, nutritional snacks, and breakfast and lunch programs. The nurse served frequently as the liaison between home, school, and other agencies within the community. Teachers and administrators rated health services very highly.

Library services continued to be augmented during 1969-70 and were an integral part of the instructional programs. They served as a central source of material for additional classroom reference information and aided in stimulating an increased interest in reading among Title I participants. While library services were rated generally as effective or very effective, some districts reported that a part-time librarian limited the availability of the service to both teachers and students.

School-community coordinators were provided for the purpose of establishing and maintaining positive lines of communication between the school and the community. Developing parent involvement programs, working with community organizations, providing contacts with individual students, and establishing contacts with teachers and administrators were some of the activities performed by the coordinators. The districts were favorable in their response to the effectiveness of these services.

Parent Involvement. The purpose of the parent involvement component was to involve parents in the curriculum choices and classroom learning of their children. While some of the city districts reported a moderate to high level of parent involvement, at least three districts indicated that the extent of their effort was to place parents on school advisory committees. Elsewhere, parents were involved in providing informal social activities, organizing study tours, and providing leadership training for members of the community and other

parents. Parent representatives from each of the city districts attended the annual statewide Compensatory Education Conference. Two districts developed parent education classes which focused on enabling parents to assist their children at home.

The successful parent involvement programs reported that:

- A high percentage of parents said they were familiar with the school.
- A substantial percentage of parents indicated they thought school personnel understood their child.
- Community persons and parents were extensively involved in the instructional and supervisory programs of the school.
- Parent advisory committees assisted in program planning and evaluation.
- A youth-tutoring-youth program was developed.
- School and community communications were increased.

The districts made several recommendations for the improvement of the parent involvement component. These included: (1) have teachers make more home contacts; (2) contacts between teachers and parents should be made at hours convenient to parents; (3) provide thorough information about the school and its programs to parents who are new to the district; (4) design means to increase attendance at functions; (5) include and involve more parents in the decision-making process; and (6) encourage school staff members to be less reluctant to promote the parent involvement component.

Intergroup Relations. Activities in this component were designed to provide socially and ethnically integrated educational experiences for Title I participants. Student exchange activities, inter-school visitations, trips of historical and cultural interest, and attendance at art and music performances were arranged between target and non-target school students. Students were involved in planning many activities.

Although districts were almost unanimous in indicating successful intergroup relations activities and experiences, no district reported that the component had become a part of the daily activities.

Seven of the big city districts included an integration and desegregation plan as part of the Title I activities. The plans involved reassigning children from minority group neighborhoods and schools to majority group schools, changing attendance areas, or redistributing children at overcrowded schools to less crowded schools. One district established an intermediate school and accepted students on a voluntary, first-come first-served basis from the inner city.

Six of the districts provided instructional and supportive services to reassigned students; one district provided little or no additional services to such children.

Where achievement data were available for integrated students, they showed modest gains:

- Month for month growth was attained on reading tests.
- Fifty-one percent of the students made greater than eight months gain in reading, with fourth graders attaining 11 months and first graders five months during the school year.
- In mathematics, 46 percent of the students gained eight or more months of growth.
- Growth patterns for the intermediate school participants were similar to Title I participants in other schools.

Subjective responses to the program included:

- Nine out of ten target area and receiving school parents agreed that the students read more and that they like school better than previously.
- Progress and behavior were viewed by parents as being satisfactory.
- Nearly all of the parents felt that the school was really interested in helping their child.
- At least one weakness expressed by both parents and teachers was the lack of comparable services provided to integrated schools as opposed to target schools.
- Student attitudes toward themselves and others had been improved, according to three out of four certificated staff members.

Staff Development. Staff development activities generally were conducted throughout the school year on a continuing basis, or during a two or three week concentrated program prior to the opening of school. The primary thrust of the activities was directed toward improving the individualized approach to teaching through diagnosis of individual needs and prescriptive methods of alleviating learner problems.

Programs were conducted in the construction of behavioral objectives for language development and mathematics and in the design of pre and post measures for the attainment of achievement goals. Staff development activities were designed for certificated personnel, teacher aides, parents, administrators, community personnel and others involved in the programs.

Nearly 80 percent of the participants rated staff development programs from good to excellent, 15 percent rated them fair, and 5 percent rated them poor. Positive reactions by participants indicated that demonstration programs and exchanges of teaching methods were among the most helpful kinds of activities. The need for increased remedial reading workshops, sharing of ideas between reading and mathematics specialists, and community aide workshop meetings on learning about community resources were rated high by the respective participants. Provisions for individualized staff development programs were frequently requested by participants.

Most of the city districts reported that their staff development programs were moderately successful overall and very successful in specific instances. Recommendations for improving staff development programs included:

- Give more attention to planning and organizing activities.
- Provide frank discussions of situations and problems between teachers and administrators.
- Require staff participation by offering programs during working hours.
- Develop a program for substitutes who would be willing to serve in central area schools.
- Allow each school site to determine its own needs and develop its own program.

There is an obvious and continuing need for districts to develop and improve their evaluation techniques and instruments for the measurement of staff development program effectiveness. City districts should investigate the possibility of using one or more of the existing approaches to evaluating this affective domain.

COST DATA

The city districts submitted cost data from several sources that contributed toward a comprehensive program for target area students. These several funding sources included ESEA Title I, the Educational Improvement Act of 1969 (AB 606), the Miller-Unruh Basic Reading Act, the Miller Mathematics Improvement Programs, the Special Teacher Employment Programs (AB 938), and direct contributions by school districts. The districts were required to spend at least \$300 per pupil above and beyond the regular district support for each child.

While the following cost data have not been subjected to fiscal audit, they may be considered to be approximate in their accuracy. The median cost per participant from Title I funds in the eleven city districts was \$128 for language development, \$50 for mathematics, and \$24 for auxiliary services. Three districts reported that \$77 per participant was encumbered for English as a second language projects. The range of costs per participant were from \$112 to \$229 for language development, no expenditure to \$189 for mathematics, and \$6 to \$40 for auxiliary services. Additional costs were encumbered in the parent involvement, intergroup relations, and staff development component.

Language Development Component

The language development component was one of six required components in each of the 1969-70 projects. The basic objectives of the language development component were to improve reading and oral language skills of Title I students. The language development component consisted of reading instruction and/or English language instruction for students with a limited understanding of English. Each district was encouraged to implement a language development component which would reflect the unique needs of the Title I students in each target school.

The language development component received 54.23 percent of all Title I expenditures. Funds were used for additional personnel and materials to provide more concentrated language development instruction beyond what was normally provided by the districts.

Districts continued to emphasize instruction in the elementary grades. In grades K-12, 210,417 students participated in the language development component. As shown in Table 11, 87.72 percent of the students receiving instruction were in grades K-6 and 12.28 percent were in grades 7-12.

Reading instruction continued to be the major emphasis of the component. Ninety-three percent of the Title I students in the language development component received reading instruction. Reading activities were reported in 1,404 target schools. Fifty percent of all Title I funds were used for reading instruction at an average cost of \$155 per student.

English language instruction was provided for students with a limited understanding of oral and written English in 344 target schools. An English as a second language activity (ESL) in the language development component was not needed by students in all districts or even for all students in target schools within the same district. Six percent of the students in the language development component received instruction in English as a second language. Eighty-five percent of the students receiving English language instruction were in grades K-6. Only 3.71 percent of all Title I funds were used for English as second language activities at an average cost of \$166 per student.

READING ACTIVITIES

Basic objectives of reading activities were the improvement of the following reading skills: (1) auditory discrimination; (2) visual discrimination; (3) syllabication and other phonetic skills; (4) vocabulary development; and (5) paragraph comprehension. Some districts included specific instruction in dictionary skills and reference skills for students as part of the reading activity.

Criteria for Selection of Pupils. Target schools were selected on the basis of the highest density of poverty, the greatest need for educational improvement, and a minimum expenditure of \$300 per student from Title I or a combination of supplemental funds. Each district decided what portion of the

TABLE 11

FREQUENCY DISTRIBUTION BY GRADE LEVEL OF TITLE I
PARTICIPANTS IN ESL AND READING ACTIVITIES
IN LANGUAGE DEVELOPMENT COMPONENTS

Grade Level of Participants	Type of Activity				Total Frequency Distribution by Grade Level	
	R e a d i n g		E S L		No. of Students	Per- cent
	No. of Students	Per- cent	No. of Students	Per- cent		
K	22,616	11.49	2,544	18.80	25,160	11.96
1	27,756	14.10	2,596	19.20	30,352	14.42
2	28,218	14.33	1,869	13.81	30,087	14.30
3	26,698	13.56	1,436	10.61	28,134	13.37
4	24,906	12.65	1,191	8.80	26,097	12.40
5	22,830	11.59	982	7.26	23,812	11.32
6	20,041	10.18	888	6.56	20,929	9.95
Sub-Total K-6	173,065	87.90	11,506	85.04	184,571	87.72
7	4,952	2.51	439	3.24	5,391	2.56
8	4,228	2.15	394	2.91	4,622	2.20
9	7,226	3.67	708	5.23	7,934	3.77
10	3,476	1.77	264	1.95	3,740	1.78
11	2,545	1.29	132	.98	2,677	1.27
12	1,394	.71	88	.65	1,482	.70
Sub-Total 7-12	23,821	12.10	2,025	14.96	25,846	12.28
Total K-12	196,886	100.00	13,531	100.00	210,417	100.00

required \$300 per pupil minimum should be spent on reading instruction. Reading instruction was limited to public and non-public students residing within the attendance areas of the target schools.

Not all students in each target school received Title I reading assistance. In some target schools all of the students received Title I reading assistance, while in other target schools less than 10 percent of the students received reading assistance, because of insufficient funds to serve all eligible students, and/or scattered incidence of poverty and educational need within the target school population. Students in the lower elementary grades were given preference. Many eligible high school and junior high school students in unified and elementary districts were not served because of insufficient funds to serve all eligible students.

Organizational Systems. Responsibility for reading instruction of Title I students was usually shared by a team of instructional personnel. Local districts selected their own personnel and organized the personnel into various types of organizational systems for reading instruction. Title I funds were used to employ one or more of the following kinds of personnel to provide reading instruction or assistance: a classroom teacher; a reading specialist; a classroom teacher aide; or a reading specialist aide. Students usually received reading instruction or assistance from one or more kinds of personnel during the school year.

Four different kinds of personnel were organized into eight identifiable organizational systems for reading instruction. (Tables 12, 13, and 14) The systems were:

- (1) A classroom teacher
- (2) A classroom teacher and classroom teacher aide
- (3) A reading specialist
- (4) A reading specialist and reading specialist aide
- (5) A reading specialist and a classroom teacher
- (6) A reading specialist, classroom teacher, and classroom teacher aide
- (7) A reading specialist, a reading specialist aide, and a classroom teacher
- (8) A reading specialist, reading specialist aide, classroom teacher, and a classroom teacher aide.

The organizational system used most frequently for reading instruction varied from grade level to grade level. In kindergarten, a classroom teacher and a classroom teacher aide were used for reading and reading readiness instruction in 44.79 percent of the districts. (Table 12) The most frequently used organizational system in grades 1-3 was an instructional team composed of a reading specialist, a reading specialist aide, and a classroom teacher. This system was used by 24-26 percent of the districts. A classroom teacher and a classroom teacher aide were used in 18-22 percent of the districts. Less than two percent of the districts in grades 1-3 used only the services of a classroom teacher for reading instruction.

TABLE 12

PERCENTAGE DISTRIBUTION IN GRADES K-3 OF ORGANIZATIONAL
SYSTEMS USED FOR READING OR READING READINESS
ACTIVITIES IN LANGUAGE DEVELOPMENT COMPONENTS

Types of Organizational Systems	Percent of Districts Using System, by Grade			
	K N=192	1 N=287	2 N=319	3 N=326
Classroom Teacher Only	13.54	1.39	1.57	1.23
Classroom Teacher and Classroom Teacher Aide	44.79	22.65	18.18	18.10
Reading Specialist Only	1.56	3.14	3.13	2.76
Reading Specialist and Reading Specialist Aide	1.56	2.09	1.88	1.84
Reading Specialist and Classroom Teacher	8.85	16.72	17.24	21.78
Reading Specialist, Classroom Teacher, and Classroom Teacher Aide	4.18	3.83	3.76	4.00
Reading Specialist, Reading Specialist Aide, and Classroom Teacher	15.10	24.74	27.59	26.07
Reading Specialist, Reading Specialist Aide, Classroom Teacher, and Classroom Teacher Aide	4.69	13.94	14.11	13.19
Other Systems	5.73	11.50	12.54	11.04

TABLE 13

PERCENTAGE DISTRIBUTION IN GRADES 4-8 OF ORGANIZATIONAL
SYSTEMS USED FOR READING OR READING READINESS
ACTIVITIES IN LANGUAGE DEVELOPMENT COMPONENTS

Types of Organizational Systems	Percent of Districts Using System, by Grade				
	4 N=326	5 N=321	6 N=293	7 N=72	8 N=65
Classroom Teacher Only	2.15	2.18	3.07	4.17	3.08
Classroom Teacher and Classroom Teacher Aide	20.86	20.87	21.50	23.61	26.15
Reading Specialist Only	4.60	4.98	5.80	11.11	7.69
Reading Specialist and Reading Specialist Aide	1.84	1.87	1.71	4.17	4.62
Reading Specialist and Classroom Teacher	22.09	23.68	22.53	26.39	27.69
Reading Specialist, Classroom Teacher, and Classroom Teacher Aide	3.68	3.43	3.07	-	-
Reading Specialist, Reading Specialist Aide, and Classroom Teacher	26.30	25.55	25.60	16.67	16.92
Reading Specialist, Reading Specialist Aide, Classroom Teacher, and Classroom Teacher Aide	8.28	8.41	8.19	4.17	3.08
Other Systems	9.20	9.03	8.53	9.72	10.77

TABLE 14

PERCENTAGE DISTRIBUTION IN GRADES 9-12 OF ORGANIZATIONAL
SYSTEMS USED FOR READING OR READING READINESS ACTIVITIES
IN LANGUAGE DEVELOPMENT COMPONENTS

Types of Organizational Systems	Percent of Districts Using System, by Grade			
	9 N=95	10 N=75	11 N=66	12 N=56
Classroom Teacher Only	8.42	9.33	9.09	8.93
Classroom Teacher and Classroom Teacher Aide	25.26	25.33	22.73	25.00
Reading Specialist Only	15.79	14.67	13.64	10.71
Reading Specialist and Reading Specialist Aide	4.21	4.00	4.55	5.36
Reading Specialist and Classroom Teacher	12.63	13.33	13.64	12.50
Reading Specialist, Classroom Teacher, and Classroom Teacher Aide	1.05	-	-	-
Reading Specialist, Reading Specialist Aide, and Classroom Teacher	15.79	16.00	18.18	16.07
Reading Specialist, Reading Specialist Aide, Classroom Teacher, and Classroom Teacher Aide	5.26	6.67	6.06	7.14
Other Systems	11.59	10.67	12.12	14.29

Three types of organizational systems were used with almost equal frequency in grades 4-6: (1) a reading specialist, a reading specialist aide, and a classroom teacher were used in 25-26 percent of the districts; (2) a reading specialist and classroom teacher were used by 22-23 percent of the districts; and (3) a classroom teacher and classroom teacher aide were used by 20-21 percent of the districts. Less than four percent used only a classroom teacher for reading instruction. (Table 13)

The organizational systems used most frequently for reading instruction in grades 7 and 8 were: (1) a reading specialist and classroom teacher, by 26-27 percent of the districts; and (2) a classroom teacher and classroom teacher aide by 23-26 percent of the districts. (Table 13) More districts at the seventh and eighth grade level used the reading specialist only as an organizational system than in grades K-6.

The most frequently used organizational systems for reading instruction in grades 9-12 were: (1) the classroom teacher and a classroom teacher aide by 22-25 percent of the districts; and (2) a reading specialist, a reading specialist aide, and a classroom teacher by 15-18 percent of the districts. (Table 14)

The most infrequently used organizational system by all grade levels was a reading specialist and a reading specialist aide. Districts used this system from a low of 1.56 percent in kindergarten to a high of 5.36 percent in grade 12.

A special study was made of the number of different organizational systems used for third grade reading instruction within a target school. Forty-three percent of the third grades in a sample of 223 target schools reported using two or more organizational systems for third grade reading instruction. (Table 15)

TABLE 15
PERCENTAGE DISTRIBUTION OF THE NUMBER OF DIFFERENT
ORGANIZATIONAL SYSTEMS USED FOR THIRD GRADE
READING INSTRUCTION IN TARGET SCHOOLS

N=223 Target Schools

Grade Level	Percent of Schools Using Different Number of Systems				
	One System	Two Systems	Three Systems	Four Systems	Five Systems
3	56.95	26.90	15.24	.45	.45

Hours of Reading Instruction. The amount of time allocated for reading instruction in the 1969-70 projects was not the same for all Title I students. The amount of reading instruction varied by grade level and the type of organizational system. Students averaged .76 of an hour per day of reading or reading readiness instruction in kindergarten, 1.12 hours in grades 1-3, 1.08 hours in grades 4-6, .88 of an hour in grades 7-9, and .83 of an hour in grades 10-12. (Tables 16 - 19) In a regular school year (175 days) Title I students in grades 1-3 received an average of 50.75 hours more of reading instruction than the average Title I students in grades 10-12.

The amount of time each student received reading instruction was also related to the type of organizational system used for reading. Districts which used only the classroom teacher or only a reading specialist averaged less instructional time per student for reading skills than districts using other types of organizational systems. A student in grades 1-3 who received reading instruction from a reading specialist, reading specialist aide, classroom teacher, and classroom teacher aide averaged .50 of an hour per day or 60 hours more of reading instruction during the regular school year than a student receiving instruction from only a classroom teacher. (Table 16)

Students in grades 4-6 also averaged more instructional time if the organizational system consisted of a reading specialist, reading specialist aide, and classroom teacher. (Table 17) The increase in time allocated per student for reading instruction was primarily due to the use of personnel. Students received reading instruction from the reading specialist and the aide in addition to the regular reading instruction from a classroom teacher and aide. Students receiving instruction from only a classroom teacher or only a reading specialist received the least amount of instructional time in grades 4-7.

Differences in the amount of instructional time, when analyzed by types of organizational systems, was not as significant in grades 8-12. (Tables 18 and 19) The traditional organizational structure of a departmentalized high school may not allow as much flexibility in time allocation for reading instruction as in the elementary schools.

Types of Reading Achievement Tests. The school district decided which standardized achievement test to use to measure the effectiveness of the reading activity at each grade level. A total of 29 different kinds of standardized reading or reading readiness achievement tests were used. The number of different tests used varied from grade level to grade level. The standardized tests used in the project also had multiple forms and levels. Even districts using the same test did not necessarily use the same form or the same level of the test at a specific grade level.

The Metropolitan Reading Readiness Test was used to test 50.20 percent of the pupils in kindergarten. (Table 20) Fifty-six percent of the pupils in grade 1 used the Cooperative Primary Reading Test. Fifty-seven percent of the pupils in grade 2 and 59.75 percent of the pupils in grade 3 used the

TABLE 16

DISTRIBUTION, BY ORGANIZATIONAL SYSTEM, OF THE AVERAGE NUMBER OF HOURS PER DAY EACH PUPIL RECEIVED READING INSTRUCTION IN GRADES K-3

Type of Organizational System	Kindergarten		First Grade		Second Grade		Third Grade		Gr. 1-3	
	No. Org. Syst.	Av. No. Hrs. Per Day Per Student	No. Org. Syst.	Av. No. Hrs. Per Day Per Student	No. Org. Syst.	Av. No. Hrs. Per Day Per Student	No. Org. Syst.	Av. No. Hrs. Per Day Per Student	No. Org. Syst.	Av. No. Hrs. Per Day Per Student
Classroom Teacher Only	26	.57	4	.68	5	.65	4	.79		.70
Classroom Teacher and Classroom Teacher Aide	86	.76	65	1.04	58	1.18	59	1.07		1.09
Reading Specialist Only	3	.50	9	.69	10	.68	9	.60		.66
Reading Specialist and Classroom Teacher	17	.73	48	1.18	55	1.14	71	1.15		1.16
Reading Specialist, Reading Specialist Aide, and Classroom Teacher	29	.84	71	1.04	88	1.18	85	1.21		1.15
Reading Specialist, Reading Specialist Aide, Classroom Teacher, and Classroom Teacher Aide	9	1.05	40	1.19	45	1.20	43	1.21		1.20
Other Systems	22	.83	50	1.13	58	1.16	55	1.13		1.14
All Organizational Systems Total	192	.76*	287	1.08*	319	1.15*	326	1.14*		1.12*

*Weighted Mean



TABLE 17

DISTRIBUTION, BY ORGANIZATIONAL SYSTEM, OF THE AVERAGE NUMBER OF HOURS PER DAY EACH PUPIL RECEIVED READING INSTRUCTION IN GRADES 4-6

Type of Organizational System	Fourth Grade		Fifth Grade		Sixth Grade		Grades 4-6 Average Number Hours Per Day Per Student
	No. Org. Syst.	Av. No. Hrs. Per Day Per Student	No. Org. Syst.	Av. No. Hrs. Per Day Per Student	No. Org. Syst.	Av. No. Hrs. Per Day Per Student	
Classroom Teacher Only	7	.92	7	1.06	9	.97	.98
Classroom Teacher and Classroom Teacher Aide	68	1.03	67	1.07	63	1.00	1.03
Reading Specialist Only	15	.70	16	.66	17	.70	.69
Reading Specialist and Classroom Teacher	72	1.13	76	1.15	66	1.15	1.14
Reading Specialist, Reading Specialist Aide, and Classroom Teacher	89	1.16	82	1.16	75	1.19	1.17
Reading Specialist, Reading Specialist Aide, Classroom Teacher, and Classroom Teacher Aide	27	1.05	27	1.07	24	1.08	1.07
Other Systems	48	1.05	46	1.04	39	1.00	1.03
All Organizational Systems Total	326	1.09*	321	1.09*	293	1.07*	1.08*

*Weighted Mean

TABLE 18

DISTRIBUTION, BY ORGANIZATIONAL SYSTEM, OF THE AVERAGE NUMBER OF HOURS PER DAY EACH PUPIL RECEIVED READING INSTRUCTION IN GRADES 7-9

Type of Organizational System	Seventh Grade		Eighth Grade		Ninth Grade		Grades 7-9 Average Number Hours Per Day Per Student
	No. Org. Syst.	Av. No. Hrs. Per Day Per Student	No. Org. Syst.	Av. No. Hrs. Per Day Per Student	No. Org. Syst.	Av. No. Hrs. Per Day Per Student	
Classroom Teacher Only	3	.69	2	.63	8	.80	.75
Classroom Teacher and Classroom Teacher Aide	17	.85	17	.85	24	.94	.89
Reading Specialist Only	8	.77	5	.86	15	.83	.82
Reading Specialist and Classroom Teacher	19	1.03	18	1.02	12	.83	.98
Reading Specialist, Reading Specialist Aide, and Classroom Teacher	12	1.09	11	1.14	15	.68	.94
Reading Specialist, Reading Specialist Aide, Classroom Teacher, and Classroom Teacher Aide	3	1.16	2	.99	5	.89	.99
Other Systems	10	.74	10	.74	16	.75	.74
All Organizational Systems Total	72	.92*	65	.93*	95	.82*	.88*

*Weighted Mean



TABLE 19

DISTRIBUTION, BY ORGANIZATIONAL SYSTEM, OF THE AVERAGE NUMBER OF HOURS PER DAY EACH PUPIL RECEIVED READING INSTRUCTION IN GRADES 10-12

Type of Organizational System	Tenth Grade		Eleventh Grade		Twelfth Grade		Grades 10-12 Average Number Hours Per Day Per Student
	No. Org. Syst.	Av. No. Hrs. Per Day Per Student	No. Org. Syst.	Av. No. Hrs. Per Day Per Student	No. Org. Syst.	Av. No. Hrs. Per Day Per Student	
Classroom Teacher Only	7	.70	6	.79	5	.85	.77
Classroom Teacher and Classroom Teacher Aide	19	.87	15	.96	14	.88	.90
Reading Specialist Only	11	.85	9	.80	6	.82	.83
Reading Specialist and Classroom Teacher	10	.99	9	.87	7	.88	.92
Reading Specialist, Reading Specialist Aide, and Classroom Teacher	12	.71	12	.64	9	.64	.67
Reading Specialist, Reading Specialist Aide, Classroom Teacher, and Classroom Teacher Aide	5	1.07	4	.73	4	.73	.86
Other Systems	11	.82	11	.80	11	.80	.81
All Organizational Systems Total	75	.85*	66	.81*	56	.81*	.83*

*Weighted Mean

TABLE 20

PERCENTAGE DISTRIBUTION, BY GRADE LEVEL, OF ESEA, TITLE I STUDENTS TESTED WITH
STANDARDIZED ACHIEVEMENT TESTS TO EVALUATE READING
ACTIVITIES IN LANGUAGE DEVELOPMENT COMPONENT
1969-70

Type of Achievement Test	Percent of Students Tested, by Grade												
	K	1	2	3	4	5	6	7	8	9	10	11	12
Metropolitan Reading Readiness	50.20	4.00											
Peabody Picture Vocabulary	8.25	1.01	.14										
Cooperative Primary - Reading		56.25	2.83	.09									
California Achievement - Reading		10.11	13.07	9.34	12.11	11.84	7.15	4.42	4.67	12.48	16.62	16.92	1.78
Comprehensive Test of Basic Skills - Reading				5.86	49.46	52.87	63.60	47.84	51.01	13.78	9.21	10.72	12.14
Stanford Achievement - Reading		2.27	57.41	59.75	15.53	12.72	11.70	12.67	21.84	9.42	1.97	.72	.56
Wide Range Achievement	11.46	9.59	5.89	4.97	4.65	4.87	4.65	8.08	4.41	2.03	2.94	2.35	1.67
Stanford Diagnostic			.92	1.99	2.13	1.84	1.87	1.17	1.93	11.60	3.82	11.12	5.37
Gates Basic Reading				.06		.32	.43	.21	.37	10.36	19.21	5.37	6.13
Other	30.09	16.77	19.74	18.00	16.06	15.54	10.60	25.61	15.77	40.33	46.23	52.80	72.35
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Stanford Reading Test. The most frequently used test in grades 4-8 was the Comprehensive Test of Basic Skills.

No single test was used by 50 percent or more of the students in grades 9-12. The Comprehensive Test of Basic Skills was the most frequently used test, but only by 13.78 percent of the students in the ninth grade and 12.14 percent of the students in the twelfth grade. In grade 10, 19.21 percent of the students used the Gates Reading Test and 16.92 percent of the students in grade 11 used the California Reading Test.

Cost Data. Cost data reported by districts for reading activities should be used with an understanding of the following limitations on the reported expenditures: (1) the cost data reported were estimates, as audits of expenditures in a component were not required, and (2) Title I expenditures were only a part of the total cost of reading instruction for disadvantaged students. The use of more than one person for reading instruction and multiple funding sources precludes the use of only Title I expenditures as an estimate of the total cost of reading instruction for Title I students. The expenditures reported did not include an estimate of the amount spent from regular district funds for reading instruction. Local districts did not have program budgets which allowed them to identify the local district cost of reading instruction by target schools, by a single target school, or by grade level within a target school.

Title I funds supplemented regular district expenditures for reading instruction. Many districts also received special funds for reading instruction from other state sources, such as the Miller-Unruh Act for grades 1-3 and the Educational Improvement Act. (Table 21) Title I funds accounted for 64.76 percent of the supplemental funds reported by districts for reading instruction. (Table 21) Cash contributions by the school district, over and above normal expenditures, accounted for 11 percent of the supplementing funds. An average of \$155 per student was encumbered from Title I funds for reading instruction. An average of \$240 per student was encumbered for reading instruction from Title I funds and other reported supplemental funds.

Summary of Findings

Objectives

- The primary objective of the language development component continued to be reading instruction.
- Only six percent of the students in the component received English as second language instruction.

Characteristics of Pupils

- Instruction was concentrated on elementary students. Students in grades K-6 comprised 87.72 percent of the participants in the component.

TABLE 21

AVERAGE ESTIMATED EXPENDITURE* BY FUNDING SOURCE OF ACTIVITIES IN
THE LANGUAGE DEVELOPMENT COMPONENT

N=210,417 Participants

Funding Source	Type of Activity						Total Cost Per Pupil for Reading and ESL
	R e a d i n g			E S L			
	Estimated Cost	Percent of Total Expenditure	Per Pupil	Estimated Cost	Percent of Total Expenditure	Per Pupil	
Federal Title I, ESEA	\$30,547,305	64.76	\$155	\$2,246,019	65.25	\$166	\$156
State Miller-Unruh Reading Act	4,942,347	10.48		178,333	5.18		
Teacher Employment (AB 938)	4,014,400	8.51		49,166	1.43		
Educational Improvement Act (AB 606)	1,783,551	3.78		171,295	4.98		
Local Cash Contributions	5,207,838	11.04		282,738	8.21		
Other	672,427	1.43		514,483	14.95		
All Funds	\$47,167,868	100.00	\$240	\$3,442,034	100.00	\$254	\$241

*Estimated expenditures do not include the normal district expenditures for reading instruction.

- In some target schools, all students participated in the language development component, while in other target schools less than 10 percent of the students participated in the component.

Organizational Systems

- Reading instruction for disadvantaged students has changed from the use of a single classroom teacher to the use of multiple personnel.
- Eight different organizational systems were used for reading instruction. The eight systems used one or more of the following types of personnel: a classroom teacher; a reading specialist; a classroom teacher aide; or a reading specialist aide.
- The most frequently used organizational system in grades 1-6 was a reading specialist, a reading specialist aide, and a classroom teacher. The system most frequently used in grades 9-12 was a classroom teacher and a classroom teacher aide.

Time Allocation for Reading Instruction

- Students in the elementary grades received more reading instruction per day than students in high school received.
- The amount of time each student received reading instruction was directly related to the type of organizational system used for reading. Students receiving instruction from a reading specialist, reading specialist aide, and a classroom teacher received more instructional time than students receiving instruction from only a classroom teacher.

Types of Achievement Tests Used

- Twenty-nine different types of achievement tests were used in K-12. The Metropolitan Reading Readiness Test was used by 50 percent of the pupils in kindergarten. Fifty-six percent of the pupils in grade 1 used the Cooperative Primary. Fifty-seven percent of the pupils in grade 2 and 59 percent of the pupils in grade 3 used the Stanford Reading Test. Forty-nine percent to 63 percent of the pupils in grades 4-8 used the Comprehensive Test of Basic Skills. No single test was used by more than 19 percent of the students in grades 9-12.

Estimated Cost

- An estimated \$155 per student was encumbered from Title I funds for reading activities. The use of other supplemental funds increased the estimated cost of reading instruction to \$240 per student. The cost estimates do not include funds spent by the district for the regular reading program.

Problem Areas and Recommendations

The major problem areas and recommendations identified in the component were:

- Differences between target schools, student populations, and student needs require individual project planning, implementation, and evaluation by target school.
- English as second language activities should be planned, implemented, and evaluated separately from the language development component. Techniques, materials, and evaluation systems appropriate for the reading activity are not necessarily appropriate for ESL. Likewise, techniques, materials, and organizational systems which were successful for students in an ESL activity were not necessarily successful for students in a reading activity.
- The local districts need a standardized system to identify costs per student of the regular district reading program. Cost data from the regular district reading program are also necessary to identify the total cost of reading rather than just the per pupil cost of reading instruction from Title I and other supplemental funds.
- Use of many different tests to evaluate reading components at each grade level severely reduces the ability of evaluators to determine the effectiveness of alternative methods of organizing for reading instruction.

Mathematics Component

School districts were required to include mathematics as one of the six components in their 1969-70 Title I programs. It was the first time that this requirement had been made. A total of 192,609 students participated in the mathematics component. The number and percent of students participating at each grade level are shown in Table 22.

TABLE 22
NUMBER AND PERCENT OF STUDENTS PARTICIPATING
IN ESEA TITLE I MATHEMATICS COMPONENT

Grade	No. of Students	Percent
K	20,194	10.48
1	25,160	13.06
2	28,286	14.69
3	26,292	13.65
4	26,041	13.52
5	23,780	12.35
6	21,494	11.16
7	6,874	3.57
8	3,540	1.84
9	5,973	3.10
10	2,262	1.17
11	1,572	.82
12	1,141	.59
Total	192,609	100.00

Expenditures for the mathematics component were \$17,637,348. Of this amount, about 13.3 million dollars were encumbered from Title I funds. This amount represented 22 percent of the statewide Title I expenditures; the average per student was about \$70. Specific sources of expenditures for the mathematics component are shown in Table 23.

TABLE 23

EXPENDITURES FOR MATHEMATICS COMPONENT IN ESEA, TITLE I PROGRAMS
BY FUNDING SOURCE, 1969-70

Funding Source	Cost	Percent
<u>Federal</u>		
Title I, ESEA	\$ 13,387,030*	75.90
<u>State</u>		
Miller-Unruh Mathematics Act	185,118	1.05
Teacher Employment (AB 938)	853,827	4.84
Educational Improvement Act (AB 606)	1,618,431	9.18
<u>Local</u>		
Cash Contributions	1,529,335	8.67
<u>Other</u>		
Other	63,607	.36
ALL FUNDS	\$ 17,637,348	100.00

*This amount is 22% of the total Title I expenditures and averages to about \$70 per participant.

ACHIEVEMENT GAINS

Standardized achievement test data for the mathematics component indicated that two-thirds of the students gained at least a month's growth per month of instruction and one-fourth of the students showed little if any improvement.

A summary of student achievement gains in mathematics by grade levels can be seen in Tables 6 and 8, pages 18 and 20 of this report.

ORGANIZATIONAL SYSTEMS

Local school districts utilized various organizational systems in conducting the mathematics component. For example, one or more of the following kinds of personnel were used in the mathematics instruction component: a classroom teacher, a mathematics specialist, a classroom teacher aide, or a mathematics specialist aide. (Table 24).

In about one-third of the projects a "classroom teacher and classroom teacher aide" was the major organizational system. In those instances a large portion of the compensatory education mathematics component expenditures were used in support of teacher aide services. In contrast, another one-third of the projects utilized a mathematics specialist in addition to the classroom teacher. This organizational system usually was more expensive because of salary differentials between mathematics teaching specialist and classroom aides.

TIME SPENT IN MATHEMATICS

The amount of time allocated for mathematics instruction varied by grade level and the type of organizational systems. The least amount of time was spent when the instruction was conducted only by the classroom teacher. Variations in the amount of daily instructional time, expressed in hours for each organizational system, are shown by grade levels in Table 25.

CONCLUSIONS

Most of the compensatory education funds allocated for the mathematics component were expended at the elementary level, and in comparison with reading, the mathematics component received limited resources.

The mathematics component demonstrated effectiveness in improving achievement in mathematics in its first year as a component within a comprehensive compensatory education program. Rates of gain approximated those made in language development.

Instruction in mathematics did not utilize the wide array of instructional strategies characteristic of many language development programs.

A shortage of mathematics teaching specialists at the elementary school level was a hindrance to some districts in implementing their mathematics instructional programs.

TABLE 24

DISTRIBUTION OF ESEA, TITLE I PROJECTS SHOWING ORGANIZATION SYSTEMS
USED FOR MATHEMATICS, BY GRADE LEVEL
1969-70

Grade	No. of Projects	Organization System Code*									Total
		100	110	120	130	140	150	160.1	160.2	160	
		Percent of Projects									
K	141	2	11	11	2	16	42	1	1	14	100%
1	245	2	13	16	6	8	38	1	1	15	100%
2	275	2	16	16	5	8	37	1	1	14	100%
3	287	2	18	15	5	7	37	1	1	14	100%
4	300	3	20	17	4	7	33	1	1	14	100%
5	299	2	23	16	4	7	33	1	1	13	100%
6	273	3	23	17	4	7	31	1	1	13	100%
7	59	7	17	10	5	22	31	3	-	5	100%
8	51	8	18	10	4	25	25	4	-	6	100%
9	82	8	6	8	1	26		2	-	9	100%
10	51	8	4	12	2	18		4	-	12	100%
11	42	10	5	12	2	19	38	5	-	9	100%
12	36	8	3	14	3	19		5	-	5	100%

*Code

- 100 mathematics specialist only
- 110 mathematics specialist and classroom teacher
- 120 mathematics specialist, mathematics specialist aide and classroom teacher
- 130 mathematics specialist, mathematics specialist aide, classroom teacher and classroom teacher aide
- 140 classroom teacher only
- 150 classroom teacher and classroom teacher aide
- 160.1 mathematics specialist and mathematics specialist aide
- 160.2 mathematics specialist, classroom teacher and classroom teacher aide
- 160 other systems

TABLE 25
INSTRUCTIONAL TIME (IN HOURS) FOR EACH ORGANIZATION
SYSTEM, IN ESEA, TITLE I PROGRAMS
BY GRADE LEVEL

Grade	Organization System Code*						
	100	110	120	130	140	150	160
	Average Instruction Hours Per Day Per Student						
K	.42	.48	.63	.58	.27	.54	.42
1	.56	.76	.89	.73	.45	.71	.69
2	.53	.81	.94	.88	.57	.76	.71
3	.60	.89	.95	.94	.61	.79	.74
4	.75	.97	.95	.92	.67	.83	.79
5	.68	.99	.94	.92	.74	.85	.81
6	.78	1.02	.97	.89	.79	.80	.83
7	.78	1.00	.98	.86	.68	.84	.51
8	.78	1.01	1.01	1.04	.67	.81	.51
9	.88	.97	.82	1.00	.74	.73	.63
10	.67	.89	.80	1.00	.75	.64	.55
11	.67	.89	.68	1.00	.74	.74	.51
12	.72	.83	.68	1.00	.71	.67	.43

***Code**

100	Mathematics Specialist Only
110	Mathematics Specialist and Classroom Teacher
120	Math Specialist, Math Specialist Aide and Classroom Teacher
130	Math Specialist, Math Specialist Aide, Classroom Teacher and Classroom Teacher Aide
140	Classroom Teacher Only
150	Classroom Teacher and Classroom Teacher Aide
160	Other Systems

Auxiliary Services

Auxiliary services was one of the six mandated components in the academic year 1969-70. While auxiliary services as a component is required in each application, only those students needing some type of specific remediation were enrolled. Hence, the number of students in this component is less than the number seen in the academic components.

There are three activities in the auxiliary services component: library services, pupil personnel services, and health services.

Libraries were used as a specific adjunct to the academic components, usually to reinforce the language development component. Ten districts reported that they established mobile libraries serving 3,050 students. Almost 200 districts augmented their library services and served more than 70,000 students. About \$966,252 was encumbered for these two activities. This amounts to an expenditure of about \$12.75 per pupil. In many cases books were supplied through ESEA Title II to meet the minimum standard of ten volumes per student set by the American Library Association.

Districts evaluated their library activity by measuring usage of the facility and indirectly by achievement test score gains. A few examples of statements supplied by districts are:

- During the year, a high percentage of the pupils used the library and checked out books.
- A significantly higher percentage of pupils checked out books in the spring than in the fall. Reading scores continued to rise.
- Library services in the target schools were highly utilized.
- Children are acquiring not only library techniques, but also a desire to read widely.
- Library services will be available every day next year. A greater selection of books will also be made available.

Pupil personnel services included several types of activities, mostly counseling of students either individually or in groups. The types of activities can be seen in Table 26.

TABLE 26
 NUMBER OF ESEA TITLE I STUDENTS
 TAKING PART IN PUPIL PERSONNEL ACTIVITIES
 1969-70

Activity	No. of Students	No. of Districts	Amount of Dollars
Individual Counseling	20,579	96	\$ 1,025,175
Group Counseling	4,017	22	340,786
Parent Counseling	4,625	24	97,631
Psychological Testing	10,240	88	455,818
Home Counseling	1,613	12	53,882
Psychometric Assistance	2,245	21	97,561
Speech Therapy	1,123	15	35,821
Multiple Services	48,083	47	1,550,767
Total	92,525	325	\$ 3,657,441

"Multiple services" means that districts offered a combination of services such as individual testing (psychometric assistance) plus individual counseling. Thus the total number of participants, 92,525, is in some cases a duplicated count. The cost per pupil served was about \$39.50.

It is very difficult to evaluate these activities in terms of specific student achievement outcome. Many of these activities can best be evaluated on a subjective basis through the use of questionnaires, anecdotal records or similar documentation.

Some examples of these are:

- Parents of every child in the program were contacted at home and at school regarding their child's progress. Very positive responses have been observed of parent reaction to this service.
- Seventy percent of the students were rated higher in self-confidence from pre to posttests. None was less "self-confident". Thirty percent was rated as "no change" from pre-to posttest.
- The dropout rate has held steady or declined at each of the target schools. The program has been successful at most schools. The emphasis in this component has shifted to the use of community counselors and community aides.

Health services activities were implemented in 300 districts with approximate expenditures of \$7.58 per pupil served. As with pupil personnel services, the number of students served, in some cases, is a duplicated count. For example, a student would receive a screening exam (health services or diagnostic services) with specific follow-up by the school nurse, physician or dentist. More than 200,000 children benefitted from health services. The distribution of activities is shown in Table 27.

TABLE 27
NUMBER OF STUDENTS RECEIVING HEALTH SERVICES:
SHOWN BY TYPE OF ACTIVITY AND EXPENDITURES

Activity	No. of Students	No. of Districts	Amount of Dollars
Health Services	165,686	30	\$ 963,856
Nurses	35,399	187	473,751
Medical	3,804	21	62,972
Dental	157	6	9,940
Nutritional	2,835	32	42,956
Diagnostic Services	2,735	24	44,096
Total	210,616	300	\$1,597,571

District reports show these benefits:

- Children were able to see the nurse more often and receive medical attention for health problems.
- Children received free dental care through the County Pediatrics Clinic.
- Attendance records indicate a 20 percent decrease in unexcused absences due to district effort in securing glasses, dental work and clothing.
- Title I students received dental and medical inspections from a dentist and a medical doctor.
- Teachers, nurse, psychologist and teacher aides were provided intensive inservice training to enable them to better observe, test and diagnose pupil learning problems and develop preventive programs.

While many diagnostic surveys were made, there remains the problem of correcting defects once they are identified. Table 28, which follows, presents data that illustrate this problem. It is clear that if health services are to be effective, they must include follow-up and corrective procedures.

TABLE 28

A SUMMARY OF THE RESULTS OF DETECTION AND
CORRECTION OF PHYSICAL DEFECTS BY THE SCHOOL NURSING
SERVICES IN THE ESEA SCHOOLS - SPRING SEMESTER, 1970

Physical Defects	Physical Defects <u>Found</u> During One Semester in ESEA Schools	Physical Defects <u>Corrected</u> During One Semester in ESEA Schools
Eyes	31	22
Vision	200	86
Ears	44	55
Hearing	60	34
Skin	109	84
Allergies	90	26
Nose	35	29
Mouth	29	19
Dental Caries	924	271
Throat	61	29
Lungs	2	1
Heart	29	4
Circulation	1	1
Gastro-Intestinal	4	4
Genito-Urinary	12	6
Hernia	5	2
Posture	13	--
Weight Deviation	25	--
Orthopedic	14	6
Neurological	49	23
Fatigue	74	10

Intergroup Relations Component

School districts participating in compensatory education programs in the 1969-70 school year were requested to include experiences for children in intergroup relations. The component was to provide opportunities for children to understand and appreciate the ethnic, cultural, and social groups within a community, and to provide opportunities for children from differing ethnic and socio-economic backgrounds to work together toward greater academic achievement, better inter-personal relationships, and more positive self-concepts. School districts reported spending \$2,621,981 for intergroup relations components. Of this amount, \$1,930,632 was encumbered from Title I funds. School district funds provided an additional \$409,066, and \$282,283 were encumbered from other sources.

MAJOR OBJECTIVES

Major emphasis was placed on establishing positive attitudes toward ethnic groups through multicultural experiences. In general the objectives could be grouped into four categories: curriculum, informational, inservice education and integration. Examples of objectives reported by school districts for each of the categories were:

Curriculum

- Increase contacts of different groups through involvement in curriculum study projects.
- Improve linguistic skills.
- Include in the curriculum contributions made by minority ethnic groups.
- Provide reading materials that contain contributions by persons from many ethnic groups.

Informational

- Increase information regarding the contributions of all ethnic groups.
- Assist groups in making surveys relating to the educational and occupational aspirations of the children, including information about scholarships.

Inservice Education

- Provide visitation day for school staffs to visit schools with different ethnic populations.
- Promote parent and staff workshops aimed at achieving a better understanding of school and community aims.
- Increase school staff understanding and skills in effecting better intergroup relations.

Integration

- Alleviate identifiable social, linguistic and racial isolation.
- Decrease racial and ethnic imbalance in schools.
- Increase contacts among different groups through social, recreational and instructional activities.

ACTIVITIES

Many of the activities were carried out through exchange type programs. Examples of activities mentioned most frequently for the objectives were:

Curriculum Activities

- Development of instructional packets on different ethnic and socio-economic groups
- Introduction of "minorities studies" with course credit
- Employment of tutors, aides and teachers of representative minority groups
- Study trips and workshops in which children from different ethnic and socio-economic backgrounds worked together in activities such as art, music, photography, science and student government

Informational Activities

- Minority group speakers for student meetings
- Intergroup field trips
- Inter-school visitations by teacher, tutors, aides and pupils
- Establishment of pupil advisory services to discuss issues of race relations

Inservice Activities

- Development of intergroup relations guides for school staffs
- Ethnic studies' workshops for school staffs and parent groups
- Outdoor education camps for staffs and children from different ethnic groups

A brief summary of the intergroup relations component conducted by one of the large city districts describes the program as follows:

"The Program for Interschool Enrichment (PIE) was designed to provide opportunity for children, grades 1-6, from differing ethnic and socio-economic backgrounds to work together toward greater academic achievement, better interpersonal relationships, and more positive self-concepts. Selected classes from Title I schools, including some student councils, were paired with selected classes from non-Title I schools as a basis for the project. At the beginning of the school year, teachers of these partner classes jointly developed an instructional theme in student government or in a subject area of their choice, such as language arts, science, or social studies.

"During the year each pair of classes met at one or the other of their schools and/or took field trips together as the principal medium for the learning activities. These meetings were intended to provide a basis for communication and mutual problem solving and for development of interpersonal relationships.

"Parents were invited to attend teacher inservice meetings, to share in planning, and to assist teachers with class meetings at schools or on field trips. Substitute teachers were provided so that participating teachers could attend as many as possible of the seven all-day staff development meetings which were held during the year.

"Each pair of PIE classes was scheduled to meet one full day on alternative weeks between September 1969 and June 1970. Staff development meetings for teachers were held about once a month.

"Children in grades one through six worked with children from differing ethnic and socio-economic backgrounds on science, literature, mathematics, art, social studies, music, and student-government themes.

"Activities for each instructional theme, planned to promote specific learning in that subject area, included research projects, field trips for science specimen collection and identification, art workshops in photographic line design, sculpturing, silk screen process, texture study, group painting, collage construction, opera study, assembly line production, and joint class culminations, as well as attendance at opera rehearsals and performances, and visits to City Council, County Board of Supervisors, Board of Education, Court House, and consular offices.

"Written, taped, pictorial, and filmed reactions to the experiences were exchanged between classes and between individuals in order to strengthen self-image, build interpersonal relationships, improve communication skills, and reinforce cognitive learning.

"Student-produced stories and reports and photographs of the participants were printed in bi-semester issues of "P.I.E. Happenings", a four-page newspaper that was distributed to all persons involved in the program.

"Other approaches to better intergroup relations mentioned by individual schools included use of films or other audio-visual materials to provide opportunity to contrast and compare values; use of library displays and library resources; auditorium displays, assemblies, or assembly recognition to individuals and/or classrooms; school clubs, including interest groups in intercultural relations, industrial arts, careers, journalism, and charm; activities to develop self-image and self-respect; the tutorial program; ethnic studies; art, dance, or music presentations; group discussions; workshops; speakers; displays; and home visitation."

CONCLUSIONS AND RECOMMENDATIONS

Questionnaires to teachers, parents and students provided a large portion of the evaluation information on the intergroup component. In addition, records kept on the extent of participation, anecdotal records, measures of changes in attitudes toward others and self-concept scales were also part of the evaluation strategy.

School tours and establishment of ethnic studies centers in the classrooms and libraries were common intergroup activities in the schools. The general feeling was that such programs were beneficial. Likewise, assembly speakers or programs promoting inter-cultural understanding also were seen as positive forces. Reactions of teachers, administrators and pupils indicated that they believed effective work was being done in a variety of intergroup approaches and activities.

School districts made the following recommendations for improvement of intergroup relations components:

- More instructional materials that reflect contribution of many ethnic groups
- Ethnic studies for all students
- Increased interaction of persons of various ethnic groups
- Less sporadic efforts -- such as infrequent visitation and assemblies
- Recruitment and employment of minority group people from the community for work in the school program
- Involvement of more parents, teachers and administrators in the intergroup relations activities

Parent Involvement

School districts were required to implement a systematic plan for parent involvement in compensatory education programs for the 1969-70 school year. The plan was to go beyond the employment of neighborhood and community aides and the use of required advisory committees. School districts were encouraged to provide activities designed to make parents aware of the schools' instructional program and their child's progress and to assist parents in helping their children in the learning process.

Parent involvement activities were reported in 88 percent of the Title I projects. Districts reported spending \$2,191,468 for the parent involvement component. Of this amount, \$1,984,239 was encumbered from Title I funds; school districts' funds provided an additional \$66,383, and \$140,846 were encumbered from other sources. A total of 98,704 parents participated in the activities of the component.

MAJOR OBJECTIVES

Parent involvement activities placed major emphasis on improvement of communications between school and home, involvement of parents in the instructional program of the school, and solicitation of parental support in improving the children's school attendance and attitudes toward school. The objectives of the parent involvement component mentioned most frequently by school districts were:

- Improve communications between school and home.
- Help parents understand the objectives of the compensatory education program.
- Assist parents to help their children in classroom learning.
- Improve children's school attendance and attitudes toward school.
- Utilize parents as resource people to school-community advisory councils.

ACTIVITIES

In general the parent involvement component was designed to enhance learning conditions for children through pupil-parent-teacher activities related to the instructional component, with parents used as resource persons and aides. The activities mentioned most frequently by school districts were:

- Teacher-parent conferences
- Parents serving as resource persons to school-community advisory councils
- Instructional classes for parents conducted by reading specialists and classroom teachers

- Observation of classroom activities
- Parent assistance in classroom activities and study trips
- Home visitations by school staff and aides
- Workshops by parents to construct teaching materials
- Group meetings for non-English speaking parents

A wide variety of services were performed by parents, including:

Preparation of instructional materials
 Reading and/or telling stories to children
 Accompanying classes on field trips
 Sharing hobbies and special talents
 Assisting with art work and music sessions
 Assisting in small-group discussion on "our cultural heritage"
 Shelving books and other instructional aids
 Repairing books and instructional materials
 Preparing bulletin boards
 Serving as interpreters for non-English speaking parents
 Assisting in preparation of newsletters and bulletins in Spanish
 and English pertaining to ESEA, Title I activities

POSITIVE RESULTS

Each school district was asked to summarize the positive and negative results of their parent involvement component. Numerical counts of attendance, rating scales, check lists, questionnaires, and anecdotal records were the evaluative devices used to assess the results of parent involvement. The evaluations usually were conducted by aides in home visitations, group meetings, and parent teacher conferences. In some instances comparisons were made of parent involvement in compensatory education project schools and non-project schools. As might be expected there was a high correlation between degree of involvement and positive attitudes. One unanticipated but encouraging result was that a few school districts reported a reduction in the mobility rate of Title I pupils. In these districts it was felt that a high degree of parent involvement was among the contributing factors.

Positive results mentioned most often by parents and school aides were:

- Increased participation in school affairs
- Better understanding of the school's program
- Improved attitudes toward schools
- Better advisory committees
- Teachers and school aides gaining more insight into family and home situations which might affect school learning
- Improved attitudes of pupils toward school

Parental involvement was valued by a large majority of the participating parents and school aides. In several instances school districts reported that parent advisory groups and parental involvement activities were being planned for non-compensatory education schools. It was clearly evident that increased opportunities for parent-school-community interaction also increased parent interest and participation in school activities.

NEGATIVE RESULTS

Most school districts reported few if any negative results from the parent involvement component. For the most part the negative evaluative comments pertained to failure to accomplish the goals set for parent involvement activities. Negative results included the following:

- Exclusion of working mothers
- Refusal of some parents to participate, which on occasion increased their children's negative attitudes toward school
- Poor attendance by parents at meetings and in volunteer help
- Mobility of parents to another district which kept program at an orientation level
- Reluctance of school staff in making home visitations
- Feeling of school staff members that parents were hostile and oppressive to them

RECOMMENDATIONS

The level of parent participation among the school districts varied from none to almost 100 percent; the average was about 40 percent. It can be concluded that parent interest in the schools increased. Responses from parents, school-community aides and school staffs indicated that parent involvement was a positive influence in improving compensatory education programs. Almost all concerned expressed a strong desire to continue the component.

The recommendations made most frequently fell into the following categories:

- Provide better coordination and training of volunteer help.
- Place more attention on assisting parents to help their children with schoolwork at home.
- Establish specific objectives for the parent involvement component rather than "global" objectives such as "improving learning."
- Provide inservice training for parents in working with school district advisory committees.
- Involve more minority group parents as teacher aides.

- Use teacher aides more for home-parent contacts and home visitations.
- Provide additional paid counselor and teacher aide time for home contacts.
- Increase bilingual community and school aide staff.
- Provide reimbursement for "baby sitters" and travel expenses when necessary to permit parent participation.

Staff Development Component

The 1969-70 school year was the second year the staff development component was required in all Title I projects. Public school employees, non-public school employees, parents, and volunteers were included in a school-community effort to improve the skills and understanding of adults serving disadvantaged students. Special training of project personnel continued to be a major factor in developing new concepts and new teaching skills in Title I projects. The percentage of Title I funds allocated for staff development activities increased from 1.04 percent in 1968-69 to 4.3 percent in 1969-70.

Characteristics of Participants. The staff development component provided training for 34,962 public school employees, non-public school employees, parents, and volunteers. As shown in Table 29, 97.60 percent of the staff development participants were from public schools and 2.40 percent were from non-public schools. Parents and volunteers comprised 26.61 percent of the participants. The staff development component reflected the increased concentration of Title I activities on elementary students; public school employees serving grades K-6 comprised 85.84 percent of the participants as compared with 14.6 percent in grades 7-12.

Many types of public school personnel participated in staff development activities. (Table 30) The component continued to emphasize the training of classroom teachers, reading specialists, mathematics specialists, and teacher aides. Classroom teachers and specialists comprised 64 percent of the participants in 1968-69, as compared with 61.54 percent in 1969-70. Teacher aides and/or teacher assistants comprised 20 percent of the participants in 1968-69, as compared with 21.83 percent in 1969-70.

TABLE 29

**PERCENTAGE DISTRIBUTION OF PARTICIPANTS* FROM
PUBLIC AND NON-PUBLIC SCHOOLS IN 1969-70
TITLE I STAFF DEVELOPMENT COMPONENT**

N=451 School District Projects

Public School Participants				Total Public School Participants		Non-Public School Participants		Grand Total	
School Employees		Parents & Volunteers							
No.	Per-cent	No.	Per-cent	No.	Per-cent	No.	Per-cent	No.	Per-cent
25,043	73.39	9,081	26.61	34,124	97.60	838	2.40	34,962	100.00

*Participants are defined as personnel who participated in 75% or more of the activities in the staff development component.

TABLE 30

PERCENTAGE DISTRIBUTION, BY TYPE OF PERSONNEL, OF PUBLIC SCHOOL PARTICIPANTS* IN THE TITLE I STAFF DEVELOPMENT COMPONENT 1969-70

School Employees	Grades K-6		Grades 7-12		Total Grades K-12	
	No.	%	No.	%	No.	%
Classroom Teachers	11,482	58.90	2,052	63.82	13,534	54.04
Reading Specialists	1,219	6.25	179	5.57	1,398	5.58
Mathematics Specialists	378	1.94	100	3.11	478	1.92
Teacher Aides or Assistants	5,044	25.88	423	13.16	5,467	21.83
Total Teachers, Aides	18,123	92.97	2,754	85.66	20,877	83.37
Administrators, Supervisors, Resource Personnel	1,191	6.11	265	8.24	1,456	5.81
Counselors	179	.92	196	6.10	375	1.50
Librarians					174	.69
Psychologist and/or Psychometrists					233	.93
Social or Community Workers					300	1.20
Nurses					282	1.13
Clerks, Custodians					732	2.92
Other					614	2.45
Total Non-Teachers	1,370	7.03	461	14.34	4,166	16.63
Grand Total	19,493	100.00	3,215	100.00	25,043	100.00

*A participant is defined as one who participated in 75% or more of the staff development component.

Major Objectives. Major objectives of the staff development component were to improve understanding of the special problems of disadvantaged students and to improve skills in planning and organizing for instruction. (Table 31) More emphasis was placed on improving skills related to planning and organizing for instruction than in the previous two years. The improvement of mathematics skills was selected by the projects as a major objective for only 10.91 percent of the classroom teachers. Little emphasis was placed on improving skills of classroom teachers in counseling disadvantaged students.

The major objective selected by 62.10 percent of the projects for reading specialists was the improvement of reading instructional skills. Reading specialists in 7.01 percent of the projects concentrated on improving skills needed in planning for instruction while an additional 7.32 percent concentrated on improving skills in diagnosing educational and learning deficiencies.

The major objective selected by 69.05 percent of the projects for math specialists was the improvement of instructional skills related to mathematics. The second major objective was the improvement of skills in planning and organizing for instruction.

The major objective selected by 30.45 percent of the projects for teacher aides was the improvement of organizational skills in assisting the teacher during instruction. The major objective selected by 18.50 percent of the projects for aides was the improvement of skills related to reading while 11.04 percent of the projects selected the improvement of skills related to mathematics instruction.

The major objective selected by 22.71 percent of the projects for administrators was an understanding of the special problems of disadvantaged students. The major objective selected by 20.19 percent of the projects for administrators was the improvement of administrative skills in planning for instruction. Improvement of skills related to diagnosing individual student educational and learning deficiencies was selected as the major objective for administrators by 9.78 percent of the projects.

The small number of districts, 10.91 percent, selecting the improvement of skills related to mathematics instruction for classroom teachers appeared to be less than desirable. The 1969-70 school year was the first year that all projects were required to have a mathematics component. Although 69.05 percent of the projects concentrated on improving skills related to mathematics for mathematics specialists, only 10.91 percent of the projects with classroom teachers and 11.04 percent of the projects with teacher aides concentrated on improving skills related to mathematics instruction.

Hours of Participation. The reading specialists participated in the greatest number of hours of staff development activities. An average of 21 or more hours of instruction was completed by 56.54 percent of the projects with reading specialists while 52.90 percent of the projects with classroom teachers received less than 20 hours of staff development instruction. Less than 20 hours of staff development instruction was provided by 56.70 percent of the projects using math specialists and by 56.92 percent of the projects using teacher aides. Less than 20 hours of instruction was provided by 48.63 percent of the projects for administrators and by 56.51 percent of the projects for other types of personnel. There was a major difference between projects in the number of hours personnel participated in the staff development component. Most projects

TABLE 31

PERCENTAGE DISTRIBUTION, BY TYPE OF PERSONNEL*, OF THE MAJOR OBJECTIVES OF THE STAFF DEVELOPMENT COMPONENT IN ESEA TITLE I PROJECTS, 1969-70

Major Objectives	Classroom Teachers	Reading Specialists	Mathematics Specialists	Teacher Aides or Assistants	Adm., Supvr., Resource Personnel	Other Personnel
	N=367	N=314	N=210	N=335	N=317	N=167
To Change Attitudes of the Adult Participants About Disadvantaged Students	28.88	3.18	4.76	11.34	22.71	29.94
To Improve Instructional Skills of Adult Participants in Teaching Specific Areas Related to Reading Achievement	21.25	62.10	.95	18.50	4.73	7.78
To Improve Instructional Skills of Adult Participants in Teaching Specific Areas Related to Mathematics Achievement	10.91	6.05	69.05	11.04	4.42	6.59
To Improve Skills of Adult Participants in Organizing for Instruction	13.35	4.78	5.71	30.45	13.88	2.99
To Improve Skills of Adult Participants in Planning for Instruction	10.35	7.01	5.71	5.67	20.19	5.99
To Improve Skills of Adult Participants in Using Special Equipment	.82	1.27	.48	6.27	.63	1.20
To Improve Skills of Adult Participants in Diagnosing Individual Student Educational and Learning Deficiencies	5.45	7.32	3.81	2.39	9.78	9.58
To Improve Skills of Adult Participants in Motivating Students	4.09	2.55	2.86	6.86	4.73	4.19
To Develop New Curriculum Materials or Improve Existing Curriculum Materials	2.72	2.23	3.81	.30	8.20	5.99
To Improve Skills of Adult Participants in Evaluating and Recording Pupil Programs	--	.96	--	.30	3.47	1.80
To Improve Counseling Skills of Adult Participants with Students	.27	.32	--	.30	2.21	13.77
Other	1.91	2.23	2.86	6.58	5.05	10.18
Total	100.00	100.00	100.00	100.00	100.00	100.00

*The types of component participants were not the same in all projects.

provided 30 hours or less of staff development instruction while 12-18 percent of the projects provided 51 hours or more of staff development instruction. (Table 32)

Staff development activities were conducted during the regular school year by 81 percent of the projects. Only seven percent of the staff development activities were conducted during the summer, and 12 percent were implemented during the summer and the regular school year.

Organizational Systems. Project personnel continued to emphasize a workshop approach in staff development activities. (Table 33) Forty-four to 63 percent of all project personnel participated in workshops. A trend toward scheduling workshops at the individual target school continued. Eleven to 27.6 percent of the participants in 1969-70 participated in individual school workshops as compared with an average of 10 percent in 1966-67. Districts using county-wide workshops were primarily rural elementary districts and districts in cooperative projects. Individual consultation and attendance at conferences were also frequently used as organizational systems for staff development. Visitation within the district or outside the district was used by less than 5 percent of the personnel. Only 2.1 percent of the classroom teachers, as compared with 19.4 percent of the administrators, selected conference attendance as the major organizational system for staff development.

Grouping Systems. Staff development activities were conducted in groups of 16 or less by a majority of all participants. (Table 34) The use of small groups for staff development activities increased interaction among staff members. Twenty-four percent of the classroom teachers and 10-17 percent of the other types of personnel participated in groups with 26 or more participants.

Frequency of Meetings. Thirty-one to 40 percent of the personnel in the project participated in staff development activities every two to four weeks. (Table 35) Activities were scheduled weekly or more often for 19-32 percent of the participants. Twenty-one to 29 percent of the personnel participated only annually or biannually. Twenty-four percent of the teacher aides participated weekly while only 16.9 percent of the classroom teachers met weekly.

Instructional Techniques. The major instructional techniques used in staff development activities have shifted from "sit and listen" techniques to discussion-participation techniques. Group discussion of problems and development of solutions by participants with a consultant were selected by 44-60 percent of the projects as a major instructional technique. (Table 36) Listening to a formal presentation with some form of interaction with the speaker was used as a major instructional technique by 19-29 percent of projects. Video tape and problem simulation techniques were used by less than four percent of the projects. The training of personnel by a master teacher while actually assisting students was used more often as a major instructional technique for aides than with other types of personnel.

Cost Factors. Districts did not use Title I funds exclusively to finance the staff development component. Title I funds were used to finance 74.78 percent of the estimated cost of the staff development component implemented during the regular school year. (Table 37) Funds from other state, local and federal sources were also used. The average cost per participant was \$75.11

TABLE 32

PERCENTAGE DISTRIBUTION, BY TYPE OF PERSONNEL, OF THE AVERAGE NUMBER
OF HOURS PER PARTICIPANT ALLOCATED FOR STAFF DEVELOPMENT
IN ESEA TITLE I PROJECTS, 1969-70

Type of Personnel	No. of Projects	Percent of Projects Using Hours Cited for Staff Development of Personnel						Total
		0-10 Hrs.	11-20	21-30	31-40	41-50	51 or More	
Classroom Teachers	344	22.67	30.23	14.54	13.37	6.11	13.08	100.00
Reading Specialists	283	15.20	28.26	14.48	13.08	10.60	18.38	100.00
Mathematics Specialists	210	30.92	25.78	15.98	7.73	4.13	15.46	100.00
Teacher Aides or Assistants	335	28.63	28.29	15.13	10.19	4.60	13.16	100.00
Administrators, Supervisors, Resource Personnel	317	25.18	23.45	16.55	14.82	5.52	14.48	100.00
Other Personnel	167	28.56	27.95	15.53	8.08	7.46	12.42	100.00

TABLE 33

PERCENTAGE DISTRIBUTION, BY TYPE OF PERSONNEL, OF THE MAJOR ORGANIZATIONAL SYSTEMS USED BY ESEA TITLE I PROJECTS FOR STAFF DEVELOPMENT 1969-70

Organizational Systems	Classroom Teachers	Reading Specialists	Mathematics Specialists	Teacher Aides or Assistants	Administrators, Supervisors, Resource Personnel	Other Personnel
	N=373	N=323	N=212	N=344	N=335	N=168
Workshop at the County Level	4.3	6.5	7.1	5.5	7.2	4.8
Workshop at District or Interdistrict Level	32.2	31.3	31.1	30.8	26.6	21.4
Workshop at Individual School Level	26.9	14.2	18.4	27.6	11.0	16.1
Workshop on College Campus	.5	1.5	3.8	.9	.6	1.8
Sub-Total	63.9	53.5	60.4	64.8	45.4	44.1
College Course in the School District	5.1	4.6	1.9	2.0	2.4	3.6
College Course on College Campus	1.3	2.2	4.2	2.9	1.2	--
School or Classroom Visitation - Within the District	.5	.6	.9	.6	--	3.0
School or Classroom Visitation - Outside the District	2.1	1.5	2.4	1.2	2.4	1.8
Conference Attendance	2.1	13.9	6.1	.9	19.4	14.3
Demonstration School Observation and/or Participation	1.9	2.5	2.4	1.5	1.2	.6
Formal Speaker Only	1.3	.3	.5	.9	1.2	--
Individual Consultation with School Personnel	6.4	4.0	7.1	12.2	6.6	13.7
Other	15.4	16.9	14.1	13.0	20.2	18.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 34
 PERCENTAGE DISTRIBUTION, BY TYPE OF PERSONNEL, OF
 THE SIZE OF PARTICIPANT GROUPS USED FOR
 STAFF DEVELOPMENT ACTIVITIES

Type of Personnel	Number of Projects	Percent of Projects Using Size of Groups Cited				Total
		1-7	8-16	17-25	26 or Over	
Classroom Teachers	357	24.64	32.20	19.04	24.12	100.00
Reading Specialists	311	56.26	24.11	9.32	10.31	100.00
Mathematics Specialists	206	62.12	19.40	6.30	12.18	100.00
Teacher Aides or Assistants	335	44.76	35.81	9.24	10.19	100.00
Administrators, Supervisors, Resource Personnel	324	57.39	17.27	9.25	16.09	100.00
Other Personnel	151	49.00	24.28	9.26	17.46	100.00

TABLE 35

PERCENTAGE DISTRIBUTION, BY TYPE OF PERSONNEL, OF THE
FREQUENCY OF STAFF DEVELOPMENT MEETINGS
IN ESEA TITLE I PROJECTS, 1969-70

Frequency	Percent of Projects Holding Meetings for Personnel at Frequency Indicated					
	Classroom Teachers N=373	Reading Specialists N=322	Mathematics Specialists N=207	Teacher Aides or Assistants N=342	Administrators, Supervisors, Re- source Personnel N=332	Other Personnel N=165
5 days a week	1.3	.3	-	4.4	.3	1.8
4 days a week	-	.3	1.4	.3	.3	.6
3 days a week	1.6	1.6	1.9	1.5	.6	-
2 days a week	3.8	1.2	2.4	1.8	1.8	4.2
1 day a week	16.9	19.9	17.9	24.0	16.3	13.9
Sub-Total	23.6	23.3	23.6	32.0	19.3	20.5
Every 2 weeks	15.0	17.7	15.9	10.2	13.0	9.7
Every 3 weeks	4.8	3.4	5.3	2.9	3.0	2.4
Every 4 weeks	16.4	19.6	17.9	18.4	22.3	20.6
Sub-Total	36.2	40.7	39.1	31.5	38.3	32.7
Every 2 months	11.0	7.1	8.7	8.2	10.2	8.5
Every 3 months	5.4	4.3	4.3	2.6	7.2	6.1
Every 4 months	2.4	1.9	.5	2.6	3.0	1.8
Every 5 months	-	.9	1.0	.9	.6	1.2
Sub-Total	18.8	14.2	14.5	14.3	21.0	17.6
Biannually or Annually	21.4	21.8	22.8	22.2	21.4	29.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 36

PERCENTAGE DISTRIBUTION, BY TYPE OF PERSONNEL, OF THE MAJOR
TECHNIQUES USED FOR INSTRUCTION IN THE
STAFF DEVELOPMENT COMPONENT

Instructional Techniques	Percent of Projects Using Major Instructional Techniques for Personnel Indicated					
	Classroom Teachers	Reading Specialists	Mathematics Specialists	Teacher Aides or Assistants	Adm., Supvr., Resource Personnel	Other Personnel
	N=314	N=276	N=180	N=293	N=279	N=131
Analysis of video tape recording: of participants	1.91	.73	-	.34	1.43	-
of students	-	.36	-	-	-	-
of teachers and students	.96	.36	-	.68	-	.76
Construction and/or development of media used for classroom in- struction or diagnosis	7.64	7.25	8.33	7.17	2.87	6.11
Direct observation: of interaction between stu- dents and teachers	3.18	2.90	4.44	6.83	5.02	6.11
of master teachers	1.27	1.09	1.11	5.12	.36	.76
of student or students	.64	.36	1.67	.68	-	1.53
Discussion of problems and devel- opment of solutions by partici- pants with a consultant: from outside the district	23.57	27.90	25.56	13.31	30.47	19.86
from within the district	34.71	31.52	35.00	31.40	30.11	30.53
Listening to formal presentation: followed by a question and answer session	11.15	10.14	10.56	13.65	10.75	14.50
with planned small group dis- cussions later	11.46	14.49	9.44	9.90	11.83	14.50
with no planned small group discussions later	.32	.73	-	-	1.43	2.29
Outside reading and reports to other participants	.64	.36	.56	-	1.43	.76
Participants instruct students under direct supervision of the master teacher	.96	.36	-	9.56	-	-
Problem simulation techniques	1.59	1.45	3.33	1.02	3.58	2.29
Role playing by the participants	-	-	-	.34	.72	-
Total	100.00	100.00	100.00	100.00	100.00	100.00

TABLE 37

ESTIMATED EXPENDITURE, BY FUNDING SOURCE, FOR
THE STAFF DEVELOPMENT COMPONENT IN
ESEA TITLE I PROJECTS, 1969-70

Source of Funds	Amount	Percent	Average Cost Per Participant
Title I	\$ 2,625,957	74.78	\$ 75.11
Educational Improvement Act (AB 606)	228,015	6.49	
Miller-Unruh - Reading	23,785	.67	
Miller-Unruh - Math	11,503	.34	
Teacher Employment (AB 938)	90,215	2.57	
District Funds (Cash Contributions Only)	109,930	3.13	
Other	422,015	12.02	
Total	\$ 3,511,420	100.00	\$ 100.44

from Title I funds and \$100.44 when other funds were included. The reported estimated expenditure per participant has risen from \$47.22 in 1967-68 to \$100.44 in 1969-70.

Twelve percent of the districts reported no expenditures for the staff development component from Title I funds. Expenditure reports are required for the total project but not by individual component, i.e., staff development. Some districts reporting no Title I expenditures implemented the component by using funds from other sources.

Summary of Findings

The 1969-70 school year was the second year the staff development component was required in all Title I projects. Public school employees, non-public school employees, parents, and volunteers were included in a school-community effort to improve the skills and understanding of adults serving disadvantaged students. Special training of project personnel continued to be a major factor in developing new concepts and new teaching skills in Title I projects.

Participants

- The staff development component provided training for 34,962 public school employees, non-public school employees, parents, and volunteers.

Objectives

- Major objectives of the staff development component were to improve understanding of the special problems of disadvantaged students and improve skills in planning and organizing for instruction.

Hours of Instruction

- Most projects provided 30 hours or less of staff development instruction while 12-18 percent of the projects provided 51 hours or more of staff development instruction.

Organizational Systems

- Project personnel continued to emphasize a workshop approach in staff development activities. Forty-four to 63 percent of all project personnel participated in workshops. A trend towards scheduling workshops at the individual target school continued.

Grouping and Frequency of Instruction

- Staff development activities were conducted in groups of 16 or less by a majority of all participants. Thirty-one to 40 percent of the personnel in the projects participated in staff development activities every two to four weeks.

Instructional Techniques

- The major instructional techniques used in staff development activities have shifted from "sit and listen" techniques to discussion-participation techniques. Group discussion of problems and development of solutions by participants were selected by 44-60 percent of the projects as a major instructional technique.

Cost Factors

- Title I funds were used to finance 74 percent of the estimated cost of staff development components. The average cost per participant was \$75 from Title I funds or \$100 per participant when other funds were included.

Recommended Changes

- Changes most frequently recommended by local districts in the staff development component were in the area of component management and the selection of component objectives.

Recommended Changes

Changes most frequently recommended by local districts in the staff development component were in the area of component management and selection of component objectives. The major recommendations were:

Personnel

- Staff development activities should be planned for all personnel in the project. The amount of time allocated for participation should depend on need and the amount of time spent in direct instruction of students.
- The amount of time allocated for staff development and participation for training of instructional aides should be increased. The amount of time necessary for training of the aides was usually underestimated.
- Parents should be included in some portions of the staff development component.

Objectives

- Emphasis should continue to be placed on acquiring teaching skills related to mathematics and reading instruction.
- School personnel should increase their knowledge of other ethnic groups.
- Special instruction should be given in the use of new materials and equipment purchased for the language development and mathematics components.

Organizational Systems

- Classroom teachers, reading specialists, and mathematics specialists requested more opportunities to visit other Title I projects.
- The staff development component should use more small group instruction and discussion in groups of 6-12 participants. The structure should provide for frequent discussion between participants and inservice leaders.
- Staff development activities should be scheduled more often at the beginning of the school year than near the close of the school year to prevent recurring problems.

Instructional Techniques

- Staff personnel requested an increased use of practical demonstrations of new techniques and materials selected for disadvantaged students.

Management Systems

- A planning committee, made up of representative members of the instructional staff and administrators in each target school or in a geographically related group of target schools, should assist the project director in planning the staff development component. The committee should be responsible for suggesting activities within the staff development component which are directly related to solving instructional, motivational, or management problems in the project.
- The role of the aide in assisting the classroom teacher or specialist during reading or math instruction should be more clearly defined.
- Staff members requested more frequent meetings during the year to identify problems, improve coordination, and exchange information about the progress of individual students in the Title I project.
- One person should be responsible for implementing and coordinating the staff development activities in each target school or in a group of target schools.
- A special orientation session should be conducted before school begins for personnel new to the project.
- A special orientation session about changes in the 1970-71 project was requested by returning personnel.
- There should be an increased allocation of funds for released time to enable Title I personnel to participate in staff development activities.

- Reading specialists, math specialists, classroom teachers, and aides requested separate meetings to identify and discuss common problems.
- Additional funds and services were requested to improve the evaluation of the staff development component.
- The amount of funds and time allocated for improving instructional skills of project personnel in mathematics should be increased.

Programs for Neglected and Delinquent Youths in Local Institutions

Forty-eight local educational agencies administered Title I programs for neglected and delinquent youths. A statewide allocation of \$1,046,735 served 6,581 children in local institutions. The average expenditure was \$159 per child. The unduplicated count of agencies and children participating in such programs is shown in Table 38 below.

TABLE 38

NUMBER OF AGENCIES AND CHILDREN PARTICIPATING IN ESEA TITLE I PROGRAMS FOR NEGLECTED AND DELINQUENT YOUTHS

<u>Administering Agencies</u>	
Number of Participating School Districts	30
Number of Participating County Offices of Education	<u>18</u>
Total Number of Administering Agencies	48
<u>Enrollment</u>	
Number of Youths Enrolled in Programs for Neglected Children	1,800
Number of Youths Enrolled in Programs for Delinquent Children	<u>4,781</u>
Total Number of Children Participating in Neglected and Delinquent Programs	<u>6,581</u>

OBJECTIVES AND ACTIVITIES

The primary objectives of most programs for neglected and delinquent children were to improve performance in skill areas and to improve the attitudes of children toward school, toward education and toward themselves. Specific objectives most frequently reported were:

- Improve performance in reading.
- Raise attitudinal level children.
- Improve performance in other skill areas.

- Improve classroom behavior.
- Improve emotional and social stability.
- Improve verbal and/or non-verbal functioning level.
- Provide cultural enrichment experiences.

To meet the objectives of many programs, the major activities were in the area of remedial instruction utilizing tutors. Specialist teachers, teacher assistants and teacher aides were used to reduce the class size and to provide small group and individual instruction. Motivational programmed instruction materials and equipment obtained through Title I contributed to further individualization of instruction. In many cases, counseling and guidance services were also provided to augment the curriculum program. These services were aimed primarily at promoting attitudinal and behavioral changes. The most frequent activities implemented to carry out the objectives were:

- Remedial reading instruction
- Individual tutoring
- Remedial mathematics instruction
- Individual counseling and guidance
- Field trips
- Creative arts experiences and instruction
- Language skills programs
- Psychological testing
- Outdoor or physical education
- Parent visitation

FINDINGS

Due to the transiency of institutionalized children, the duration of participation per student in the programs varied widely. Some students participated for only a month while others were served throughout the school year. The average duration of participation per student was approximately five months.

Test results indicated that the rates of gain ranged from little or no improvement to over two months gain per month of instruction. In remedial reading programs where tutors were utilized and supported by counseling and guidance activities, the average student growth was approximately one month gain per month of instruction.

Teacher aides were used in approximately 65 percent of the participating institutions. The majority of teacher aides were college students who assisted in the curriculum program and frequently rendered tutorial service.

Over three-fourths of the programs provided inservice training for Title I project personnel. Topics covering instructional methodology and the cultural background of educationally handicapped, neglected or delinquent children seemed to have the best inservice training value.

Subjective data showed that the students generally improved in classroom performance, attitude toward school, general behavior and emotional stability. Samples of narrative reports and anecdotal records submitted by local institutions for neglected and delinquent youths are as follows:

"According to the opinions of the basic subjects teachers, pupils in the neglected, institutionalized children's project made significant gains both in academic performance and in personal attitudes".

"As the subjects appeared to gain confidence in their ability to compete with their peers and to improve their attendance in school, the girls were more willing to give attention, spend time on homework, and to complete school assignments. Their use of books from libraries increased. It is felt that increased individual tutorial time probably would have been reflected in greater gains".

"Three participants commented that they never felt they could make it in school before but now they felt they could. Two said they had changed their minds about dropping out of school. Seven completely finished reading a book for the first time in their lives".

"Attitudes certainly changed toward school, in that district coordinators reported a reasonable amount of good adjustment on the behalf of youngsters returning to school. Students within the institutional school were turned on to education through the intensive work done by the tutors".

"Many of the parents were impressed with the program and indicated they were willing to help their children when they returned home because they saw new hope for them".

"The climactic exposition of the project for the entire community has rekindled an empathy within the framework of the citizenry toward the delinquent boys. Where negative connotations were common in reference to the delinquent boys a re-emphasis in faith in the youth has been redeveloped in the attitudes of a large segment of the civilian population".

MOST PROMISING PRACTICES

Projects on which neglected and/or delinquent youths showed improvement toward stated objectives had the following characteristics:

- Individualized instruction utilizing tutors was provided.
- Individual learning deficiencies were diagnosed and activities implemented to meet the needs of students.
- Supportive counseling and guidance services were provided to the students.
- Highly motivational programmed instruction materials and equipment were used.
- Good communication and coordination existed between institution staff, school staff and social welfare staff.
- College students were used as tutors.
- Inservice training was provided for personnel in the instructional program covering the background and problems of neglected and delinquent children.
- Continuing evaluation of academic progress and behavioral changes of students was made.

RECOMMENDATIONS

The most pertinent recommendations made by local project administrators toward improving their programs were:

- Enlarge the instructional staff by hiring additional specialist teachers, teacher assistants or teacher aides.
- Provide more intensive inservice training for both professional and non-professional personnel involved in the program.
- Improve curricular offerings and/or instruction methods to meet program objectives.
- Improve communication and promote closer liaison between teachers and administrators through periodically scheduled meetings.
- Expand the program to include more participating students.
- Provide a continuing evaluation of academic and behavioral changes to determine student growth and needs.

California Plan for the Education of Migrant Children

The California Plan for the Education of Migrant Children is administered by the State Department of Education, Division of Compensatory Education, to provide supplementary educational services to children of migrant agricultural workers in California. The project was administered with the cooperation of 43 county superintendents of schools and 197 local school districts. Services were provided for 40,158 migrant children during the regular school year.

ACTIVITIES

The California Plan for the Education of Migrant Children provided for three forms of services:

- In each of the seven regions of the State a regional component was implemented to provide supplementary educational services to meet the special educational needs of migrant children in impacted school districts within the region.
- Multi-regional components provided services to migrant children in several regions.
- Statewide and interstate activities were implemented to assure continuity and coordination of educational services.

Regional Components. The State was divided into seven multi-county regions to facilitate the administration of services in areas with the greatest impact of migrants. Within each of the regions, one county superintendent was designated the agent of the State Department of Education to perform certain specified tasks necessary to implement the regional program. Each of the seven agency county superintendents submitted a proposal for implementing services to migrant children within the region. These proposals detailed the special educational needs of migrant children in the region, objectives to be attained in meeting those needs, and activities to be implemented in reaching the objectives. All activities and services were to be supplementary to those services available to migrant children through other funding sources. Activities provided were of four types:

- Instructional Activities

In-school elementary and secondary education
Preschool education
Extended day education
Summer school education

Instructional activities emphasized improvement in language and mathematics. Language instruction was tailored to the needs of children and included supplemental instruction in oral language development, English as a second language, reading and writing of English, and maintenance or improvement of first language skills for children who spoke a language other than English. Supplementary instruction in mathematics was provided, as were tutorial services in other subject areas.

- Health and Welfare Services

- Medical health services
 - Dental health services
 - Health education
 - Nutritional services
 - Child welfare services

Health and welfare services were provided to supplement regular services available to all children. Health services included immunizations and screening, followed by examination and diagnosis of health problems and remediation of health defects inimical to the learning processes of children. Welfare services included assessment and remediation of environmental, social, and psychological factors causing poor school attendance or lowered facility for learning.

- Pre- and Inservice Education of Professional and Para-Professional Personnel

- Workshops for teachers, administrators, and other professional and non-professional personnel

- College and university courses for teachers and teacher candidates

- Practicum in education of migrant children for experienced classroom teachers

Workshops to improve specific skills of professional and non-professional personnel in working with migrant children and to increase understanding of the migrant condition and of migrant families were held in each region. Many of these workshops stressed the methods and techniques of cooperative service between professionals and non-professionals. The State Department of Education and regional personnel were instrumental in gaining the cooperation of community colleges in providing courses for teachers and prospective teachers which had relevance for the teaching of migrant children.

- Supportive Services

- Transportation services
- Recreation services
- Family liaison
- Provision of personnel, equipment and supplies

Supportive services were provided in all regions. Transportation of children, and where necessary, parents, to clinics and other medical and dental facilities was provided. Children were transported on study trips that reinforced instructional activities. Liaison was maintained with the community and with migrant families primarily through employment of community aides and special liaison personnel. Most of these personnel were bilingual and many were migrants or ex-migrants.

Recreational programs were provided as an adjunct to instructional programs in the late afternoon and evening. Materials and supplies were provided for supplementary programs of instruction for migrant children.

MULTI-REGIONAL COMPONENTS

The California Migrant Teacher Assistant Mini-Corps:
The California Migrant Teacher Assistant Mini-Corps program was operated in four regions which included twenty-six counties. The program consisted of the selection and pre-service training of 200 college students from bilingual backgrounds who want to become teachers. The students received field experience by working as teacher assistants in school districts operating summer programs for migrant children. The training was provided through four California State Colleges. Teachers with whom the Mini-Corpsmen would work were given simultaneous training with the students. This provided a common basis for cooperation between the teachers and Mini-Corpsmen. The field experience portion of the work was supervised by the colleges and by personnel in the regions and schools being served.

The 200 Mini-Corpsmen provided a wide variety of services to migrant children and their families, both in school and in camps and family housing centers.

The Migrant Preschool Day Care Program. To provide a comprehensive program of preschool education and day care for migrant children, a contract was again negotiated between the State Department of Education, the State Department of Social Welfare and the Department of Human Resources Development to provide a multi-funded program of preschool education and child

care in the publicly operated migrant family housing centers in the State. The contract provided that the program would be administered by the State Department of Education, Division of Compensatory Education, Bureau of Community Services and Migrant Education. Funds available through the Social Security Act, Title IV and the Department of Human Resources Development were utilized to carry on a program of child care for children two to five years of age. Funds provided under Title I were used for a four-hour preschool education program. The total program provided services for at least twelve hours per day, six or seven days per week for the approximately six months of the year that the centers were kept open. The preschool program included activities to enhance the academic, psychological, social, and physical development of children three to five years of age.

Pilot Program in Group Infant Care. As an extension of the child care activity, another contract was negotiated between the State Department of Education, the State Department of Social Welfare and the Department of Human Resources Development to begin a pilot program of group infant care in three of the migrant family housing centers. This program, funded with Social Security Act funds and administered jointly with the preschool day care program, was started in August 1970 to accommodate 84 infants from migrant families. The program is designed to provide a healthy, mentally stimulating environment for babies of working migrant mothers.

Component Activities. Regional components implemented a number of exemplary activities. The following examples are typical of the scope and variety of these activities:

- Complete dental services were provided for 3,161 migrant children in three regions during June, July and August through contracts with the University of California School of Dentistry. The University provided two mobile dental vans which included X-ray and laboratory facilities. The vans were located in migrant family housing centers and children were scheduled for appointments by the regional staff. The vans were manned by supervising dentists and dental interns from the University. Each child was provided a dental examination and flouride treatment of the teeth. Carious teeth were repaired, or if beyond repair, were extracted. Complete services were provided for less than \$35 per child.
- All regional components placed high priority on programs in oral language development and English as a second language. Evaluations of these programs indicate language improvement, greater ease in the classroom

environment, and increased participation in all areas of instruction on the part of migrant students.

- One region devised a method of providing tutorial assistance to migrant children based upon a diagnostic prescriptive approach. Specially trained aides carried out prescribed activities designed to overcome specific learning problems. The classroom teacher, with the assistance of a specialist teacher from the regional office, diagnosed the individual needs of each child and prescribed learning activities to meet these needs. Since extensive training of both teachers and aides is required, the program was not put into operation soon enough for objective data to be gathered for this report. However, the program holds promise for meeting two of the major needs of migrant children: individualization of instruction and continuity of the learning process.
- Health services were a part of all regional components and were designed to supplement services available through other sources. Most of the programs included screening for health defects and immunizations. Most programs provided some treatment of severe health problems, and a few provided extensive medical and dental care. Nutrition was provided mainly in summer school programs, since migrants participate in school lunch programs available in the schools during the regular term. In a number of regions, breakfast, as well as lunches and between meal snacks, were served.
- Home-school-community liaison services were emphasized in all regional programs. These involved the employment of bilingual aides to facilitate communication between migrant parents, many of whom have a limited command of English, and the schools. The services proved very effective in helping to locate and identify migrant children and in improving relations between migrant parents and the schools. This effort resulted in better attendance and attitudes toward school on the part of migrant students and greater interest in the schools on the part of their parents.

Interstate Activities. It is estimated that only about 7 percent of migrant children in California are involved in interstate migration. Most of these are migrants from Texas and Arizona who are in the State for summer harvest and remain for relatively short periods. As a result, California did not participate extensively in interstate institutes or curriculum planning, although there was limited participation with the State of Texas.

California has continued to be active in the development of the Uniform Migrant Transfer Record System. The State Department of Education continued to operate and improve the manual system for transfer of both intra- and interstate migrant students records. The system has operated relatively smoothly in all regions of the State.

INTER-RELATIONSHIPS WITH REGULAR TITLE I PROGRAMS

All educational programs operated within the California Plan for the Education of Migrant Children are required to be supplementary to, and to complement, all other programs available in participating school districts, including those provided under regular Title I. It should be noted that in many districts, however, most of the migrant children are not eligible for regular Title I programs. The amount of funds allocated to California for regular Title I programs is far too small to meet even the most pressing educational needs of disadvantaged children. In order to prevent dilution of the program, the numbers of children served has been strictly limited. In larger districts this has been accomplished through designation of target areas where the highest concentrations of low income families reside. For the most part, agricultural workers tend to reside outside of these high concentration target areas. Emphasis is also placed on serving children over an entire year, or if possible for several years; thus, migrant children are usually not included in regular Title I projects. Since many of the most pressing educational needs of migrant children are similar to those of disadvantaged resident children, districts have tended to provide similar services for the two groups through the two funding sources.

Many school districts have been able to utilize some of the same personnel, facilities and equipment for both programs. Costs, in these cases, are prorated. Inservice training for personnel has been available to those employed in both programs. Teachers and administrators who have received special training in workshops for migrant program personnel have, in some cases, been utilized in these inservice programs.

FINDINGS

Objective Data. All schools participating in the California Plan for the Education of Migrant Children were requested to administer the California Achievement Tests in reading and mathematics to all migrant children participating in instructional activities supported by the Plan at the beginning of the instructional activity. Those still enrolled at the end of the program period were to be administered the same test as a post-test. The mean gain in scores was to serve as a measure of program

effectiveness when compared to normal gains for the period covered by the instruction. This attempt to get objective standardized test data produced only limited results. A variety of factors contributed to difficulties in obtaining significant test data. The major problem was the high mobility of the migrant population. Only a small percentage of the children took both a pre and a post-test, which increased the possibility that reported results are atypical. Another factor was the variability in program length from district to district, with the resultant differences in length of the instructional period between tests. The most important factor, however, appeared to be the variability in test administration which occurred. In many instances it appeared that standard testing procedures were ignored, even to the extent that some attempted to translate instructions into Spanish.

In spite of these difficulties, there are indications that migrant children who received supplementary instructional services through the California Plan are progressing academically at a more rapid rate than are children not receiving these services; in some cases the project children may even be surpassing their resident classmates.

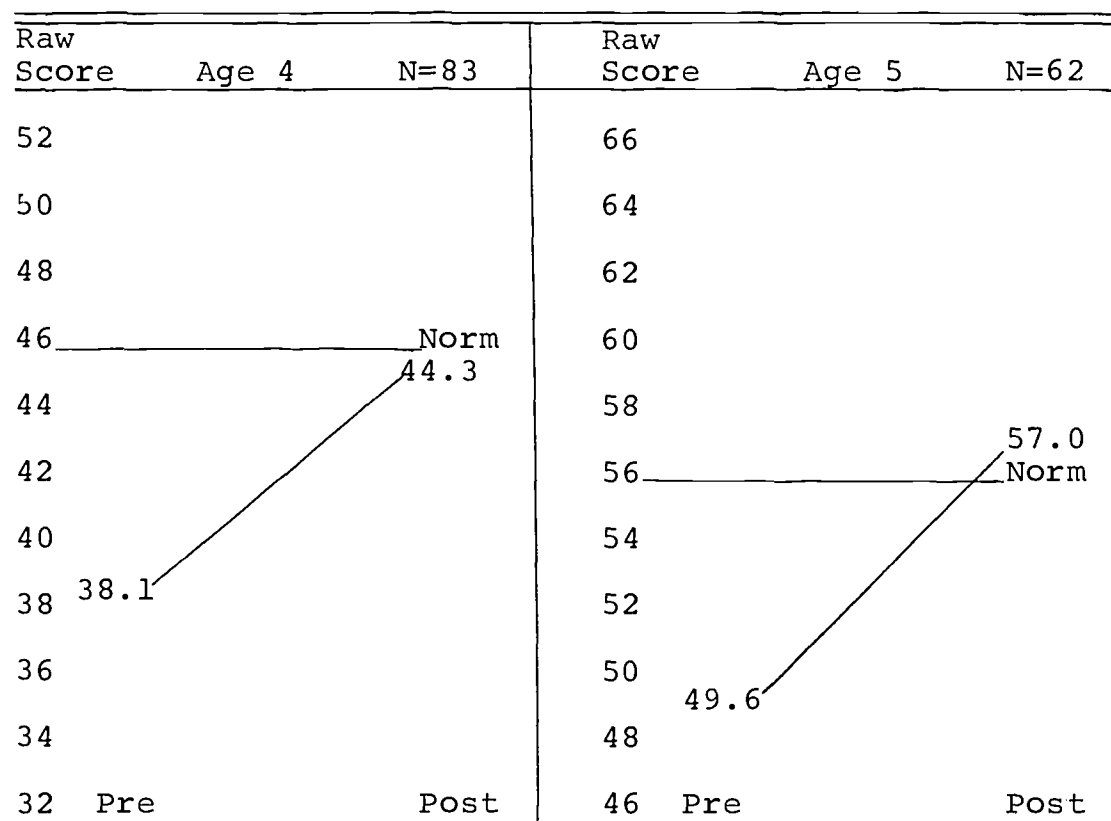
The following cases will illustrate some of the tangible results of the program in various locations.

Test Results - Day Care Preschool Program. In the pre-school programs carried on in the migrant family housing centers, children were tested with the Bettye Caldwell Preschool Inventory. Pre- and post-test scores were obtained for a total of 145 children, of which 83 were 4 year olds and 62 were 5 years of age. A pre-test was administered on July 1, 1970, at the beginning of the summer program; post-testing was accomplished on August 26, 1970. At each age level the mean raw scores of the children improved significantly. Figure 1 illustrates the gains in relation to the test norms for disadvantaged children.

Academic Gains for Children in Regular and Summer School Programs. Evaluations from the seven regional components presented a variety of statistics on the academic achievement of children in the program. The data indicate that although considerable variation exists between the regions, the overall effect of the program was positive. Children participating in programs within the California Plan at all grade levels averaged at least one month gain for each month of instruction in reading and mathematics. Children in concentrated summer programs and those in the upper grades tended to make greater gains than did those in regular school year programs and those in the primary grades. Greater gains were indicated in reading than in mathematics, reflecting the greater emphasis on language improvement programs.

FIGURE 1

GAIN IN RAW SCORES OF 4 AND 5 YEAR OLDS AS MEASURED BY THE BETTYE CALDWELL PRESCHOOL INVENTORY IN AN 8-WEEK SUMMER PROGRAM



o Health Services

Statistics from the seven migrant regions show that 18,971 children were screened for various health defects during the regular school year, and an additional 8,919 were screened during the summer session. Of these children, a total of 10,607 were given treatment.

Subjective Data. A variety of techniques were used to collect subjective data concerning various aspects of the programs. These included questionnaires, opinionnaires, anecdotal records, rating scales, diaries, and interview records. Information was obtained on such factors as teacher attitudes toward migrant children, workshop effectiveness, teacher estimates of pupil growth, effectiveness of para-professional personnel, and suitability of materials and methods employed in the program. Two examples of this type of data follow:

A one-day workshop for administrators and school project directors was held in one region. The main purpose of the workshop was to explain the mechanics of operating the component; topics included fiscal accounting and control, responsibility of administrators for migrant education, and statistical reporting. Fifty-four persons attended the meeting. Participants were asked to fill in a questionnaire to evaluate the workshop. A summary of their responses is presented in Table 39.

In one region, school districts were asked to rate the appropriateness of the California Achievement Test for measuring the achievement of migrant pupils. Forty-seven school districts reported. These forty-seven districts rated the test as follows:

Nine percent found it very appropriate.

Forty-two percent found the test appropriate.

Thirty-six percent found it inappropriate or said they preferred other tests.

Six percent said it was inexcusable to use it.

Six percent said they did not use the test, but did not rate their judgment of its effectiveness.

Expansion of Services. Services provided for migrant children during the 1970 fiscal year were not markedly different from those provided during the previous year. They were, however, organized to benefit more children and to take into account the varying periods of impactation in participating school districts. As a result, 35,324 children were provided services during the regular school year, and 11,076 were served in summer programs. Because of the intrastate movement of children in California, it was not possible to determine exactly how many participated in both programs, but it is estimated that approximately one-half of the summer program enrollees were also served during some part of the regular school term. During the regular term 197 districts participated in the program, and 78 of these also provided programs during the summer.

Most Effective Activities. For children in preschool through grade 3, language development, health and nutrition services, cultural enrichment, home-school-community liaison services, and individualized instruction appear to have been the most effective activities.

In grades four through six, language development, English as a second language, home-school liaison activities and health and nutrition services seemed most effective.

TABLE 39

SUMMARY OF RESPONSES OF PARTICIPANTS IN
ADMINISTRATORS AND PROJECT DIRECTORS WORKSHOP

Respondents 54

		Superin- tendents(8)	Princi- pals (8)	Project Dir. (20)	Classi- fied(8)	Unidenti- fied(10)	Total (54)
Conference Rating	Excel- lent	7 87.5%	2 25%	3 15%	2 25%	3 30%	17 31%
	Good	1 12.5%	4 50%	14 70%	5 62.5%	7 70%	31 57%
	Fair		2 25%	3 15%			5 9%
	Poor						
Conference Time	Excel- lent	6 75%	4 50%	12 60%	5 62.5%	5 50%	32 59%
	Good	2 25%	3 37.5%	7 35%	2 25%	5 50%	19 35%
	Fair			1 5%			1 2%
	Poor		1 12.5%		1 12.5%		2 4%
Conference Attendance	Essen- tial	3 37.5%	2 25%	10 50%	2 25%	5 50%	22 41%
	Impor- tant	5 62.5%	5 62.5%	8 40%	5 62.5%	5 50%	28 52%
	Not im- portant		1 12.5%	2 10%	1 12.5%		4 7%
	Waste of time						
Increased Knowledge	Yes	8 100%	6 75%	17 85%	8 100%	9 90%	48 89%
	No			1 5%		1 10%	2 4%
	Unde- cided		2 25%	2 10%			4 7%

In grades seven through twelve, language development, individualized instruction, study centers, tutoring services, health and nutrition services, and home-school-community liaison services were judged most effective.

Classroom Procedures. Evaluation of the activities and services for migrant children showed that the most effective procedures in improving the achievement, behavior and self-concepts of migrant children were those which made possible a

high degree of individualized attention and interaction between the migrant student and a sympathetic and knowledgeable adult. Specialist teachers, teacher assistants and teacher aides were used to reduce the ratio of students to adults and to provide small group and individual instruction.

As the California Plan has as a major objective the full integration of migrant children into the mainstream of American life, all migrant students were enrolled in regular classes with resident students and in regular district schools. Children who needed specialized instruction in English as a second language, special oral language development programs or special assistance of a tutorial nature were either grouped within their regular classrooms for special help or were placed in special classrooms for short periods of intensive instruction by specialist teachers and aides. For most of the day the children received instruction in a completely integrated classroom, often with special assistance from a bilingual aide to help them interpret the instructions of the teacher. Summer programs included cultural enrichment and recreational activities designed to bring about full participation with the resident population in community activities.

COMMUNITY INVOLVEMENT

A major effort of the migrant education program in California has been centered on bringing about maximum involvement of the total community in the program. An important aspect of this effort has been the development of school district advisory committees to assist in the identification of needs, planning of programs, and evaluation of program effectiveness. In districts participating in the program, migrant parents are required to be included on, and participate in the deliberations of, these advisory committees. With regionalization of the program, the advisory structure was expanded to provide for advisory committees at both the county and regional levels. These committees include representation from the district committees and all agencies and organizations that have an interest in the welfare of migrant families.

Liaison personnel were provided between the school and migrant families to improve communication. Parents of migrant children and other migrant family members have been employed in the program and have participated in school-sponsored activities. The involvement of migrant parents in the program heightened interest in the schools, developed better attitudes toward the schools and improved attendance of migrant children.

In many areas, involvement of the total community produced an increased concern for the problems and conditions facing migrant families and a greater understanding and acceptance of this group by the resident population. There is evidence that

many migrants in California are staying longer in communities where good programs have improved conditions for them. As a result children remain in school for longer periods and attend fewer schools, which greatly improves the continuity of their education.

PROBLEM AREAS

Preschool Programs. Consideration should be given to providing funds for programs for children younger than five years of age. Not only does research indicate that academic progress in school is, to a large degree, dependent upon the environment to which the young child has been exposed prior to his entry into the school, but it is also apparent many migrant families need child care for preschool age children, as care of younger siblings is a major cause of absenteeism among school age migrant pupils. Since children under five years of age are not, at present, considered in making allotments of funds to the states, any funds diverted to preschool education programs reduces the amounts available for programs for children of school age. These problems cannot be solved at the local or state level but require Federal action.

Migrant Health. The physical and mental health of migrant children is a continuing problem. It is unreasonable to expect that children debilitated by disease or malnutrition, or suffering from carious teeth, or whose eyesight or hearing are impaired, or who have severe psychological problems can progress academically at a rate comparable to those in vigorous good health. A large number of migrant children have some referable physical health problem that may impair their ability to learn. Adequate treatment of the health problems of these children is beyond the present capability of health agencies. This requires that substantial support from funds primarily intended for educational programs be used to provide health services to make the children fully educable.

Funding. Continuing problems encountered by the State Department of Education in implementing the Title I migrant program continue to be related to funding. Although some progress has been made, funding is still not assured early enough to allow for adequate planning and staffing of programs. The amount of funds provided is still inadequate to meet any but the most pressing educational needs of some of the migrant children in California. Programs have necessarily been limited to activities designed to meet the highest priority needs of migrant children in areas of highest concentration of migrants and to peak impact periods. Thus many eligible children receive somewhat limited services for only a part of the year, and others cannot be served at all. The continued eligibility of children for services under

the provisions of P.L. 89-750 for five years after their migrancy has terminated is a particularly severe problem in California. Many California migrants are temporarily or intermittently employed in seasonal agricultural pursuits. Thousands leave the migrant way of life each year and settle in cities or small towns and either take up other kinds of work or continue to be employed in agriculture as seasonal or year-round workers. It is estimated that as a result of the extended eligibility for services, at least 250,000 children in California would be eligible for services within five years. Serving these children would require approximately the amount of funding for California as is now provided for the entire country.

Through the regional organization, progress has been made in the identification of migrants and initiation of programs to meet their needs. Nevertheless some communities still prefer to ignore or deny that migrants are present and need special help.

Identification of Migrant Children. Although much progress has been made, the identification of eligible migrant children continues to be a problem. California's position in this regard appears to be somewhat unique. Not only are there a variety of definitions of migrancy used by the various agencies concerned with migrants in the State, but the tremendous variability among the migrant population is cause for concern. One study has identified six levels of migrant acculturation among the State's migrant population. These range from the completely itinerant migrant with no recognizable home base, often a recent immigrant or alien with a seasonal work permit, to the resident, who for a short time each year migrates to another area, but who is almost indistinguishable from the resident seasonal farm worker. When the former migrants, still eligible under the five year rule are added to these, the problems of maintaining the integrity of a categorical program become almost insurmountable. A Federal definition of migrancy which sets limits and which can be uniformly applied by the states is needed.