

## DOCUMENT RESUME

ED 039 275

UD 009 956

TITLE Learning Investment for Tomorrow: ESEA Title I Project 69-092, Evaluation Report, 1968-1969.

INSTITUTION Colorado Springs Public Schools, Colo. Div. of Special Services.

PUB DATE 69

NOTE 117p.

EDRS PRICE EDRS Price MF-\$0.50 HC-\$5.95

DESCRIPTORS \*Compensatory Education, \*Disadvantaged Youth, Early Childhood Education, Emotionally Disturbed Children, \*Federal Programs, Health Services, Individual Development, Language Arts, Learning Disabilities, Learning Readiness, Mathematics Education, Reading Improvement, Science Education, Social Studies, Summer Programs, Test Results

IDENTIFIERS Colorado, \*Elementary Secondary Education Act Title I

## ABSTRACT

This evaluation report carries a description of each project then in operation, an analysis of the evaluative data collected for each, and recommendations for improvement. Objectives of the projects, geared for disadvantaged youth (K-12), were: improvement of performance of capabilities of children with learning disabilities due to psychological, neurological, sociological, and emotional handicaps; improvement of school-community cooperation; increase of available health services; increase of rate of academic growth for elementary school children retarded emotionally, socially, and scholastically; improvement of learning readiness in primary school children; provision of summer leisure activities; and upgrading of academic achievement in the areas of language arts, social studies, mathematics, science, and practical arts. The overall general recommendation is that the district undertake a thorough study of the various project components to determine the feasibility of incorporating certain of the components, or parts thereof, into the regular school program. Appended are statistical data and test results. (KG)

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COLORADO SPRINGS PUBLIC SCHOOLS

1969



LEARNING INVESTMENT FOR TOMORROW

Title I

Elementary and Secondary Education Act

PROJECT 69-092

EVALUATION REPORT  
1968-1969

UD009956

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## PREFACE

This document represents an effort to provide a qualitative assessment of Project LIFT (Learning Investment for Tomorrow) during the third year of its funding by Title I of the Elementary and Secondary Education Act. The report includes a description of each project component, an analysis of the evaluative data collected for each, and recommendations for improvement.

Appreciation is expressed for the assistance of the many people whose help and cooperation made this report possible. Special thanks go to the staff members of participating schools, to the Department of Pupil Accounting and Testing, and to the Department of Research and Special Studies.

L.M.B.

## SUMMARY DATA

PROJECT OBJECTIVES

1. To improve the performance capabilities of children with learning disabilities due to psychological, neurological, sociological, and emotional handicaps.
2. To improve school-community cooperation and communication among minority groups and other disadvantaged families residing in the North Junior, South Junior, and West Junior attendance areas.
3. To increase health services to disadvantaged children in target secondary schools.
4. To increase the rate of academic growth for children retarded emotionally, socially, and scholastically in Buena Vista Elementary School.
5. To develop increased readiness for learning among disadvantaged primary grade children at Helen Hunt School.
6. To raise classroom performance of disadvantaged children in reading to individual expectancy level.
7. To increase the degree of academic success beyond that of previous years for disadvantaged children in the areas of language arts, social studies, mathematics, science, and practical arts.
8. To provide opportunities for the constructive use of summer leisure time by Title I children.

PROJECT STATISTICS

1. Length of project:	12 months
2. Grade levels included:	K-12
3. Total amount of Title I funds used:	\$322,508.00
4. Total number of Title I pupils participating:	2,742
5. Cost per pupil:	\$117.62

OBJECTIVE MEASURES OF ACHIEVEMENT

1. Stanford Achievement Test	Grades 4-7
2. Gates-MacGinitie Reading Test	Grades 10-11
3. Iowa Test of Basic Skills	Grades 3-8
4. Metropolitan Advanced Arithmetic Tests	Grades 10-11
5. Stanford Science Test	Grades 7-8



## TITLE I COORDINATOR'S CONCLUSIONS AND RECOMMENDATIONS

The first part of this discussion will consider the recommendations made in the 1967-68 report and the status of those recommendations at this time. The second part will present general conclusions and recommendations based on the 1968-69 project.

Status of Recommendations for 1967-68

Recommendation I calling for a greater concentration of funds in schools with the highest incidence of low income impaction remains a major concern. Desired realignment of funds has been difficult because of the reduced Title I allocation to the district and the increasing cost of maintaining the existing components of the program. Yet, some improvement has been realized because of this situation since it has forced discontinuation of some services and enabled the portion of the funds remaining after accounting for the inflationary factor to be redeployed to the benefit of the four schools with low income impaction rates exceeding 40%. Therefore, despite the decrease this year in average per pupil expenditure (142.72 to 117.62), the per pupil expenditure for Helen Hunt, Garfield, and Lowell Elementary Schools and South Junior High School remains relatively unchanged.

Despite the fact that the above mentioned schools receive primary consideration in Title I planning, the needs of the more diffused target population cannot be forgotten. On the west side of the community, six elementary schools and one junior high school have in attendance a large number of Spanish-surnamed children coming from low-income families. Title I services have been reduced in most of these schools; however, an effort has been made to continue limited assistance to this substantial but scattered target population.

Recommendation II specified the need for more comprehensive planning which would embody a broader range of school and community concerns for the needs of the dis-

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advantaged. To achieve this end, a Title I Advisory Committee has been organized with members representing Head Start, Community Action Program, CAP Neighborhood Centers, parochial schools, the various divisions and departments of the public school system, and parents from target schools. Thus far, the committee has been concerned with orientation but is now prepared to assist with plans for next year's proposal.

Recommendation III called for continued efforts to improve the quality of project evaluation by developing instruments for teachers to use in rating attitudinal and behavioral change and instituting procedures for the efficient collection and assessment of data. An evaluation flow chart was developed to achieve greater efficiency, and a number of new instruments were devised and employed; nevertheless, a satisfactory level of quality in the evaluation of most project components has yet to be reached. Concentrated efforts will continue to be made to achieve the excellence desired.

#### 1968-69 Conclusions and Recommendations

1. The Diagnostic and Special Learning Center accepted forty-four pupils for specialized training to help them overcome their particular learning disability(s). During the year twenty-five (56.8%) of the group were enabled to resume a regular schedule successfully. Seven of the forty-four moved from the district; the remaining twelve are to resume training in the fall. The Center also continued its special diagnostic testing service for target schools. One hundred twenty-two pupils were tested, and where learning problems were discovered, recommended instructional approaches were sent to the referring school. More frequent communication with sending school teachers was achieved this year as well as greater communication with parents. The staff has begun the development of a rationale for the Center program in order to achieve a more efficient and systematic approach to learning disabilities. Next year (1969-70) should see considerable progress towards this goal.

Recommendation: Increase the staff of the Diagnostic and Special Learning Center to include an instructional programmer and at least one paraprofessional. The programmer would assume primary responsibility for the analysis of diagnostic information upon initial referral and for the prescription of specific activities for identified disabilities. At present, the teachers must devote a significant part of their time to the diagnosis and prescription functions before specific instruction can begin. The addition of a programmer would release the teachers from these functions and enable them to concentrate on prescribed activities thus speeding up the progress of children being served by the center. This would enable the center to serve a greater number of children each year and result in a more efficient use of the facility.

2. The program for improving school-community relationships in the core area of the city was expanded this year with the addition of another worker to assist at West Junior High School. The workers at both South Junior and West Junior have been invaluable in preventing problems from developing and in alleviating those already existent. Plans for 1969-70 call for the addition of a third worker to assist pupils at Lowell Elementary School.

Recommendation: Provide a full-time school-community worker for Palmer High School. The workers assigned to South Junior and West Junior have received repeated requests from Palmer High School for assistance in dealing with potential or actual problem situations. These requests cannot be fulfilled without impairing the effectiveness of the workers in their primary school assignment. The need for the services of a worker at Palmer High School is sufficient to justify the employment of a full-time person at that school.

3. Nurses at Palmer High School and at West, North, and South Junior High Schools continue to render much needed assistance to large numbers of disadvantaged students. Their major activities include counseling students and parents in health matters and assisting in arranging for medical attention. The counseling aspect of their work is most important in relieving student anxieties regarding health matters that might otherwise interfere with learning activities. Remodeling is underway at each of these schools to improve the school infirmaries which will enable the nurses to function even more effectively.

Recommendation: Increase the nursing services to not less than half-time at Helen Hunt, Lowell, and Garfield Elementary Schools. The City-County Health Department has provided some increase in nursing services at these schools this year above and beyond the previous half-day per week. However, to prevent or reduce health problems in later years will require constant attention in these early years. The success of the nursing program is dependent upon the amount of time the nurse is available. Only limited success can be realized with limited services.

4. A new component of Project Lift met with great success at Buena Vista Elementary School. A full-time teacher-counselor worked during the year with 100 pupils referred by classroom teachers because of learning/adjustment problems. Fifty of the group required intensive assistance, and their progress was followed carefully during the year. Evaluation of this program yielded very positive results.

Recommendation: Give serious consideration to providing full-time counselors in all primary target elementary schools. In this regard

there needs to be some clarification of the functions performed by social workers, counselors, and certain special education personnel. It is evident that a significant factor in the success realized by the teacher-counselor at Buena Vista was that she could devote full-time to the needs of disadvantaged children at that school. Because Buena Vista is not one of the primary target schools and because Title I funds will be further reduced in 1969-70, it is further recommended that another source of funding be found to continue this program.

5. A group of dedicated primary grade level teachers at Helen Hunt Elementary School functioned partially as a team to provide additional readiness activities for first grade children who had demonstrated such a need. Title I funds provided special equipment to facilitate and enhance the activities. Teachers recognized great value in allowing these children additional time for readiness activities and to experience success early in their school years.

Recommendation: Devise better methods for assessing the effectiveness of additional readiness activities with identified children. Provide teacher aides who can give individual help to pupils within the regular classroom and thus enable these children to remain with their peer group.

6. The elementary Corrective Reading program, operating at a reduced level from the previous year because of curtailed funds, provided intensive reading instruction for 688 pupils at nine district schools and two parochial schools. Achievement test results did not confirm the success recognized by teachers, but other factors substantiate their judgments. During the year 124 (18%) of the participating children progressed sufficiently to resume their regular schedule successfully. This corresponds

to the success experienced the previous year when the same percentage of pupils was remediated. Consistent success speaks well for the program in that it indicates the employment of sound methods and a determined effort by Corrective Reading teachers to overcome reading problems.

In the Palmer High and North Junior programs, achievement test data also does not indicate gains commensurate with expectancy level. At the same time, in the analyses of test data the test consultants found no significant correlation between achievement and mental ability. This continues to point up the fact that so many variables are operating in the case of the disadvantaged child that standardized test data remains a minor factor in the assessment of their progress. Means of obtaining accurate attitudinal data are still to be developed and employed.

In the experimental EDL Learning-100 Program at South Junior, one of the school's teacher aides, several parent volunteers, and a student teacher assisted the reading teacher with the introduction of the new materials and made it possible to provide some special assistance to individuals and small groups. This program requires an extensive staff in order to monitor simultaneously the several different small group activities and to provide assistance to pupils needing individual attention. Evaluative data for this program will be available next year.

7. The Garfield Learning Center continues as an important component of Project LIFT. The multitude of learning experiences realized in the Center environment has contributed immeasurably to the school's educational program and its ability to build positive pupil attitudes. The facilities have received even broader use with the incorporation of an evening study program providing more special help for disadvantaged children and achieving integral involvement of parents.

8. South Junior project support in academic areas has been largely limited to the provision of teacher aides. One assists in the special reading program as previously described; another has worked with students in the language arts program. In an after school program to provide speech activities for interested students, the language arts aide assisted the teacher in training the group. These students later won two "excellent" awards in a competition held at Littleton Junior High School. A third aide assisted social studies teachers and was particularly helpful with the production of visual aides that had applicability in several academic areas. The reading program aide and a fourth aide served very effectively as part-time counselor aides helping minority group girls in a variety of ways.

Recommendation: Redesign the academic teacher aide service to insure that the aide's services are more directly related to specific needs of disadvantaged children.

9. Project funds, in addition to providing summer school tuition for 40 Title I students, supported an academic program at Helen Hunt School for 68 children, grades 1-6, needing help in reading, math, and language arts. The children were enthusiastic throughout the program, and parents expressed appreciation for the help given their children. Project LIFT also partially supported for the second time the summer recreational program at Palmer High School. Participation and cooperation from all age groups was gratifying. Plans for next year's program call for utilizing to greater advantage the services and facilities of the Teen Center in combination with the sports activities at the Palmer High athletic facility.

Recommendation: Continue project support for summer activities for disadvantaged children to the extent that funds are available.

10. A final factor is worthy of mention in that it has application to the project components reviewed above and, thus, concerns the total impact of Project LIFT: A comparison of the retention records for 1967-68 with those of 1968-69 shows that teacher recommended retentions for the 13 target schools had a slight increase 1.5% to 1.6%. The significant decrease for the target schools cannot, of course, be attributed exclusively to the effects of project programs. The district itself has made a concerted effort to improve programs and service in target schools.

#### General Recommendation

It is further recommended that the district undertake a thorough study of the various project components to determine the feasibility of incorporating certain components, or parts thereof, into the regular school program. An analysis of the relationships between project services and those provided in the regular program may indicate that, with certain modifications, project services can be incorporated into the regular program with little or no additional cost. It is suggested that such a study would reduce the necessity for outright curtailment of services as project funds are reduced.



OBJECTIVE NO. 1

- a. Statement of objective: To improve the performance capabilities of children with learning disabilities due to psychological, neurological, sociological, and emotional handicaps.
- b. Activities and procedures used to achieve the objective:

1. The Diagnostic and Special Learning Center was established in a 1965-66 Title I project to help carry out the objective. It is concerned with assisting those children K-12 who underachieve because of a learning disability. The Center diagnosis seeks to determine and deal with the underlying cause(s) of the learning disability as opposed to merely treating symptoms. In general, these disabilities concern problems of perception, coordination, or association in visual or auditory areas. These disabilities most often manifest themselves in the following kinds of behaviors, one or more of which can be recognized in varying degrees in different children:

withdrawal  
 hyperactivity  
 working very slowly  
 awkwardness  
 difficulty in making judgments  
 lack of skill in judging shape, size, distance  
 difficulty in persisting with tasks  
 difficulty in following oral and/or written directions  
 requiring directions repeated frequently  
 easily distracted by activity or sounds  
 difficulty in recalling what was taught  
 deficient in one or more academic skills  
 difficulty in determining right from left

Because the Center's purpose is to provide a unique service, it does not accept youngsters who are diagnosed as mentally retarded or in whom an emotional disturbance is considered the cause of a learning problem rather than a symptom. Special classes are offered elsewhere for these children.

2. During the 1968-69 school year, forty-four children referred to the Diagnostic and Special Learning Center received diagnosis and special instruction. Of these, twenty-five were dismissed as remediated, seven moved from the district, and the remaining twelve will resume training in September 1969. In addition, 122 children were tested at the Center but did not receive training. For these referrals, a diagnosis was made and a recommended approach to identified learning problems was given the sending school.

During the summer school session from June 16 to July 25, three teachers instructed a total of seventeen children in daily 90 minute sessions. Two additional pupils had been enrolled but one withdrew because of employment; the other failed to attend more than one day.

3. The instructional program was completely individualized and proceeded on the basis of test results and those special needs revealed in the data compiled for each pupil by the nurse and social worker. The following tests were administered to each referral:

Stanford Achievement Test  
 Spache, Diagnostic Reading Scales  
 Wechsler Intelligence Scale for Children or  
 Wechsler Preschool and Primary Scale of Intelligence

In addition, one or more of the following tests were administered when deemed necessary:

Kottmeyer, Diagnostic Spelling Tests  
 Bender-Gestalt Test for Young Children  
 Frostig Developmental Test of Visual Perception  
 Money Road Map Test of Directional Sense  
 Purdue Motor Perception Survey  
 Illinois Test of Psycholinguistic Abilities

4. Teachers worked with nine pupils each day Monday through Thursday, giving instruction to no more than three students at one time in three time bands of ninety minutes each. Fridays were reserved for staff meetings and planning. Regular communication was maintained with sending school teachers to appraise progress and correlate methods and materials.
5. Bus transportation was furnished for target school pupils enrolled at the Center.
6. Center specialists were involved in the following activities:
  - (a) The nurse:
    - (1) Provided developmental data on all children enrolled at the Center.
    - (2) Made follow-up visits to parents and contacted doctors when necessary.
    - (3) Conducted telebinocular tests and Kephart Motor Training Tests.
    - (4) Served as the health resource person for teachers.
    - (5) Checked children's height and weight every three months.
    - (6) Made referrals to the following community agencies:
      - 2 - Trimble Fund for visual examinations
      - 1 - Mental Evaluation Clinic
      - 1 - Pikes Peak Mental Health Center
      - 1 - Handicapped Children's Program
      - 1 - Orthopedic Clinic
      - 1 - Brinley Guild for financial assistance with orthopedic shoes
    - (7) Participated in the following inservice activities:
      - Birth Defects Conference (Colorado Springs)
      - Colorado Public Health Association (Colorado Springs)
      - School Nurse Workshop (Denver)
      - Narcotic Abuse and Control Conference (Denver)

## (b) The social worker:

- (1) Made 23 home visits to secure social history data for each child accepted for training.
- (2) Maintained regular contact with parents to establish a rapport that would insure understanding and cooperation.
  - 10 cases (parents involved in Center conferences.)
  - 8 cases (parent conferences at their homes.)
- (3) In 39 cases acted as a liaison person between community agencies, community resources, and school personnel.
- (4) Worked with 44 boys and girls in six different groups during regular Thursday group activities and provided individual counseling in eleven cases.
- (5) Maintained communication with social workers of the sending schools.
- (6) Played an active role as a team member in Center conferences and also in parent or teacher conferences at sending schools.
- (7) Served as a consultant within the Center.
- (8) Participated in the following inservice activities:...

Colorado College Bi-Lingual Conference  
 Art Workshop (Colorado Springs)  
 Meeting at Colorado College on Alcoholism

## (c) The speech therapist:

- (1) Screened each child attending the Center for possible weaknesses.
- (2) Gave assistance to teachers by explaining special methods which develop improved speech patterns.
- (3) Made necessary referrals to the therapist servicing the home school and, with severe cases, obtained additional

help from the speech-hearing therapist from the Department of Special Education of School District #11.

(d) The audiologist:

(1) Screened 109 pupils from 15 target schools for hearing defects making any necessary referrals to physicians or to the speech and hearing supervisor.

(2) Enrolled eleven pupils in aural classes, seven of whom will continue this training in the fall.

7. The Center instituted a group activity as a part of the regular program in fall 1968. Conceived and directed by the social worker, it provided children an opportunity to work with a variety of arts and crafts materials for the purpose of realizing the following therapeutic goals:

(1) To give the child, who has had little chance of discovering what he can or cannot do, a way of discovering his potential.

(2) To broaden experience and revitalize curiosity and eagerness to learn.

(3) To improve self-image through self-expression.

(4) To improve distorted or confused perceptions through concrete illustration.

(5) To improve eye/hand coordination.

(6) To help the child to relate, communicate, and share through constructive use of group dynamics.

(7) To enable these children who have a weak father image to identify with a male leader.

(8) To assist these children in learning to put off instant pleasure for a greater future reward.

The activity provided more flexibility and variation in the teaching program since half the children scheduled in one time band could participate in the group activity for one half of the period while the other half received the benefit of more concentrated individual attention from the teachers. Pupils could be grouped in any manner considered most advantageous to the learning situation.

8. To insure more parent involvement, an addition was made to the form sent to parents which requests permission for their child to receive transportation to the Center and its special training. A statement is included which explains that upon signing the form the parent not only renders permission but also agrees to arrange for a visit to the Center in order to become acquainted with the staff and the instructional program.

An evening open house was also arranged to acquaint the parents of participating children with the Center facility. Twenty-three adults and twenty children were in attendance at the open house.

9. Improvement in communication with the sending school has been achieved this year. Center teacher conferences with the sending school teacher are arranged to discuss the pupil when training begins with a final conference upon the pupil's return to his regular schedule. A complete Center resumé is given the sending school which recommends a learning approach for the pupil to follow.

Center staff conferences focusing on one child are also held to promote a thorough understanding of the child's needs and a determination of the best ways to meet them.

Constant contact with other district departments is maintained to prevent overlapping or duplication of services and to assure that each child receives those services most suitable to his needs.

10. The Center staff participated in the following inservice meetings, classes, and workshops:

- International Reading Association (Fort Collins, Boulder, Denver)
- International Reading Association Regional (Tucson, Arizona)
- International Reading Association National (Denver)
- Lecture by Dr. Newell Kephart (Denver)
- SRA Linguistic Conference (Colorado Springs)
- SRA Learning Disabilities (Denver)
- Inservice Program with Harold Rupert, Colorado State College (Diagnostic Center)
- Colorado Speech and Hearing (Denver)
- Aural Class discussion with Dr. James Carris (Diagnostic Center)
- Learning Disabilities Workshop (Colorado State College)
- Bi-Lingual Conference, Dr. Ulibarri (Colorado College)
- Council for Exceptional Children (Denver)

11. In the period between August 26, 1968 and May 16, 1969, 137 persons signed the Center's guest register. An explanation of the Center's purpose was given visitors along with a tour of the facility.
12. The Steering Committee met on March 14, 1969 to review policies and procedures. Considering the number of people on the committee and their many responsibilities and commitments, it was felt that one meeting might reduce the possibility of conflicts and thus insure maximum attendance. It remains to be decided whether one long meeting a year is more desirable than two or three shorter meetings.

The following personnel are members of the Steering Committee:

- Mr. Thomas B. Doherty, Superintendent
- Dr. Calvin Frazier, Deputy Superintendent
- Dr. Barclay Watson, Director, Special Services
- Dr. William Liddle, Director, Elementary Education
- Mr. Harold Threlkeld, Director, Secondary Education
- Mr. Tom Hockman, Department Director, Special Education

Dr. Julian Tatum, Department Director, Guidance & Counseling  
 Mr. Odven Aakre, Department Coordinator, School Social Work Services  
 Miss Helen Bailey, Department Director, Pupil Accounting & Testing  
 Dr. Roslyn Grady, Department Director, Research  
 Mr. Lauren Bussey, ESEA Coordinator  
 Mr. Garry Berry, Department Director, Health & Physical Education  
 Dr. Robert Card, Director, Audiovisual Services  
 Mr. Robert Bainbridge, Principal, Helen Hunt Elementary School  
 Mr. Gerald Ford, Principal, Lowell Elementary School  
 Mr. Dominic Incitti, Principal, North Junior  
 Mr. Robert Simpich, Department Director, Art Education  
 Dr. Charles Hadley, Research Department Coordinator  
 Miss Dorothy Swanson, Acting Director, Public Health Nursing  
 Mr. Frank Schroeder, Supervisor, Speech Correction  
 Dr. James Stout, Director, Diagnostic & Special Learning Center  
 Mrs. Saramargret Friesen, Test consultant, DSLC  
 Miss Gloria Green, Audiologist, DSLC  
 Mr. Mike Ciavonne, Social Worker, DSLC  
 Mrs. Mary Baker, DSLC Nurse  
 Mrs. Vreda Schieman, Teacher, DSLC  
 Mrs. Mary Sorensen, Teacher, DSLC  
 Mrs. Eleanor Wier, Teacher, DSLC  
 Miss Eloise Wynne, Teacher, DSLC

c. Identification of measuring instruments and methods used to evaluate the objective:

1. Teacher rating scale:

The Center dismisses a pupil when its staff and the sending school staff decide that the child can function successfully in a planned program at the sending school. After resuming a regular schedule for eight weeks, the pupil is evaluated by the classroom teacher. A five point rating scale is used which covers nine specific and three general categories of behavior. The teacher decides at this time whether or not the pupil should be referred once again to the Center for further special help. After a second eight week period at the sending school the pupil is again evaluated to determine whether or not his progress is continuing.

Next year, results of this rating scale will be received pre- and post-training.



2. Parent questionnaire:

Seventeen parents of target children attending the Center were contacted by the social worker and asked for specific and general opinions regarding their children's reactions to Center training.

3. Test Anxiety Scale for Children:

This test in conjunction with the Lie Scale was administered to twenty-six Center pupils to further determine how much credence can be placed in the scores Center pupils make on achievement tests. The Lie Scale was used to identify those children who had developed such strong defensive mechanisms that they could not answer T.A.S. questions objectively.

4. Stanford Achievement Test:

Pre-and post-tests were administered in a seven month interval to twenty-two pupils. Subscores of Word Meaning, Paragraph Meaning, Spelling, and Work-Study Skills were compared on the basis of the difference between expected learning gain and actual learning gain. The data were analyzed by the Department of Research and Special Studies using the t-test for correlated means.

5. Behavioral and attitudinal assessment:

A teacher rating instrument devised by the Department of Research and Special Studies was completed by the sending school teachers of twenty-two pupils to measure change in three areas: hostility/introversion, security, and work-study skills.

d. Results and interpretation of data:

1. Teacher rating scale:

Eight pupils released from the Center program in January were evaluated in March. Four were judged as having overcome the learning disability for which referred; one had made improvement;

two displayed little improvement; and for the last, no judgment was made because of a change in teachers. All teachers but one felt that pupil attitudes had improved sufficiently to enable these pupils to succeed in a planned school program. One teacher recommended that one pupil receive additional Center training. (See Table I, Appendix B.)

2. Parent questionnaire:

Parent responses were highly positive. The following is a tally of responses received with additional parent comments as indicated:

	<u>NO</u>	<u>YES</u>	<u>NO CHANGE</u>
(a) Do you feel that your child is meeting with greater success in school?	2	15	0
<ul style="list-style-type: none"> <li>-Yes, especially in reading and writing.</li> <li>-Yes, does not seem so helpless; does more on his own.</li> <li>-Definitely, David enjoys reading and seems to understand what he reads.</li> <li>-Yes, Carl is willing to work much harder.</li> </ul>			
(b) Has your child displayed more interest this year in books and reading at home?	4	10	2
<ul style="list-style-type: none"> <li>-When I saw William reading the newspaper, I almost dropped from shock.</li> <li>-Carl has shown so much more enthusiasm that we bought a new set of encyclopedias.</li> <li>-Tony is now willing to do reading for school reports.</li> </ul>			
(c) Does your child seem more willing or eager to take part in school activities this year than last?	3	12	1
<ul style="list-style-type: none"> <li>-William has never shown such an interest in school activities before; he now enjoys basketball and baseball.</li> <li>-Carl seems much happier and enjoys school activities.</li> </ul>			

NO      YES      NO CHANGE

-Whenever he has a school project, he leaves material all over the house which he does not want disturbed.

- (d) Has your child seemed more interested in telling about school experiences this year?      3      10      1

-Tony now volunteers to tell about daily happenings.

-Every night Carl wants to tell us about his school experiences. He has a very happy feeling about school.

-David talks a great deal about the Center.

### 3. Test Anxiety Scale:

Of the twenty-six children tested, nine were found to be test anxious. In addition, ten children on the basis of Lie Scale results proved to be so defensive that they too would qualify as inordinately test anxious. In other words, for 73% of this group, achievement test results could not be considered a reliable evaluative measure.

For other reasons the Center staff remains unable to place much confidence in achievement test results:

- (a) Achievement tests are designed for normal learners which, of course, Center pupils are not.
- (b) The cause of a learning problem must be discovered and overcome before a normal learning rate is realized. It would, therefore, require more than a year's time for significant achievement to become manifest.
- (c) Considerable attitudinal change must take place before scholastic achievement is possible. Center pupils, because of their past failures, have a poor self-concept. This self-image must be improved before significant achievement may be expected.

4. Stanford Achievement Test:

None of the t-values was statistically significant; however, in no case did the group achieve less than expectancy. (See Appendix C.)

5. Behavioral and attitudinal assessment:

None of the differences in the adjustment areas was statistically significant, however, all three areas showed growth in a positive direction. (See Table IV, Appendix C.)

e. Summary & conclusions:

1. Most significant changes in pupils participating in the project:

- (a) In general pupils display a better attitude toward school and an improved self-image which stems from their realizing some success and finding that they possess some potential.
- (b) It is not surprising that in the short span of seven months only a limited gain in achievement and attitude could be computed for such severely handicapped youngsters. To record a substantial gain in either or both areas would require a longitudinal study of several years. This problem of achieving a more accurate and meaningful evaluation of the Center's diagnostic and remedial program is receiving special attention from the Center staff.

2. Most significant changes in the school staff who participated in the project:

The Diagnostic Center staff has remained, throughout the time the Center has been in operation, highly motivated and dedicated. They are not content to treat merely the symptoms of a learning problem but wish to discover the best ways to overcome or improve the visual, auditory, and motor disabilities which cause the learning problem so that the child may then more easily acquire concepts and skills. They are confident and secure in the knowledge that greater progress is being made in finding more effective means to help this kind of learner.

3. Methods, procedures, techniques, or activities that were most successful in achieving the objectives of the project:
- (a) Center teachers, working in a situation that makes possible very efficient communication, have the prerogative of executing, without delay, their decisions regarding pupil grouping. They find such flexibility very effective in improving learning situations which are hampered because of unsatisfactory intra-group relationships.
  - (b) Each pupil undergoes a trial teaching period of two weeks which enables the staff to determine the type of training to which the pupil may best respond. It is often found that a child does not require the kind of specialized training which the Center provides and that he may benefit more by continuing in the regular school program. If this is the case, the Center recommends a learning approach with which the sending school can meet the particular learning problem.
  - (c) The Arts and Humanities program supplied a variety of displays (stuffed animals, birds, reptiles; sculpted works and fine art prints) which broadened pupil experiences and increased opportunities for the child's self-expression.
  - (d) Teaching lip reading methods has benefited pupils with hearing problems.
  - (e) Immediate reinforcement technique (giving an M&M candy for a correct response) is effective with younger pupils.
  - (f) The typing program, using manuals designed for elementary children, improves hand-eye coordination and motivates the pupil with handwriting problems.

(g) Aural screening and subsequent classes for those pupils in whom hearing problems were detected has enabled these children to benefit from the special training which they otherwise might not have had.

4. Methods, procedures, techniques, or activities that were least successful in achieving project objectives:

None were identified.

5. Conclusions in terms of overall project effectiveness and recommendations for improvement:

(a) To all observers, the Center provides an essential service which has met with considerable success. Parents and teachers have recognized positive changes in behavior and in academic performance in the large majority of Center trainees. The dedication of the Center staff demonstrated by their constant search for better methods and techniques should result in increasing effectiveness.

(b) The following recommendations are made to increase effectiveness:

(1) A special teacher or programmer is needed to work solely with new referrals for the two week trial period of assessment. This would make possible a thorough definition of the child's strengths and weaknesses and result in the formulation of a superior remedial program for teachers to follow.

(2) To prevent those problems that arise when children of disparate ages are brought to the Center on the same bus, it should be arranged for the youngest children to be transported on the first bus, the next older group on the second, and the oldest group on the third.

(3) Acquiring the services of a competent, teacher aide would improve the instructional program. Under teacher supervision an aide could perform certain routine instructional tasks not requiring constant professional attention thus freeing teachers to give more children intensive specialized training. The following are examples of duties which an aide might be given:

Presenting predetermined controlled reader programs or flash card programs.  
 Operating the Language Center system.  
 Administering routine perceptual motor exercises.  
 Supervising programmed typewriter instruction.  
 Reading teacher selected passages from written materials.  
 Monitoring and timing tests.  
 Presenting and monitoring educational games used to reinforce skills.

(4) To improve evaluation, the teacher rating scale heretofore completed at eight week intervals following the pupil's return to the regular school program should also be provided in assessment at the time the child is sent to the Center for training.

(5) To keep pace with the evolvement of philosophy underlying the Center's activities and their refinements in methodology, it would be well to redefine Center goals and objectives for all concerned so that the Center's function in the educational process be thoroughly understood thus assuring unity of purpose and maximum benefit from the Center's highly specialized role.

f. Anecdotes of a human interest nature concerning the impact of the Title I project on a particular pupil, parent, teacher, or school:

General comments received from parents about their children and the Center:

Mrs. A. states that Steve talks all the time about the Center; he used to play hooky a lot and hasn't at all since he came to the Center; he reads a little more at home but still not very often.

Mrs. M. strongly feels the Center has been most helpful to Jerry; he is always eager to attend his classes there.

Mrs. C. recognizes an improvement in Lyle's reading and spelling; he doesn't seem to dread school as he used to and doesn't seem as depressed.

Mr. L. remarks, "Need more places like that. Sure helped my son."

Mr. P. says, "William is a lot more optimistic about what he can do and is more willing to do things on his own. He seems to be a happier boy."



OBJECTIVE NO. 2

- a. Statement of objective: To improve school-community cooperation and communication among minority groups and other disadvantaged families residing in the North Junior, South Junior, and West Junior attendance areas.
- b. Activities and procedures used to achieve the objective:
  1. School-community worker:
    - (a) Two full-time school-community workers were employed for the twelve months of 1968-69, one to work under the direction of the South Junior principal; the other, the West Junior principal. They were assigned to give special attention to those minority and other disadvantaged students who exhibited need for special assistance because of the following problems: poor attendance, poor academic performance, poor self-concept, antisocial behavior, or for other reasons deemed appropriate.
    - (b) Each worker was primarily concerned with grades 7-9 at his assigned junior high school but would render service to feeder elementary schools and to Palmer High School when a problem at one of those schools related directly to one at the junior high.
    - (c) During the year the South Junior worker assisted 127 junior high students, about half as many from other grades, and worked directly with 67 parents. The West Junior worker assisted 121 students and 105 parents. These figures cover only those cases which received concentrated attention and do not reflect the repeated efforts which many cases required nor the number of students who benefited indirectly from the assistance which each worker rendered in helping to organize activities in the schools and in the community.

The West Junior worker's records did show in addition: 118 home visits, 78 follow-up visits, 76 contacts with other schools and community agencies, 227 miscellaneous student/parent contacts at school, and 129 contacts by phone.

(d) The following list of activities indicates in general the ways in which the workers have assisted in meeting pupil/parent needs and have endeavored to increase communication and cooperation between school and community:

(1) Home visitations:

- to discuss a child's school problem.
- to discuss a child's community or home problem.
- to make a family profile.
- to comply with a parent request.
- to explain a school policy.
- to arrange school/parent conferences.
- to determine family needs and assist in obtaining aid from appropriate community agencies.

(2) Various and numerous school meetings, conferences, discussions with pupils, teachers, counselors, principals, parents. (Many parents meeting with school people requested that the school-community worker attend with them.)

(3) Attendance at extra-curricular activities.

(4) Various and numerous contacts with the following community agencies:

- Community Action Program
- Welfare Office
- Protestant & Catholic Churches
- Urban League
- Latin American Education Foundation
- Police Department
- Rehabilitation Center
- Elks Club
- Office of Economic Opportunity
- Employment Office
- Salvation Army
- Y.M.C.A., Y.W.C.A.

Neighborhood Youth Corps  
 Parole & Probation Officers  
 Dept. of Special Services, School District 11  
 City Council

(e) The following is a partial list of ways in which the school-community workers have been involved in school and community activities:

(1) The South Junior worker:

-assisted in organizing and furthering the purposes of the Essadi Club at Palmer High School. The club offers membership to all students and sponsors activities and programs which will further racial understanding and provide constructive ways to meet minority group problems.

-assisted in organizing a basketball league at the Hillside Community Center which will include teams to be formed at the three other Community Centers. This will be expanded into a general recreation program for young people which will have available all the sports facilities of Palmer High School as well as those of the community.

-assisted in organizing the Colorado Springs Teen Center supported by the City Council and designed to provide recreation and a variety of worthwhile motivational programs for young people.

-assists in the Outward Bound and Young Life Programs.

-traveled to Washington D.C. to study the self-supporting Pride Program which had met with impressive successes in providing work for the jobless. Also studied the street academics in Harlem and others in New Jersey.

-developed a program with the Police Department for the purpose of alleviating tensions between its members and some of the most militant Negro youths. The program involved informal get-togethers of both sides in which views could be aired and which served to give police a better understanding of minority thinking. To give the teen-ager a better understanding of the police and their problems, the most militant were each assigned to ride in a police cruiser on different evenings from 7:00 to 11:00 P.M.

-enlisted the aid of the Elks Club to provide supplementary funds to eight students who had received special college scholarships but who needed money to meet living expenses.

## (2) The West Junior worker:

- was the 1968-69 secretary of the Pikes Peak Community Action Program. Received special thanks from the Executive Director for many contributions and devoted and untiring efforts.
- attended a workshop in Denver in conjunction with the regional meeting of the Legal Services Board.
- participated in a panel discussion for the Inter-Cultural Relations class.
- is a member of the Neighborhood Youth Corps Advisory Board.
- served as a member of the advisory board for the Archdiocesan Human Relations Commission.
- is working on plans to organize a Big Brother and Big Sister resource for students requiring more personal attention and guidance.

## (3) Both workers assisted in the planning of the Palmer High School Summer Activities Program with the South Junior worker serving as director during the summer and the West Junior worker as an advisor and counselor.

## 2. North Junior school community programs:

## (a) Teacher home visitations:

## (1) In November 1968 this program was begun with a teacher orientation which included:

Distributing the most pertinent information about programs of this kind conducted elsewhere.

Detailing procedures to be followed in preparing for the home visit and in reporting results of the visit.

Presenting and discussing all aspects of making visits so that teachers would appreciate those attitudes and approaches most likely to yield beneficial results for all concerned.

Developing a priority list of pupils who in teachers' opinion would benefit most by a home visit. Each teacher first made his own list. From these a composite list was made.

(2) During the remainder of the year, 62 home visitations were made by the head counselor and twenty-four teachers. For those visits not made during school hours, teachers received \$5.00 per visit.

(b) Work experience program:

(1) The principal and the head counselor conceived and instituted this program to help potential dropouts:

- develop a more positive attitude toward school.
- improve attendance at school.
- build self-esteem by giving them an opportunity to accept responsibility and succeed at a particular job.
- learn the value of a dollar.
- counter antisocial attitudes arising from feelings of low self-esteem.
- learn good work habits.

(2) Seven ninth grade students participated. Five boys assisted the custodians after school, and two girls worked during the lunch hour in the cafeteria. The students were paid by the hour.

3. South Junior Counselor Aides:

(a) An aide worked half-time under the supervision of the Dean of Girls providing clerical assistance and, more importantly, assisting girls in many ways with their problems. This often entailed meeting with parents and gaining their cooperation.

(b) An aide in half-time capacity gave special assistance to counselors with girls of Hispano descent. Much of this assistance concerned contact with the parents.

(See objective No. 7 for the aides' other duties.)

c. Identification of measuring instruments and methods used to evaluate the objective:

1. School-community worker:

(a) Teacher opinion:

A questionnaire was distributed at the end of the school year which gave teachers an opportunity to evaluate the program from their point of view.

(b) Parent questionnaire:

A random sample of 25 parents was chosen for each participating junior high. Questionnaires with a letter of explanation were mailed to the West Junior sample with self-addressed, stamped envelope for return. At South Junior the worker asked students to deliver the questionnaire to their parents and to return it to him after the parents had completed it.

(c) Quantitative and anecdotal records:

Each worker kept data on daily activities and a resumé of parent and pupil contacts.

2. North Junior school-community program:

(a) Home visitations:

Each teacher completed a form following each visitation which served to assess all aspects of the visitation.

(b) The principal who had followed the program closely rendered his conclusions.

(c) Counselor records of the work experience program:

The counselor evaluated the effect of the program on each participant.

d. Results and interpretation of data:

1. School-community worker:

(a) Teacher opinion:

South Junior teachers express unreserved appreciation for the efforts the worker has made to bring about greater school-community understanding. They state that student attitudes toward the school which could have deteriorated seriously remained much more positive because of his influence.

The program at West Junior, in operation just this year, is regarded in several lights by teachers. Those who have had direct contact with the worker display a complete understanding of the program's purpose and make highly favorable comments about the results of the worker's efforts. Other teachers stated that because they had not been involved enough in the program, they could make no comment. A few were negative in their remarks revealing a misconception of the program's purpose and a misunderstanding of the worker's method of operation. (See page 12 for recommendation.)

(b) Parent questionnaire:

The response to the West Junior questionnaire mailed to parents was poor, no doubt because of the manner in which it was solicited. Only five of the twenty-five were returned. However, these five contained mostly positive answers to all questions with highly favorable comments about the school-community worker. One contained the constructive criticism that children were not getting and need more individual counseling.

Fourteen of the twenty-five parents responded to the South Junior questionnaire with the following positive results:

- 11 parents felt visits with school people had been satisfying.
- 8 parents expressed a desire for a teacher visit to their home.
- 6 parents preferred coming to school to see a teacher rather than having the teacher call on them at home.
- 9 parents felt their children had displayed more interest in school this year than last.
- 9 parents indicated they had increased opportunity during the current year to discuss their children with school personnel.

Individual remarks by parents were similar in that they either expressed praise for the school-community worker, expressed a desire for increased school emphasis on study habits and homework, or criticized the school for not giving them an earlier notice of problems children were having at school.

The two methods of obtaining parent responses were used to verify what had been anticipated: Little response can be expected from the mailed questionnaire; some kind of personal contact is required. In the future, evaluation procedures will utilize the latter method.

(c) Worker records:

These records provide additional means of appreciating the scope and variety of the workers' contacts and clearly indicate that much extra time in the evenings and on weekends was given to completing assignments begun on school time.

2. North Junior school-community programs:

(a) Teacher home visitations:

Reports on the sixty-two home visitations revealed the following information:

Parent interest in their children's education was judged "strong" in 36 cases, "moderate" in 20, "slight" in only 5, and "none" in but one case.



Parent reaction to the visiting teacher was judged as "friendly" in 52 visits and as "indifferent" in but 10. Not one parent reception was judged "unfriendly" or "hostile."

The value of 29 visits was judged "very helpful," 30 as "moderately helpful," and only 3 as "not helpful."

It is not possible at present to determine with any accuracy the effects of the visits on parents or pupils; however, several teachers admitted that their own attitudes had been greatly affected and that their classroom approach to these pupils would be considerably changed.

The principal recognized in his observations and discussions that the visitations had had a decided impact on teacher attitudes with the result that their rapport with the problem students visited had improved.

(b) Work experience program:

The program yielded excellent results in all cases but one. One boy failed to respond to this incentive and gave up his job. The other students appreciated the opportunity given them and displayed willingness and ability to accept responsibility, work cooperatively, and complete job assignments satisfactorily. The four boys and two girls have gone on to district high schools and, at the present time, are participating fully in the educational program. One boy is continuing his work experience at the high school.

e. Summary and conclusions:

1. Most significant changes in pupils participating in the project:

(a) School-community workers:

Although at the present time the overall or long range effects of the program on students is difficult to accurately assess, in many individual cases student reaction to the workers' special attention and assistance has been positive with definite improvement recognized in one or more aspects of behavior, attendance, appearance, participation, and scholastic achievement.

(b) North Junior programs:

(1) Teacher home visitations:

It was the principal's observation that any apparent changes in pupils was actually due to the change in teacher attitudes.

(2) Work experience program:

These students experiencing success and reward in the school environment improved their attendance, attitudes, and self-image.

(c) South Junior Counselor Aides:

A number of girls have developed a more constructive attitude toward themselves and the school because of the aides' attention.

2. Most significant changes in school staff participating in the project:

(a) School-community worker:

Although continued development of teacher attitudes toward the disadvantaged is necessary, many teachers have stated that after some association with the community worker they have gained new insight into student problems and consequently better understanding of the students' learning difficulties.

(b) North Junior teacher home visitations:

The visitations gave teachers a broadened viewpoint and improved their rapport with students whose homes had been visited.

(c) North Junior work experience program:

Not applicable.

(d) South Junior Aides:

Not applicable.

3. Methods, procedures, techniques, or activities most successful in achieving the objectives of the project:

(a) School-community worker:

The variety of situations that confront a community worker demand a variety of approaches each of which may be very successful when used in appropriate circumstances. In general, success most depends upon the inherent qualities possessed by the worker and his ability to relate to both school people and those of the community.

(b) North Junior home visitations:

A thorough orientation for teachers was essential to the success of this program.

(c) North Junior work experience program:

Giving the potential dropout a job which provided the incentive of remuneration and the satisfaction of handling responsibility and experiencing success was the whole key to achieving the objective.

(d) South Junior Counselor Aides:

(See below.)

4. Methods, procedures, techniques, or activities least successful in achieving the objectives of the project:

(a) School-community worker:

Having the worker act as the direct representative of the school in cases of suspension or truancy is damaging to the program. The worker loses effectiveness if involved in negative ways with the community and must not be allowed to appear as an authoritative figure.

(b) North Junior home visitations:

None were identified.

(c) North Junior work experience program:

None were identified.

(d) South Junior Aides:

None were identified.

5. Conclusions in terms of overall project effectiveness and recommendations for improvement:

(a) School-community worker:

The program has undoubtedly been effective in reducing student and parent hostility and indifference. Many minority group or otherwise disadvantaged students have become more gregarious and are participating in school and community activities particularly in those organized for their benefit. Many parents now feel more comfortable about visiting the school, and with most, attitudes toward the school staff are improved. It must also be recognized that because of this program, certain families incapable of helping themselves obtained relief which without worker assistance they may or may not have eventually received. In two situations, families were spared tragedy because of worker intervention.

Next year, to increase program effectiveness, it is recommended

that teachers and counselors make more home visits. To accomplish this, the workers plan to take staff members with them on some calls to homes.

To make visits to school more inviting for parents, plans are being made to provide space for a parent lounge. Parents will be encouraged to come in at any time for coffee and conversation.

In order to maintain program effectiveness, it is essential that the workers never be asked to handle disciplinary problems directly nor be hampered by requests to check attendance, collect money, etc.

It is imperative that workers do not attempt to comply with all the requests for their assistance that come from sources outside their assigned school. If they were to try to meet all these demands, their efforts would be spread so thinly that they could not remain effective in their primary assignment.

(b) North Junior school-community programs:

Both programs were very worthwhile particularly since considerable benefits accrued from a limited expenditure. Nevertheless, because funds for the coming year have been severely curtailed, it will not be possible to offer teachers remuneration for making home visits.

Since expenditures of the work experience program result in direct and immediate benefit to students, it will be continued and expanded to the degree funds permit.

## (c) South Junior Counselor Aides:

Counselor aides have been extremely helpful working with girl truants, acting as liaison between parents and school, and in counteracting problems before they become severe. They have built rapport by taking girls to community events and by listening understandingly to their problems. Because of their effectiveness in this area, they will continue with these duties next year in the same half-time capacity.

f. Anecdotes of a human interest nature concerning the impact of the Title I project on a particular pupil, parent, teacher, or school:

The following briefly described situations in which the school-community workers have been involved attest further to the value of their efforts:

Family of five, eldest child in seventh grade, left by father without means to buy food. Worker obtained food; police made contact with father. Family's needs now taken care of.

Mother emotionally disturbed over broken marriage, a potential suicide. Her two junior high children having great difficulty in school. Worker enlisted appropriate aid from community agencies, involved the mother in Community Center work, and helped the children find new constructive interests. Girl student now less hostile; brother has discovered fine artistic talent which his mother is eager for him to develop.

Living conditions of this family deplorable, yet were paying high rent. Mother suffered nervous breakdown; father died two weeks after worker made contact. With assistance of Community Center, family was moved. Worker helped mother in budgeting and obtained glasses for younger child. Mother now works for Head Start; the two boys attend school more regularly and have taken an interest in sports. Family much happier.

Young mother seriously ill, in need of blood transfusions and hospital care. Father, part-time construction worker, making \$30 over the income which would have qualified the family for welfare assistance but without which they could not meet medical expenses. Through the efforts of the school-community worker, some welfare assistance was obtained, and the worker managed to get the mother admitted to the hospital where she recovered her health. The worker then found funds which enabled the family to return to relatives in the East where the father had an opportunity to increase his income.

OBJECTIVE NO. 3

- a. Statement of objective: To increase health services to disadvantaged children in target secondary schools.
- b. Activities and procedures used to achieve the objective:
  1. Nursing services were provided by contract with the City-County Health Department for four target secondary schools and the Diagnostic and Special Learning Center. One nurse was assigned full-time at Palmer High School. Half-time services were rendered at North, South, and West Junior High Schools and the Diagnostic Center.
  2. In the fall, school principals conducted an orientation for faculty members to explain the purposes of the nursing service and the means by which the most effective use could be made of the service.
  3. The nurses' primary concerns were to:
    - (a) Identify pupils with health needs or handicaps, assist them to obtain needed care, and recommend changes, if necessary, in a pupil's school program.
    - (b) Provide health counseling to make pupils more aware of the importance of maintaining and improving health.
    - (c) Encourage parents to obtain needed health care for their children.
    - (d) Prevent the spread of communicable disease.
    - (e) Render aid in case of emergency illness or injury.
  4. The nurses also rendered special service in the following ways:
    - (a) Assisted as resource persons in certain classes. (home economics, civics, child development, special education, educable mentally handicapped)
    - (b) At the junior high level, obtained health education films for teachers ("Feeling Left Out," "Alcoholism in the Human Body")

and showed the films "Boy to Man" and "Girl to Woman" to special classes. At the senior high level, showed the films "Pre-Natal Care," "Labor and Delivery," and "A New Baby" to the child development class.

(c) Participated in P.T.A. panel discussions.

(d) Attended the following workshops:

El Paso County Nurse Workshop - St. Francis Hospital, Colorado Springs

Narcotics Abuse and Control - Regis College, Denver

c. Identification of measuring instruments and methods used to evaluate the objective:

1. Nurses' daily records provided information on numbers of students assisted, reasons for referrals, number of cases referred to doctors, etc.
2. Each nurse gave her judgment of the school's health program.

d. Results and interpretation of data:

1. Daily records indicate that a great percentage of the nurses' time is spent dealing with emergency situations with little time left for much concentration on preventive measures and health education. (A composite of the nurses' daily records is presented in Appendix D. Because of a change in the nursing staff at North and West Junior High Schools, North's records are incomplete and none were available from West. The figures indicating the number of pupils receiving treatment from doctors are minimal since it is difficult for nurses to determine whether each student referred did, in fact, receive a doctor's care.)
2. Despite the lack of time to deal fully with all aspects of health needs, nurses express a sincere satisfaction with the work they have been able to accomplish. They are looking forward next year



to improved facilities. These are to be provided in 1969-70 as remodeling at each target secondary school is completed.

e. Summary and conclusions:

1. Most significant changes in pupils participating in the project:

Individual cases could be cited that would prove school health services to be a significant factor in producing desirable change in certain pupils; however, present evaluative procedures cannot provide a measure, in total, of the manner in which or the extent to which participants have responded more desirably in the school situation as the direct result of receiving health service.

2. Most significant changes in school staff participating in the project:

Nurses report excellent staff cooperation and support which denotes considerable growth in teacher awareness of the importance of meeting pupil health needs. In past years, nurses had recognized a need for greater support from the staff.

3. Methods, procedures, techniques, or activities that were most successful in achieving the objective of the project:

The team meeting has proven to be a successful method in achieving the team work which is essential to:

- uncovering causes of individual student problems.
- acquainting equally all staff that need to be concerned with a problem.
- developing effectual solutions.

4. Methods, procedures, techniques, or activities that were least successful in achieving the objective of the project:

None were identified.

5. Conclusions in terms of overall program effectiveness and recommendations for improvement:

One important part of the valuable services nurses render in the target secondary schools is to provide counseling to students regarding physical development and boy-girl relationships. Many

students during this period of rapid physical maturation with their natural interests in the opposite sex are not able to get responsible answers to the questions that inevitably arise regarding these matters. Often, parents are not capable of providing enlightened, unbiased counsel, and their children, aware of this fact, either receive no assistance or, worse, obtain erroneous, irresponsible information from their peers. Numerous girls, some boys, and, at the senior high school level, couples have found the nurse a sympathetic confidant who can give them straight answers to questions and sound counsel with problems.

The Palmer High School nurse calls attention to the following:

Because during the teen years tooth decay is a major problem, every effort should be made to detect such problems in their incipient stage. To this end, more comprehensive dental screening is necessary along with consistent counseling about the importance of dental care. Most students should find it possible to have minor deficiencies corrected thus preventing the development of a dental problem that would eventually be very expensive to rectify. Students with serious dental problems who cannot afford the necessary care can be referred to the City-County Health Department Dental Clinic where assistance may be found.

OBJECTIVE NO. 4

- a. Statement of objective: To increase the rate of academic growth for children retarded emotionally, socially, and scholastically in Buena Vista Elementary School.
- b. Activities and procedures used to achieve the objective:
1. One full-time teacher-counselor was employed at Buena Vista School to work with pupils experiencing learning/adjustment problems in their regular classroom.
  2. Children were referred to the counselor by classroom teachers who submitted a referral form for each case giving reasons for referral, an explanation of corrective measures previously taken, and an assessment of the pupil's current academic, social, and emotional behavior. The following behaviors were most often listed as reasons for referral: extreme shyness, over-aggressiveness, excessive day-dreaming, preoccupation with fantasy, consistent prevarication, emotional instability, exhibiting a learning problem, exhibiting withdrawal, social maladjustment.
  3. During the year approximately 100 students received individual counseling and of this number 36 were given remedial help in small groups of 3-4 pupils. Most of the remediation was in reading, but other subject areas were included if specified by the classroom teacher. A wide variety of reading texts, workbooks, and phonics games were used with much attention on word attack skills, comprehension, vocabulary, and study skills.
  4. Fifty pupils of the above total were considered intensive cases and each was followed carefully throughout the greater part of the year and was counseled individually no less than once each week.
  5. Whenever possible, counseling was non-directive with pupils free to speak about themselves, peers, family, school, etc. Toys games,

and puzzles were available for children to play with during interviews which served to stimulate conversation by creating a relaxed atmosphere.

6. The counselor organized an after-school club for 5th and 6th grade girls to assist them with health and grooming problems. Activities during the weekly meetings included films, role playing discussions, and actual experience in care of hair, nails, etc. Club membership totaled 53 with 20 to 50 girls in attendance at each meeting.
7. Frequent conferences with the classroom teacher were held to assess the child's progress and determine whether or not he could resume a regular schedule successfully.

c. Identification of measuring instruments and methods used to evaluate the objective:

1. Behavior Inventory:

A special form was devised for this project enabling teachers to assess pupil academic, social, and emotional behavior on a well-differentiated five point scale at the time pupils began counseling sessions and again at the end of the year. The resulting information was organized to provide a comparison of the major characteristics of the total group for the purpose of revealing to whom and to what degree the special counseling had been of benefit. The division was as follows:

- (a) Separate analysis of data for boys and for girls. (See Table I, Appendix J.)
- (b) Separate analysis of data for primary children and for those in intermediate grades. (See Table II, Appendix J.)
- (c) Separate analysis of data for children who received intensive counseling and for those who received only limited counseling.

The intensive group were counseled individually for at least 45 minutes per week and, in addition, received 90 minutes of weekly remedial instruction in small groups. The children in the limited group were counseled but once or on few occasions. (See Table III, Appendix J.)

The pre- and post-ratings were compared using the t-test for correlated means.

2. Counselor report:

The counselor submitted a complete report of the year's counseling activities with her assessments and recommendations for the 1969-70 school year.

d. Results and interpretation of data:

1. Behavior Inventory:

Analysis of data yielded results indicating that this counseling assistance had been of significant benefit to all concerned. Mean difference in pre- and post-ratings showed growth for all groups in each area. Greatest increases occurred in the academic area with the Primary group making best gains and the Intermediate group the least. The Girls and the Primary group gained most in social behavior while least gains were made by the Boys and the Intermediate group. The latter gains were not significant. In the emotional assessment, the Primary group again gained the most; the Intermediate the least. (See Appendix J.)

2. Counselor report:

(See section e)

e. Summary and conclusions:

1. Most significant changes in pupils participating in the project:

Children in this program responded extremely well. Teachers rec-

ognize striking improvement in behavior and in school work. Both teachers and parents have been impressed by the significant improvement in appearance of girls participating in the after-school club aforementioned.

2. Most significant changes in school staff participating in the project:

Teachers were anxious for the counselor to give them suggestions for working with disturbed children and low achievers. After gaining more insight into the background of a child's problem, many teachers were better able to understand and cope with the child's behavior.

3. Methods, procedures, techniques, or activities that were most successful in achieving the objectives of the project:

(a) The major factor was having counselor efforts concentrated full time at one school.

(b) Home visits - A full understanding of the home situation is essential in understanding and helping the child.

(c) After-school club for girls designed to deal with health and grooming problems.

(d) A relaxed, non-directive method of counseling was effective with most children.

4. Methods, procedures, techniques, or activities that were least successful in achieving the objectives of the project:

None could be termed least successful; however, certain changes in emphasis are recommended. (See below)

5. Conclusions in terms of overall project effectiveness and recommendations for improvement:

The concerted opinion of persons involved in the program attribute its success to having a full-time counselor in the school rather than a part-time person. This is regarded as a necessity if the

problems recognized are to be effectively dealt with. The following reasons are given to substantiate this opinion:

- A full-time counselor is able to see more children more often and can give each case the degree of attention it demands.
- The counselor is immediately available to meet a crisis or emergency situation.
- Children know the counselor as a member of the staff not as some person who visits school once in awhile.
- In this situation, teachers become much more knowledgeable of children's backgrounds which increases teaching effectiveness in problem cases.

It is recommended that next year the counselor be able to devote more time to counseling and less to remedial work. This will not only permit more thorough counseling of more children but will also enable the counselor to make more home visits which are essential to understanding and helping the child. Added counseling time would also allow for preventive work which could be accomplished in group situations.

Those concerned in this program feel that this kind of emphasis in the elementary school is vital to eliminating or alleviating those problems which become increasingly difficult to cope with as the child grows older and much more damaging to the individual and to the entire school effort. The progress of the children counseled this year will be followed closely in order to give them immediate, additional support if needed and, over the long run, to determine the effect of this early support.

OBJECTIVE NO. 5

- a. Statement of objective: To develop increased readiness for learning among disadvantaged primary grade children at Helen Hunt School.
- b. Activities and procedures used to achieve the objective:
1. Four groups of 1st grade children participated in the readiness program under the direction of five teachers who functioned together as a planning team although each had an assigned class of approximately 21 pupils.
  2. The groups were composed of those children who during the primary year had demonstrated the need for additional readiness on the basis of test scores (Metropolitan Readiness Test-categories D, E, & F ) and teacher judgment.
  3. Emphasis was placed on the development of motor, auditory, and visual skills which would make possible the later introduction of tool subjects and on procedures which would help build and strengthen positive pupil attitudes.
  4. Through orientation, inservice training activities, and active involvement in the team effort, teachers were encouraged to maintain constructive attitudes toward each and every pupil.
  5. Parents were made acquainted with the reasons, procedures, and objectives of the program and were urged to visit classes and attend parent programs so they could give greater home support to their children.
- c. Identification of measuring instruments and methods used to evaluate the objective:

Teacher rating:

Teachers formulated a scale of twelve behaviors which they felt should be increasingly evident in pupils if efforts were meeting with success.

Pupils were rated four times during the year.



d. Results and interpretation of data:

Teacher rating:

Rating scale assessments showed dramatic improvement in achievement for these children who had had very few, if any, previous experiences that would have better prepared them for school.

e. Summary and conclusions:

1. Most significant changes in pupils participating in the project:

Because the pupils in the readiness program could realize success with the work given them, teachers noted a developing sense of pride in themselves which resulted in improved behavior and attitude toward teachers and the school.

2. Most significant changes in school staff participating in the project:

Working together and sharing ideas helped teachers find that each child could learn when placed in an appropriate situation. Realizing success with these pupils generated increasing teacher enthusiasm and esprit de corps.

3. Methods, procedures, techniques, or activities most successful in achieving the objectives of the project:

- (a) Picture interpretation to broaden vocabulary and develop oral expression skills.
- (b) Grouping children according to ability level and freely shifting pupils to better provide for their individual needs.
- (c) Field trips with correlated pre- and post- classroom activities.

4. Methods, procedures, techniques, or activities least successful in achieving the objectives of the project:

Placing a first year teacher with a group of low ability.

5. Conclusions in terms of overall project effectiveness and recommendations for improvement:

The immediate effectiveness of the readiness program could be judged by pupils' advancement in reading level, neater work habits, and noticeable improvement in attitudes toward school, teachers, and each other. However, it is very probable that with some "follow through" the program will be responsible for future benefits of greater value. Having been given the necessary assistance, these pupils were able to experience success early in their school careers. This foundation, which might otherwise have been one of frustration and resentment, can support a continued willingness to work and an ability to take pleasure in learning.

To increase program effectiveness it is recommended that:

- class size be decreased so that teachers may better determine and attend to special individual needs and also provide more experiences basal to art, science, and social studies.
- more planning time be arranged for teachers. This time could be made available each school day or in a large block on any one day. This would mean less class time for pupils; however, greater learning would result because teachers would be able to prepare more interesting and more pertinent lessons and activities.

## OBJECTIVE NO. 6

- a. Statement of objective: To raise classroom performance of disadvantaged children in reading to individual expectancy level.
- b. Activities and procedures used to achieve the objective:
  1. Pupils from each target school with slight to moderate reading problems participated in the Corrective Reading Program. At both elementary and secondary levels overall pursuit of the objective involved:
    - (a) Diagnosis of specific reading problems through use of diagnostic tests, standardized tests, and teacher judgments based on reading performance.
    - (b) Prescription of specific procedures suited to small group and individual instruction with maximum concern for individual reading problems. These procedures designed to overcome deficiencies, build proficiency, and reinforce skills employed the following special materials and devices:
      - EDL Learning-100 Program (South Junior only)
      - Sullivan Programmed Reading Materials
      - Barnell-Loft Major Skills Materials
      - SRA Reading Laboratories
      - Readers Digest Skill Builders
      - Lyons-Carnahan Kit of Games
      - O'Conner Corrective Reading Materials
      - Controlled Reader (Reading rate and word recognition)
      - Language Master (Vocabulary and Phrasing)
      - Tachistoscope (Perceptual accuracy)
      - Listening Centers (Listening skills, speech patterns, literature appreciation)
      - Films, tapes, slides, records, flashcards, magazines, paperbacks, library books.
    - (c) Continual evaluation of progress through observation and by administration of teacher made and program tests.
    - (d) Frequent conferences with the regular classroom teachers to coordinate efforts and discuss effective techniques.

(e) Conferences when necessary with counselors, administrators, social workers, nurses, and parents.

2. At South Junior the reading program involved first year implementation of a three year program designed to raise the reading level of forty 7th and 8th grade students (potential dropouts) presently reading at a third-grade level. This program is part of a national research project testing the merits the Educational Developmental Laboratories' Learning-100 Program. Two teachers aides, a cadet teacher, and 13 community volunteers assisted the reading teacher with the project.

c. Identification of measuring instruments and methods used to evaluate the objective:

1. Elementary:

In the district's regular fall testing program, grades 3-6 received the Iowa Test of Basic Skills with the only exception that some third graders received instead the Metropolitan Reading Test. In May, a random sample of 110 pupils was selected from the total number of the year's participants and given as a post-test the same test they had taken in the fall. Since the California Short-Form Test of Mental Maturity is administered in the regular testing program to grades two and five, I.Q. scores were available for all elementary pupils making it possible to compare growth in achievement as measured by the standardized tests with ability. Here, the expected growth in achievement is assumed to approximate .10 times the I.Q. score.

2. Secondary:

In the North Junior reading program, the Iowa Test of Basic Skills-Form 3, Grade 5 was administered as a pre- and post-test.

At Palmer High School, the Gates-MacGinitie Reading Test, Level D was used on a pre- and post- basis.

The South Junior reading program was evaluated by the Department of Research and Special Studies in cooperation with the Educational Developmental Laboratories in New York.

d. Results and interpretation of data:

1. Elementary:

Pre- and post-test scores in Reading Comprehension were obtained for 107 pupils. Comparison showed: 33 pupils made either no gain or lost in grade equivalency; 22 gained from 1-5 months. Forty-seven gained six months or more. Twenty-nine of the pupils in the sample made gains of eleven months or more. Pearson product moment correlation figures were computed to determine if a relationship existed between mental ability and the degree of achievement in Reading Comprehension. The results showed no correlation. Mean grade equivalents on both pre- and post-tests showed the third grade to be one year below expectancy level, the fourth and fifth grade reading a year and one-half below, and the sixth grade two years below. This is considering that average I.Q. is used as the determining factor of expectancy level. Elementary I.Q. scores ranged from 66-114 with a mean of 89.

From these standardized test results, the following conclusions can be drawn:

- (a) The longer a reading problem persists, the more difficult and less likely of success is the remediation.
- (b) I.Q.'s are a faulty means of predicting a pupil's chance of success in a reading program. Many with lower I.Q.'s make gains

that equal any of those made by pupil's with average or above average I.Q.'s.

- (c) Definitive attitudinal analysis of pupils is essential to an accurate assessment of the program. Reasons must be pinpointed which will explain why 31% of the sample failed to make any gains in reading achievement, and, at the same time, why 27% exceeded expectancy level, some pupils by more than 10 months. (See Appendix E for more information.)

2. Secondary:

Of the 71 seventh and eighth grade North Junior pupils participating in the reading program, pre- and post-test scores were available for only 31. I.Q. scores were obtained for all but one of this small group and indicated a level of low ability. Eleven had I.Q.'s in the low 90's; eight had I.Q.'s below 80. On the Vocabulary sub-test, 8 pupils made no gain, 6 gained one to five months, and 15 gained six months or more. On the Reading sub-test, 10 pupils made no gain, 9 gained 1-5 months, and 11 gained 6 months or more.

Because of the limited number of scores involved in the study, conclusions of any substance are impossible. Results showed that the average gains of the group did not meet expectancy level; however, it is possible that the "rule-of-thumb" determination of expectancy level is unrealistic for these low ability students. Also, at this age, after experiencing years of little or no reading success, pupils are seriously hampered by poor attitudes and lack of motivation. It will be necessary to obtain more complete evaluative data if the program is to be fairly assessed. (See Appendix F for complete information.)

At Palmer High School results pre- and post- were available for 59 of the 124 students in the program. Again, as at the junior high and elementary levels, no significant correlation was found between mental ability and achievement. Average mean grade equivalents on pre- and post-tests showed a gain that failed to meet expectancy levels; however, the accuracy of the data is subject to question because of inconsistent extremes in gains and losses that occurred on the sub-tests of Speed and Accuracy, Vocabulary, and Comprehension. Without a more representative number of standardized test scores and an accurate determination of attitudinal change, no significant conclusion about the success of this program is possible. (See Appendix G for more information.)

In the experimental program at South Junior with EDL materials, no complete information will be available until the spring of next year; however, the following baseline data was obtained for next year's evaluation:

The Otis Quick Scoring Mental Ability Test was given in October 1968, and the Stanford Achievement Test was administered in May 1969.

Mean I.Q. for seventh grade was 87, for eighth grade, 83.

Reading levels established for seventh grade, inclusive of both sub-tests on Word and Paragraph meaning, ranged from 3.0 to 6.2;

for eighth grade, 2.8 to 5.9.

e. Summary and conclusions:

1. Most significant changes in pupils participating in the project:

The reading staff recognizes that the child who receives special assistance early enough (i.e., no later than second or third grade)

exhibits the most significant improvement in achievement and attitude. A reading problem in existence for several years allows the accompanying frustration to exert an evermore damaging affect on attitude and motivation; hence, with the problem compounded, remediation becomes increasingly difficult.

2. Most significant changes in school staff participating in the project:

Classroom teachers experience much less frustration since they have been able to obtain the assistance needed to deal with individual reading problems.

3. Methods, procedures, techniques, or activities that were most successful in achieving the objectives of the project:

(a) Elementary:

When it is possible to give concentrated attention individually to identified reading problems, results are good. Reading groups must be small, the size governed by ability levels, attitude, and motivation. In no case should a group number more than six pupils, and in situations, where ability is low and attitude poor, a group should be less than six.

(b) Secondary:

Small group and individual attention are also essential at this level. Appropriate materials become more difficult to find for this age group, but those written on a fourth or fifth grade level yet of high interest content for this maturity level are most successful in stimulating the desire to read. In the senior high reading program, Scott, Foresman's Tactics in Reading I has been identified as a most successful material to use in helping students gain strength in many problem areas.



4. Methods, procedures, techniques, or activities that were least successful in achieving the objectives of the project:

When the make-up or size of a group prevents a teacher from giving special attention to specific, individual reading problems, and the teacher finds it possible to present only general activities for the group to pursue, then the possibility of each student realizing adequate reading progress becomes a matter of chance.

5. Conclusions in terms of overall program effectiveness and recommendations for improvement:

(a) Elementary:

Although the results of standardized tests showed but modest average gains, other factors are indicative of considerably more success. Of the 688 pupils participating in the Corrective Reading Program 124 (18%) were considered capable, after the special training, of functioning successfully in the regular program and so were phased out of Corrective Reading during the year. Another fact that cannot be solely attributed to the effects of the Corrective Reading Program nor to any particular cause is, nevertheless, worthy of mention. Retentions recommended by teachers in April 1969 decreased greatly from the previous year in the target schools while those in non-target schools increased. Total enrollment increased enough in the non-target schools to have easily accounted for the recommended retentions; however, although enrollment did decline for target schools during the same period by 139 pupils, this was not enough to have accounted for the large decrease in recommended retentions.

A final factor bearing heavily on program success is the excellence of the Corrective Reading teaching staff. They are efficient, well organized, and well versed in methodology. They

demonstrate outstanding creativity by their imaginative use of materials often developed entirely from their own resources to suit special group or individual requirements. They are also able to relate very well to the disadvantaged pupil because of their full understanding of his problems and needs.

(b) Secondary:

Student achievement at this level failed to meet expectations according to standardized test results. However, with students handicapped by years of reading deficiency and low achievement, the cumulative deficit has exacted heavy toll. Teachers must spend much time gaining rapport, building attitudes, increasing motivation before any skill development can begin. A careful evaluation of attitudinal changes that can be attributed to secondary reading programs is necessary before a true and complete assessment becomes possible.

OBJECTIVE NO. 7

- a. Statement of objective: To increase the degree of academic success beyond that of previous for disadvantaged children in the areas of language arts, social studies, mathematics, science, and practical arts.
- b. Activities and procedures used to achieve the objective:
  1. Garfield Learning Center:
    - (a) The Center staff provided a variety of group and individual readiness and enrichment activities for 217 disadvantaged children in grades K-6. The Center helping teacher assisted staff members by demonstrating the use and care of audio-visual equipment and materials and by helping them devise and implement teaching strategies effective with disadvantaged children. The helping teacher also tutored each day an average of six pupils coming from all grade levels. The Center aide assisted directly with children and handled routine clerical tasks as well. She assisted pupils with audio-visual devices and helped them select appropriate reading materials. In the primary grades, she read stories, presented films and filmstrips and provided materials for free-time activities.
    - (b) Each Thursday evening from October 10, 1968 to May 22, 1969, a two hour study program was conducted at the Center for twenty-two fourth grade children who were under achieving or experiencing adjustmental problems in school. Adult volunteers using teacher planned assignments worked with the children on a one to one basis for a portion of the time each evening with the remainder devoted to general activities (films, stories, refreshments) which included the parents. Many of the

volunteers also undertook week-end projects with their assigned pupils taking them to their homes for meals and to places of interest around the region.

- (c) Four parent volunteers assisted in the Center three days a week for an hour each day working under teacher supervision with pupils in grades one, two, and four.

2. South Junior Aides:

During the school year the services of four aides were utilized in the following ways:

- (a) An aide worked half-time in the special EDL Learning-100 reading program and half-time in counseling. In the reading program she assisted directly with children individually and in small groups giving and reviewing directions, presenting cycled lessons with the Aud-X, Tach-X, and controlled reader, checking answers with each pupil, and orienting the pupil to the next appropriate lesson phase. (See Objective No. 2 for counseling duties.)
- (b) An aide was assigned to work primarily with English and social studies teachers. Her instructional duties included giving preliminary directions and explanations to students regarding elements of unit studies and activities, assisting students in the classroom and in the library with individual and group projects, helping small groups with basic English Skills, and developing individual exercises to increase competency in a needed skill. She assisted one English teacher with an after school speech club which gave interested students an opportunity to develop aptitude in oratory, dramatic reading, and poetic recitation. This group attended a Speech Workshop at Kearney Junior High School in Denver and a Speech Festival at Littleton

Junior High sponsored by the Colorado State Speech League. At the latter they were proficient enough to win two "Excellent" awards.

- (c) A fourth aide assisted the social studies department and the audio-visual department primarily in the production of special audio-visual materials requested by teachers for unit studies as well as those of general usefulness to that department.

### 3. Mathematics Laboratory at Palmer High School:

Six classes, each with a maximum of 20 students, received special training to help them develop numerical concepts and problem solving skills. In addition activities were designed to improve attitudes, self-image, and increase motivation by assuming that each student would realize success. To these ends the following means and methods were employed:

- (a) Computations facilitated by the use of mechanical calculators.
- (b) Assignment of realistic problems having immediate practical application.
- (c) Provision of a relaxed classroom atmosphere.

### c. Identification of measuring instruments and methods used to evaluate the objective:

#### 1. Garfield Learning Center:

- (a) The resource helping teacher submitted a report of the year's activities and gave her judgment of the kinds of success experienced.
- (b) Teachers gave their judgments of the value of the Learning Center to them and to their students.

2. South Junior Aides:

An evaluation form was submitted to teachers for their assessment of each aide with whom they had worked. Each aide was evaluated on the basis of Personal Characteristics, Abilities, and Initiative/Creativity. Teachers were also requested to estimate the amount of time their aide had been occupied with a specific activity. This estimate was for the purpose of determining in what ways teachers were most using the aides.

3. Palmer Math Laboratory:

Metropolitan Advanced Arithmetic Tests were administered on a pre- and post-test basis to sixty-four tenth grade and fifteen eleventh grade students. The remaining students participating did not receive, for one reason or another, either the pre-test or the post-test.

d. Results and interpretation of data:

1. Garfield Learning Center:

Children's reactions to individual and group learning activities conducted in the Center continues to be highly positive. Behavior is excellent and pupils show great respect for the materials at their disposal. Pupils of all age groups enjoy constructing exhibits relating to their classroom studies for display in the Center. This has given these children creative satisfaction, a concrete sense of accomplishment, and has helped them develop pride in themselves and respect for others.

Teachers observe that children who have had the advantage of using the Center for the three years since its inception seem, for the most part, more self-directed and more capable of working independently.

## 2. South Junior Aides:

Of the twenty teachers who had worked with the aides, sixteen evaluated the aides' assistance as very helpful; the remaining four termed it helpful. Ten of the teachers felt the aide program should be expanded while the remaining ten indicated that it should be continued as is. Fourteen of the teachers used the aides solely in a clerical capacity; the other six also found the aides to be of service in working directly with children. These latter six teachers without exception termed the aides' services as very helpful. One teacher expressed a need for learning how to use aides to better advantage, and another felt that certain departments were monopolizing the aides' services.

The teacher evaluations of aides indicate that:

Aides have enabled teachers to do more thorough planning.

Aides' assistance has given some teachers more time to teach.

A few teachers have utilized aides in working directly with children.

Most teachers have utilized aides to serve only in a clerical capacity.

## 3. Palmer Math Laboratory:

On both sub-tests, Computation and Problem Solving and Concepts, the mean grade equivalent for both grades increased from pre- to post-test. These were 45 of 75 students registering a gain of six months or more on the Computation Test and 19 of 68 with an increase of six or more months on the Problem Solving and Concepts Test. Similarly, more students scored above the 25th percentile on the post-Computation Test than had on the pre-test while not so great

a gain in this regard was made on the Problem Solving and Concepts Test. It is unfortunate that a greater proportion of pre- and post-scores were not available for the group, for this would have made more definitive conclusions possible. (See Appendix H & I for detailed information.)

e. Summary and conclusions:

1. Most significant changes in pupils participating in the project:

(a) Garfield Learning Center:

The Center is primarily responsible for improved pupil attitudes toward school. This is reflected in the care and respect with which pupils treat Center materials and equipment.

(b) South Junior Aides:

Student morale and self-image have been strengthened by the success of the Speech and Dramatics Club in intermural competition. One aide was instrumental in organizing and training the members of this club.

(c) Palmer Math Laboratory:

None were identified.

2. Most significant changes in the school staff who participated in the project:

(a) Garfield Learning Center:

Teacher morale has been uplifted because of the instructional assistance afforded by the Center.

(b) South Junior Aides:

The professional status of teachers is enhanced when they are relieved of routine duties which require only their supervision.

(c) Palmer Math Laboratory:

No teacher of these classes expressed any wish not to teach



them again. All felt their efforts had been successful and expressed satisfaction with their students' accomplishment.

3. Methods, procedures, techniques, or activities that were most successful in achieving the objectives of the project:

(a) Garfield Learning Center:

Intense student interest has been generated through the use of displays and models which correlate with classroom activities. A great variety of exhibits supplied by the Arts and Humanities Program and various models such as those of the human body, ear, and eye acquired with school and Title I funds have initiated pupil inquiry and discussion, made subject matter more meaningful, and inspired independent study.

The evening study program evaluated by the Department of Research and Special Studies received overwhelmingly favorable reaction from pupils involved, adult volunteers, parents, and elementary teachers.

(b) South Junior Aides:

Teachers using aides to work directly with students have found these services most valuable. In this capacity, aides have worked with children needing individual assistance and have assisted with after school clubs and plays.

(c) Palmer Math Laboratory:

(1) Use of the calculators on a part-time basis proved much more motivational than the previous year's procedure of using them regularly each day.

(2) Incorporating more basic drill in activities, particularly in practices with the math builder, which permits timed

projections of basic problems.

(3) Use of the Herrick series, Modern Mathematics for Achievement.

4. Methods, procedures, techniques or activities that were least successful in achieving the objectives of the project:

(a) Garfield Learning Center:

None were identified.

(b) South Junior Aides:

A number of opinions indicate that using aides for noon supervision has not worked well.

(c) Palmer Math Laboratory:

Materials too elementary in scope, despite their applicability, fail to motivate students at this level.

5. Conclusions in terms of overall program effectiveness and recommendations for improvement:

(a) Garfield Learning Center:

No method of evaluation has been devised which will constitute a valid measure of the degree to which increased pupil achievement can be attributed to Learning Center experiences. However, the subjective judgments of pupils, teachers, and parents cannot be taken lightly when overwhelmingly positive. This, at least, is substantial evidence that attitudes have been advantageously affected. With this essential basis established, there is every reason to believe that the disadvantaged child in a situation where he feels less restricted, less in competition with others, and in which he receives individual assistance with learning materials that appeal to sight and touch will be able to develop and mature with far more certainty than could otherwise be expected.

(b) South Junior Aides:

More teachers are allowing aides to assume clerical tasks while teachers with more experience in working with aides are also allowing them to assist directly with pupils. As more teachers take advantage of the services and utilize them more proficiently, no doubt, instruction will be improved; however, as demand increases there arises the problem of having to spread aide services too thinly so that their value may be greatly reduced. If funds will not permit hiring more aides, then a means must be found of equitably sharing the services without greatly reducing the major benefits.

Recommendations include:

- (1) Providing more training for aides in the operation of audio-visual equipment.
- (2) Providing in general, more means and incentives which will enable and encourage aides to increase competency. The aides at South Junior are highly motivated and ambitious. They have demonstrated their ability to work with children and prefer working in this capacity. They are excellent examples of the kind of aide who can be most useful to a school particularly when given the opportunities here recommended.
- (3) Enabling aides to participate more fully in all school functions, including attendance at faculty meetings and, when appropriate, at group meetings concerning discipline, curriculum, and methodology.
- (4) Providing more inservice opportunities to enable teachers to learn how to use aides in a greater variety of classroom activities.

(c) Palmer Math Laboratory:

After two years of experimentation with materials and methods, Palmer math laboratory teachers this year were able to combine the most successful of these in a course which they deemed very satisfying. Cooperation from students was excellent, and each teacher is enthusiastic about continuing in the program next year.

OBJECTIVE NO. 8

a. Statement of objective: To provide opportunities for the constructive use of summer leisure time by Title I children.

b. Activities and procedures used to achieve the objective:

1. Helen Hunt Summer School

(a) The specific objectives for this program were to strengthen attitudes by enabling pupils in grades 1-6 to experience success in activities suited to their needs and interests and to improve performance in reading, language arts, and in the application of fundamental math skills.

(b) In planning the program, teachers assessed the needs of each of their pupils in the areas of reading, arithmetic, and language arts. Pupils with identified needs rated as severe or moderate were selected as prospective participants. Parents were informed about the program and advised that final selection would be on a "first come, first served" basis. The parents of the sixty-eight children who participated agreed to take responsibility for their child's regular attendance.

(c) Three teachers provided instruction in reading/language arts, arithmetic, and arts/crafts. One aide was employed to assist the teachers, two volunteer college students assisted in math, and three junior high students gave general assistance.

(d) The following classroom procedures were employed to build positive attitudes and enhance self-image:

(1) Pacing activities to insure that each pupil experiences success before proceeding to the next activity.

- (2) Encouraging individuals to pursue special interests and assisting them in such endeavors.
  - (3) Employing arts and crafts activities to give pupils tangible evidence of accomplishment.
- (e) The following classroom procedures were employed to strengthen basic skills:

(1) Reading/language arts -

Reading or listening to poems and stories.

Dramatization of reading or listening experiences.

Production of original, illustrated stories and poems.

Using special materials to develop specific reading skills.

Practice in dictionary and resource skills.

Using audio-visual aids to support all activities.

Giving emphasis to oral communication skills.

(2) Arithmetic skills and concepts -

Using concrete objects to develop number concepts.

Using mathematical games to develop facility.

Using math contests to increase motivation.

## 2. Tuition Waivers

- (a) Project funds were used to pay the regular summer school tuition fee for Title I pupils needing remedial or make-up work and for those who wished to take enrichment courses. Names of pupils were referred by target school principals to the Assistant Superintendent for Administration, coordinator of the summer academic program, who made the final approval based on economic need. Fourteen students from target secondary schools and thirty-six from target elementary

schools were given this assistance. These numbers include six participants from parochial schools.

- (b) The following is a list of course offerings with the duplicated count of Title I pupils participating indicated in parenthesis.

<u>Secondary</u>		<u>Elementary</u>	
World History	(3)	Reading Improvement	(24)
English 1	(3)	Reading Enrichment	(3)
English 2	(2)	Arithmetic Improvement	(23)
Civics 1	(1)	Arithmetic Enrichment	(3)
Civics 2	(1)	Art	(3)
Chemistry	(2)	Science	(1)
Typing 1	(1)	Speech Correction	(1)
Basic Math	(4)	Speech	(1)

### 3. Palmer High School Summer Activities Program

- (a) The program, partially funded by Project LIFT, offered a variety of recreational activities to young people from the core area of the city. The activities included:

Track	Baseball
Basketball	Weightlifting
Gymnastics	Tennis
Wrestling	Swimming

- (b) The program ran for eight weeks, five days per week, from 12 p.m. to 10 p.m. Youngsters could participate in any or all activities as suited their interests. Younger children (10-13) participated primarily in the afternoons while older youth (14-35), many of whom worked during the day, were better able to participate after 6 p.m. Daily attendance ranged from 50-75; evening attendance ranged from 150-200.

(c) The director, three full-time and eight part-time persons were salaried. In addition, the program was greatly aided by numerous volunteers. One source of excellent assistance came from Fort Carson. A group of soldiers interested in baseball offered to assist in practices, and the youngsters benefited considerably from the added expertise. One soldier from Ent Air Force Base was also a helpful volunteer.

Fort Carson has invited the summer activities participants to attend the sports activities held at the Fort during the summer.

(d) The Teen Center operation meshed well with the Palmer sports program because of their proximity as well as their mutual goals. Next summer more advantage will be taken of the situation by opening the Center at 8 a.m. This will enable a participant to enjoy all or any portion or variation of the following schedule:

- 8 a.m. - 12 p.m. Teen Center activities
- 12 p.m. - 5 p.m. Palmer sports
- 5 p.m. - 6 p.m. Evening meal at the Center
- 6 p.m. - 10 p.m. Palmer sports

c. Evaluation summary and conclusions:

1. Helen Hunt Summer School

Because this was a short six week program of limited scope, no formal efforts were made to evaluate; however, teacher and parent judgments were obtained which were highly favorable. Many parents



made repeated visits to classes; and most were very cooperative in getting their children to the school each day. Attendance was excellent with 63% of the children being absent five days or less and only 19% absent ten days or more. Teachers reported absolutely no discipline problems in class or on the playground and stated that pupils displayed more interest the sixth week than the first. In summary, the success of the program is attributed to the following factors:

- (a) Assistance of classroom teachers in identifying particular needs of individual pupils.
- (b) Interest and cooperation of parents.
- (c) Competence of the professional staff in working effectively with disadvantaged children and parents.
- (d) Adequacy of assistance to professional staff in the form of the aide and volunteers.
- (e) The degree of individual attention afforded by small group (8-10 pupils) organization.

## 2. Tuition Waivers

The response to a questionnaire sent to parents of summer school participants at the close of the program was excellent. In addition to answering the questions, many parents added written statements of commendation and of constructive criticism. All remarks indicated the intense, enthusiastic interest of the parents.

Results are tabulated below:

	<u>Yes</u>	<u>No</u>
Do you feel that summer school has been worthwhile for your child?	96%	4%

	<u>Yes</u>	<u>No</u>
Do you feel that your child will be better prepared to enter school in the fall because he attended a summer school?	93%	7%

If summer school classes are offered next year, would you want your child to attend?	83%	17%
--	-----	-----

Do you feel the time spent by the pupil in the summer school program should be increased?	24%	76%
---	-----	-----

Do you feel more courses of study should be offered in the summer school program?	68%	32%
---	-----	-----

Please mark the value you think summer school has been for your child:

Very Good 36.5%      Good 51%      Fair 12%      Poor .05%

### 3. Palmer Summer Activities Program

The summer director judged the program as more successful than the previous year's. A broader participation was achieved among minority groups in contrast to the previous summer when few Hispanos/Mexican Americans were involved. This was due, in part, to the assistance from each Neighborhood Center in sending boys and girls to the specially scheduled basketball and swimming programs. Attendance was regular for all activities, and participants of every age cooperated extremely well. Much success was due to having adequate volunteer assistance. With this help, activities do not bog down and interest does not lag.

## APPENDIX A

## PROJECT STAFF, 1968-69

## ESEA OFFICE - Administration Building

Lauren Bussey - Coordinator (Special Services) (60%)  
 Robert Miller - Project Assistant (Special Services) (50%)  
 Jean Edwards - Secretary (Special Services)  
 Ruth Davidson - Fiscal Control (Accounting) (25%)

DIAGNOSTIC AND SPECIAL LEARNING CENTER

Dr. Robert J. Stout - Director

<u>Staff</u>	<u>Title</u>
Mary Sorenson	Teacher
Eloise Wynne	"
Eleanor Wier	"
Vreda Schieman	"
Saramargaret Friesen	Test Consultant
Michael Ciavonne	Social Worker (50%)
**Mary Baker	Nurse
Gloria Green (Spec. Ed.)	Teacher of the Hard of Hearing
Phyllis Dale	Secretary

ELEMENTARY CORRECTIVE READING

\*Dr. William Liddle, Director  
 \*Loyd Owens, Supervisor  
 Lynda O'Brien, Secretary

<u>Staff</u>	<u>Title</u>	<u>Location</u>
Jane Schofield	Teacher	Bristol
Rita Allard	"	Columbia/Midland
Erle Blakeney	"	Garfield
Wanda Deming	"	"
Sheila Volkman	"	Helen Hunt
Mary Jo Bennett	"	" "
Vesta Montgomery	"	Lincoln
Sarah Maxwell	"	Lowell
Virginia Dews	"	"
Harold Malfeld	"	Pike
Annabel Appleton	"	Washington
Bertha Crawford	"	Whittier
Madelyn Lepp	"	Sacred Heart/Corpus Christi

GARFIELD ELEMENTARY LEARNING CENTER

\*Fred Matthiesen, Principal

<u>Staff</u>	<u>Title</u>
Vivian Arnold	Helping Resource Teacher
Betsy Mayger	Teacher Aide

BUENA VISTA ELEMENTARY COUNSELING

\*Sidney H. Berg, Principal

\*Odven Aakre, Supervisor, Social Worker Services

<u>Staff</u>	<u>Title</u>
Susan Stein	Teacher-Counselor

SOUTH JUNIOR HIGH SCHOOL

\*John Farrington, Principal

Reading Lab.

Phyllis Kester	Teacher
Esther Holland	Teacher Aide
Jannice Rippetoe	" "
Adela Ortiz	" "
Senida Pratt	" "

Nursing Service

\*\*Mary Baker Nurse

School-Community Relations

Sam Dunlap School-Community Worker

NORTH JUNIOR HIGH SCHOOL

\*Dominic Incitti, Principal

Reading Program

*Karen Fenske	Teacher
*Wayne Ballard	"
Wilma Dethloff	Teacher Aide
Shirley Perschbacher	" " (9/4/68-10/16/68)
Alma Carter	" " (10/17/68-6/13/69)

Nursing Service

\*\*Jane May Nurse

WEST JUNIOR HIGH SCHOOL.

\*Oarle Smith, Principal

Nursing Service

\*\*Wilma Hammond Nurse

School-Community Relations

Mary Trujillo School-Community Worker

PALMER HIGH SCHOOL

\*Kenneth L. Hinshaw, Principal

Reading Lab.

Beverly Shaff	Teacher
Donna Burden	"
Mary Jane Price	Teacher Aide

Math Lab.

*Robert Wencil	Teacher
*Charlotte Brummer	"
*James Hughes	"
*Thelma Zanders	"

Nursing Service

**Dale Borris	Nurse
---------------	-------

Summer Activities Program

<u>Staff</u>	<u>Title</u>
Sam Dunlap	Director (last 6 weeks)
Robert McCandless	" (first 2 weeks)
Robert Henry	Instructor
Michael Provenzano	"
Gordon Pugh	"
Mackie Johnson	Assistants (Part time)
Ted Jones	" ( " " )
Richard Freeman	" ( " " )
Don McCoy	" ( " " )
Bill Briscoe	" ( " " )
Douglas Fitzjarrell	" ( " " )
Hal Griggs	" ( " " )
Oliver Kelley	" ( " " )

\*Paid by District 11

\*\*Contracted from City-County Health Department

## APPENDIX B

## Diagnostic &amp; Special Learning Center

March 26, 1969

Teacher ratings from 1 to 5 (low to high)  
of eight pupils returned to regular schedule:CHARACTERISTICS:

	1	2	3	4	5	6	7	8
Belongingness	2	3	4	1	4	2	1	3
Confidence in Oral Expression	2	3	4	3	5	3	3	2
Cooperation	3	3	4	1	4	3	3	3
Courtesy	3	2	4	2	3	3	3	3
Initiative	1	3	4	3	4	3	1	3
Leadership	1	2	4	2	4	2	1	3
Motivation	3	3	4	1	3	2	3	4
Self-Reliance	2	2	4	1	4	2	3	3
Social Adaptability	1	2	4	2	4	3	2	4
<b>Total</b>	<b>18</b>	<b>23</b>	<b>36</b>	<b>16</b>	<b>35</b>	<b>23</b>	<b>20</b>	<b>28</b>
<b>Average</b>	<b>2</b>	<b>2.5</b>	<b>4</b>	<b>1.8</b>	<b>3.9</b>	<b>2.5</b>	<b>2.2</b>	<b>3.1</b>

OVERALL EVALUATION:

A. Self-Confidence	2	3	3	2	4	2	2	3
B. Acceptance by Peers	1	2	3	2	3	3	1	3
C. Adjustment to School	2	3	4	1	3	2	3	3+
<b>Total</b>	<b>5</b>	<b>8</b>	<b>10</b>	<b>5</b>	<b>10</b>	<b>7</b>	<b>6</b>	<b>9+</b>
<b>Average</b>	<b>1.6</b>	<b>2.6</b>	<b>3.3</b>	<b>1.6</b>	<b>3.3</b>	<b>2.3</b>	<b>2</b>	<b>3+</b>

## APPENDIX C

## EVALUATION OF PUPILS REFERRED TO DSLC 1968-69

Roslyn M. Grady, Director  
Department of Research and Special Studies

Complete data on achievement were available for twenty-two subjects and on teacher rating of behavior for twenty-one subjects. The Stanford Achievement Test was given on a pre- and post-test basis with a seven month interval between testing. The subscores of Word Meaning, Paragraph Meaning, Spelling and Work Study Skills were used for comparison purposes. A behavior rating assessing the three areas of hostility-introversion, security, and work-study habits was used to measure attitudinal change from pre- to post-testing. Classroom teachers at the sending school rated the students on the behavior scale.

Table I shows pertinent data about the 22 subjects referred to the Diagnostic and Special Learning Center.

TABLE I

Total Number	IQ		Learning Rate		Grade Distribution
	Mean	Range	Mean	Range	
22	98	80-111	.511	.288-900	3rd = 5 6th = 5 4th = 8 7th = 1 5th = 3

As can be seen in Table I, the average pupil referred to the Diagnostic and Special Learning Center had average mental ability. A child with an IQ of 98 would be expected to have a learning rate of .98 or approximately ten months gain in a year of school. The average child in the 22 referrals, however, had a learning rate of .511 or had gained approximately five months for each year he had attended school. Clearly, these pupils were severely handicapped in the areas of language skills when they began their training at the center. The learning rate is computed by dividing the pre-test achievement score by the grade in school.

For the total four subscores of the Stanford Achievement Test, the 22 subjects made expected progress from pre- to post-testing. (Individual achievement data can be found in Table A at the end of this report). Table II shows the results of that progress.

TABLE II

Average Learning Gain in Year	Expected Gain in 7 months	Actual Gain in 7 months	Rate of Gain
5.11 Months	3.58 Months	4.80 Months	1.42

The 22 subjects as a total group averaged approximately  $1 \frac{4}{10}$  gain which would be expected on the basis of their previous learning rate.

Each child was then compared for each of the subscores and the total language achievement on the basis of the difference between his expected gain on his individual rate of learning and his actual gain. The data were analyzed by the t-test for correlated means (Ferguson, page 170). None of the t-values was statistically significant. Table III shows the results of the analyses of the data.

TABLE III

t-TEST OF GAIN FROM PRE- TO POST-TESTING ON  
STANFORD ACHIEVEMENT SUBSCORES

Test	Mean Difference Expected-Actual	t	p
Word Meaning	+0.04 months	0.341	N.S.
Paragraph Meaning	+0.51 months	0.749	N.S.
Spelling	+0.07 months	0.595	N.S.
Work-Study Skills	+0.88 months	0.289	N.S.
Total	+1.22 months	1.856	N.S.

Although no gains were significant, in no case did the group achieve less than expectancy.



In addition to the achievement data, students were also measured on the differences between the pre- and post- rating of classroom behavior. The scale is structured so that a low score indicates a high level of adjustment. Table IV shows the results of the analysis of the pre-test data. (Individual attitudinal data can be found in Table B at the end of this report).

TABLE IV  
MEANS, RANGES, AND t-TEST ANALYSES FOR  
TEACHER RATINGS OF STUDENT BEHAVIOR

Category	Pre-Test Data			Post-Test Data			t	p
	Possible Range	Actual Range	Mean	Possible Range	Actual Range	Mean		
1. Hostility-Introversion	11-44	14-36	21.38	11-44	14-35	20.29	0.62	N.S.
2. Security	14-56	18-35	24.66	14-56	14-37	24.09	0.16	N.S.
3. Work-Study Skills	10-40	13-38	25.43	10-40	15-37	24.10	0.80	N.S.
4. Total Adjustment	35-140	50-100	71.66	35-140	46-92	68.43	0.83	N.S.

There were no significant differences found in any of the adjustment areas although all three areas showed growth in a positive direction. It is quite probable that the students made greater gains in classroom adjustment than the data measures. Teachers were unaware of the key assigned to the responses of Always, Usually, Sometimes, and Never. Items such as "Is able to accept authority" where the response "Usually" shows a healthier child adjustment than "Always" and an item such as "Is fearful in new situations" where "Sometimes" was keyed higher than "Never", were quite often graded at the absolute extreme of "Always" and "Never" with teachers' comments indicating great growth in these areas. Teachers felt they were giving the students the highest rating possible.

The limited gain in achievement and attitude most probably can be attributed to the short length of time (7 months) between pre- and post-testing. To achieve substantial gain for such severely educationally disadvantaged youngsters would take a longitudinal study of several years.

---

Ferguson, George A. Statistical Analysis in Psychology and Education New York  
McGraw-Hill Book Company, 1966.

TABLE A  
INDIVIDUAL ACHIEVEMENT DATA

Student	Grade	Yearly L.R.	Expected gain in 7 months	Word Meaning		Paragraph Meaning		Spelling		Word-Study Skills		Total	
				Actual Gain	Diff.	Actual Gain	Diff.	Actual Gain	Diff.	Actual Gain	Diff.	Actual Gain	Diff.
1	3	.550	.385	0	-.385	-.20	-.585	.50	.115	.60	.215	.43	.045
2	3	.527	.370	-.10	-.470	.40	.030	.20	-.170	-.10	-.470	.10	-.270
3	3	.600	.420	1.20	.780	1.40	.980	1.20	.780	.90	.480	1.18	.760
4	3	.467	.327	.90	.573	.40	.073	1.50	1.173	0	-.327	.70	.373
5	3	.643	.450	-.10	.550	.50	.050	.20	-.250	.70	.250	.32	-.130
6	4	.517	.362	0	-.362	-.10	-.462	.50	.138	.40	.038	.20	-.162
7	4	.500	.350	.70	.350	0	-.350	.20	-.150	-.20	-.550	.18	-.170
8	4	.495	.346	.50	.154	.60	.254	.10	-.246	.40	.054	.40	.054
9	4	.470	.329	2.00	1.670	1.30	.971	.40	.071	.10	-.229	.95	.621
10	4	.413	.289	-.10	-.389	.80	.511	1.00	.711	.30	.011	.50	.211
11	4	.900	.630	.50	-.130	.10	-.530	0	-.630	-.60	-1.230	0	-.630
12	4	.688	.482	.20	-.282	.70	.218	.60	.118	1.20	.718	.68	.198
13	4	.570	.399	-.20	-.599	.30	-.099	.90	.501	.20	-.199	.30	-.099
14	5	.416	.291	.40	.109	1.10	.809	.70	.465	1.10	.809	1.22	.985
15	5	.576	.403	.80	.397	.80	.397	.50	.097	2.40	1.997	1.12	.717
16	5	.440	.308	.10	-.208	.30	-.008	.40	.092	.50	.192	.32	.012
17	6	.417	.292	.10	-.192	.90	.608	0	-.292	1.10	.808	.53	.238
18	6	.288	.202	.70	.498	.40	.198	.20	-.002	-.10	-.302	.30	.092
19	6	.458	.321	.50	.179	1.20	.879	.10	-.221	.30	-.021	.53	.209
20	6	.725	.508	-1.00	-1.508	2.00	1.492	-.30	-.808	.30	-.208	.25	-.258
21	6	.492	.344	.20	-.144	.70	.356	0	-.344	-1.20	-1.544	.17	-.174
22	7	.376	.263	.60	.537	.30	.037	.40	.137	.70	.437	.54	.277

TABLE B  
INDIVIDUAL ATTITUDINAL DATA

Subject	Grade	Hostility-Introversion			Security			Work-Study Skills			Total		
		Pre	Post	Diff.	Pre	Post	Diff.	Pre.	Post	Diff.	Pre	Post	Diff.
1	3	16	26	-10	18	20	-2	23	25	-2	57	70	-13
2	3	23	20	3	35	27	8	31	30	1	98	92	6
3	3	20	18	2	34	25	9	33	23	10	103	59	44
4	3	22	18	4	19	28	-9	15	25	-10	52	74	-22
5	3	21	18	3	32	24	8	16	15	1	62	60	2
6	4	27	16	9	27	24	3	34	29	5	83	70	13
7	4	23	23	0	23	19	4	24	18	6	66	53	13
8	4	23	14	9	25	32	-7	13	26	-13	58	76	-18
9	4	14	19	-5	14	21	-7	34	30	4	62	76	-14
10	4	20	19	1	26	20	6	38	18	20	100	61	39
11	4	16	23	-7	26	26	0	26	28	-2	68	77	-9
12	4	36	23	13	26	27	-1	36	25	11	82	71	11
13	4	14	25	-11	25	26	-1	22	28	-6	61	73	-12
14	5	20	18	2	21	20	1	23	24	-1	67	58	9
15	5	19	16	3	21	20	1	30	22	8	74	65	9
16	5	22	17	5	32	29	3	34	27	7	93	72	21
17	6	14	21	-7	27	37	-10	18	25	-7	66	80	-14
18	6	18	21	-3	22	24	-2	23	14	9	67	56	11
19	6	36	11	25	15	14	1	15	14	1	50	46	4
20	6	32	35	-3	26	23	3	21	22	-1	70	65	5
21	6	16	25	-9	24	20	4	..	37	-11	66	83	-17
Mean	4.50	21.38	20.28	1.10	24.66	24.09	.56	25.43	24.10	1.43	71.66	68.43	3.24

## COMPOSITE OF NURSES' DAILY RECORDS

1. Palmer High School: September, 1968 - June, 1969  
 Total number of individual pupils seen: 2,586  
 Number of home visits made: 10

<u>Referral Category</u>	<u>Number of Pupils Seen</u>	<u>No. Referred to</u>		<u>No. Receiving Treatment</u>
		Doctor	Agency	
Acute Illness	1,719	203	2	98
First Aid	860	126	0	51
Infectious Disease	10	8	1	7
Emotional Problems	251	7	19	9
Handicapping Conditions	3	2	1	0
General Health	337	28	0	13
Chronic Illness	53	18	1	15
Dental Problems	39	22	9	29
Vision Screening	720	45	27	24
Aural Screening	621	0	0	0

Meetings and Other Activities

Case Conference	7
Principal	125
Deans	178
Counselors	318
Teachers	408
Students	490
Parents	379
Doctors	45
City-County Health Dept.	186
Other	315

2. South Junior High School: September, 1968 - June, 1969  
 Total Number of pupils seen: 2,642  
 Number of home visits made: 73

<u>Referral Category</u>	<u>Number of Pupils Seen</u>	<u>No. Referred to</u>		<u>No. Receiving Treatment</u>
		Doctor	Agency	
Acute Illness	572	91	5	75
First Aid	640	34	0	28
Infectious Disease	29	26	0	25
Emotional Problems	79	0	0	0
General Health	1,242	49	28	57
Chronic Illness	39	3	0	3
Dental Problems	0	0	0	0
Vision Screening	131	53	54	72
Throat Cultures	59	0	0	0

Meetings and Other Activities

Case Conference	10
Principal	191
Deans	189
Counselors	182
Teachers	294
Students	225

Parents	417
Doctors	74
City-County Health Dept.	114
Other	162

3. North Junior High School: September, 1968 - June, 1969  
 Total number of pupils seen: 1,383  
 Number of home visits made: 54

<u>Referral Category</u>	<u>Number of Pupils Seen</u>	<u>No. Referred to</u>		<u>No. Receiving Treatment</u>
		<u>Doctor</u>	<u>Agency</u>	
Acute Illness	271	23	2	0
First Aid	268	24	1	0
Infectious Disease	24	3	1	1
Emotional Problems	203	1	9	0
Handicapping Conditions	37	0	0	0
General Health	211	16	2	5
Chronic Illness	93	9	2	3
Dental Problems	39	8	1	5
Vision Screening	116	5	7	0
Aural Screening	12	1	3	6

Meetings and Other Activities

Case Conference	10
Principal	38
Deans	106
Counselors	69
Teachers	81
Students	310
Parents	66
Doctors	72
City-County Health Dept.	12
Other	90

Colorado Springs Public Schools  
 Thomas B. Doherty, Superintendent  
 Department of Pupil Accounting & Testing Services  
 Helen K. Bailey, Director

Analysis of the Corrective Reading Program at the Elementary School Level

1968-69

Roy Stoller and Edward Segady

Pupils selected for the corrective reading program in the elementary schools were limited to "target" schools. These are schools designated as having a large school population of economically disadvantaged children. Students were identified on the basis of reading performance, development below expectancy level as determined by tests, and classroom teacher judgment.

The objective stated in the project description was to raise classroom performance of disadvantaged children in reading to individual expectancy level. Each school was staffed with a corrective reading teacher.

Evaluation procedures were modified from previous years. Ten elementary corrective reading teachers were to identify about 12 pupils to provide a sample of about 120 elementary pupils. In this study, there are one hundred and ten students with pre-and post-test results distributed by grade level in the following manner:

<u>Grade</u>	<u>Number</u>	<u>Test</u>
3	19	Metropolitan Reading Tests
3	18	Iowa Tests of Basic Skills
4	30	Iowa Tests of Basic Skills
5	26	Iowa Tests of Basic Skills
6	14	Iowa Tests of Basic Skills

All fourth, fifth, and sixth grade students in the program took the ITBS Vocabulary and Reading sub-tests in May of 1969. They had previously taken the full battery in the regular October, 1968 testing of all students in these grades. Third grade students were administered either the ITBS or the

Metropolitan Reading Test in October, 1968, and students in the third grade corrective reading program took the same test as a post-test in May, 1969.

Fall and Spring norms were used.

The California Short-Form Test of Mental Maturity is administered in grades two and five as part of the regular testing program. Therefore it is possible to compare results of standardized achievement and ability tests to measure growth in achievement in relation to ability.

The average I.Q. was computed for each grade by using the mental test scores of those students included in this study. This is given in Table I along with the range of I.Q.'s found in each grade for those students in this sample.

Table I

Mean Average I.Q. of Students Enrolled  
in the Corrective Reading Program,  
Elementary Schools, 1968-69

Test	Grade	Number	Ave. I.Q.	Range	Above 100
Metropolitan Reading	3	19	88	73-106	3
Iowa Test of Basic Skills	3	17	92	66-106	3
Iowa Test of Basic Skills	4	28	94	72-114	6
Iowa Test of Basic Skills	5	25	88	72-113	3
Iowa Test of Basic Skills	6	13	85	67-102	1
Total		102	90	66-114	16

Only two students with an I.Q. of above 100 were reading at grade level on the first test. These two were both third graders. Three third and three fourth graders having I.Q. scores within the 90-100 range had scores at grade level on the pre-test. No fifth or sixth graders, regardless of I.Q. scored at grade level on the preliminary test. Tables II and III indicate the grade equivalent averages for pre- and post-tests.



Table II  
Metropolitan Reading Tests  
Corrective Reading Sample  
Grade 3, 1968-69

Test	Word Knowledge		Word Discrimination		Reading	
	Pre	Post	Pre	Post	Pre	Post
Mean Grade Equivalent	2.4	2.6	2.7	3.0	2.6	2.7
No. Showing Gain	14		12		11	
No. Showing Change in G.E.	-		1		-	
No. Showing Loss	5		6		8	
Range in Change (Months)	-1.4 to + 1.5		-.9 to +1.6		-1.1 to + 2.4	

The gains are rather modest for the majority of the third grade students in this study. There were only five who had gains of eight months or more in Word Knowledge, six in Word Discrimination, and three in Reading during the eight month interval between tests.

Table III

Iowa Tests of Basic Skills,  
Corrective Reading Sample,  
Pre- and Post Test Results,  
Elementary Schools, 1968-69

Grade	Vocabulary					Reading				
	Mean Grade Equivalent		Number With Gain	Loss or no Change	Range in Change (Months)	Mean Grade Equivalent		Number With Gain	Loss or no Change	Range in Change (Months)
	Pre	Post				Pre	Post			
3	2.3	2.8	13	5	-10 to + 17	2.6	3.0	11	7	-7 to + 16
4	2.8	3.2	20	10	-11 to + 19	2.8	3.4	20	10	-15 to + 26
5	3.7	4.0	15	11	-15 to + 27	3.7	4.3	21	5	-14 to + 22
6	3.9	4.5	9	5	-18 to + 28	4.3	4.9	10	4	-19 to + 28

An examination of Tables II and III, Reading achievement, reveals that grade three is almost a year below expectancy (if average I.Q. is used as a determining factor in gaining this level) and that the discrepancy is greater for each succeeding year. These results imply that the longer the duration of the reading difficulty, the less successful will be the efforts at remediation. Thirty-nine students had gains of eight months or more between pre-test and post-test measurements (six others showed a loss of that much or more).

In order to determine the relationship of individual growth to mental ability the amount of change was plotted and depicted in Table IV.

Table IV

Comparison of Mental Ability and Growth  
in Reading Comprehension from October, 1968,  
to May, 1969, Corrective Reading Students

Grade 3-Metropolitan Reading Test*							
I.Q.	Loss	No Change	Grade Equivalent Gain in Months				
			1-5	6-10	11-15	16-20	Above 20
100 or Above	2						1
90-99			2	1			
80-89	5		3	1	1		
70-79	1		1	1			
Below 70							

\* Nineteen third grade students (in the sample) took the Metropolitan Reading Test; eighteen third grade students took the Iowa Tests of Basic Skills Reading sub-test. They are reported in separate sections of Table IV.

Grade 3 - Iowa Tests of Basic Skills

I.Q.	Loss	No Change	Grade Equivalent Gain in Months				
			1-5	6-10	11-15	16-20	Above 20
100 or Above			3				
90-99	4		1	1	1	1	
80-89	2			1		1	
70-79					1		
Below 70				1			

Grade 4

I.Q.	Loss	No Change	Grade Equivalent Gain in Months				
			1-5	6-10	11-15	16-20	Above 20
100 or Above	1		1	1	1	2	1
90-99	3	1	3	4	3		
80-89	4			1			1
70-79	1						
Below 70							

Grade 5

I.Q.	Loss	No Change	Grade Equivalent Gain in Months				
			1-5	6-10	11-15	16-20	Above 20
100 or Above			1		2		
90-99	1		4	3			
80-89	2			1	4		
70-79	2			1	1	1	1
Below 70					1		

## Grade 6

I.Q.	Loss	No Change	Grade Equivalent Gain in Months				
			1-5	6-10	11-15	16-20	Above 20
100 or Above							
90-99	2			1			1
80-89	2		1	1			1
70-79			1		1		
Below 70			1		1		

The one third grade student for whom no mental test score was available had a grade equivalent loss of two months.

Two fourth grade students had no mental test scores. One showed a gain of seven months and the other a gain of 17 months from pre-test to post-test.

The fifth grade student with no mental test had a gain of one month.

One sixth grade student with no mental test had a grade equivalent loss of one month.

The amount of gain in reading comprehension compared with mental ability, as indicated in Table IV, shows little relationship between rate of growth and measured ability.

### Summary

Meeting the objective of this project, raising the classroom performance of disadvantaged children in reading to individual expectancy level, probably cannot be accomplished within the span of one school year. Other benefits have accrued from this program. It would certainly be of help in the final evaluation if a longitudinal study of these children could be accomplished in order to ascertain the progress reflected by the more individualized teaching done here.

The average gain score on the ITBS Reading sub-test for the fourth, fifth, and sixth grades was six months in each case. Since the mean starting point for these students was low, such an increase as this places them at a progressively and comparably lower point in each succeeding grade level.

In order to point up the lack of relationship between the measured ability levels and achievement, Pearson product moment correlation figures for fourth, fifth, and sixth grades were computed. The correlation figures are for I.Q. scores and the post-test ITBS Reading grade placement. The obtained correlation figures are:

Fourth grade - .05  
Fifth grade - .04  
Sixth grade - .09

These findings indicate that, for future selections of students for this program, I.Q. scores should probably receive a low weighted figure. Other characteristics such as motivation, attitude, home background, emotional stability, possible perceptual handicaps, etc. should be studied. Knowledge of such factors would be of assistance in selecting and teaching these children.

## APPENDIX F

Colorado Springs Public Schools  
Thomas B. Doherty, Superintendent  
Department of Pupil Accounting & Testing Services  
Helen K. Bailey, Director

North Junior High School Corrective Reading

1968-69

Roy H. Stoller

The analysis of data in this report on the Corrective Reading Program at North Junior High School includes only those students who completed a pre-test and a post-test in Vocabulary or Reading or both of these sub-tests of the Iowa Tests of Basic Skills. There were fifty seventh grade students who took one test but only 17 who took the pre-test and post-test. Of the twenty-five eighth grade students in this program, 14 completed the pre-test and post-test on either Reading or Vocabulary. There were thirty-one students with usable test results for this appraisal of the Corrective Reading Program.

Form 3, Grade 5 level of the ITBS was used for pre-test and post-test of these students who have been reading below grade level. This material is relatively easier reading than is the material for their grade level but can still give grade equivalents.

Sixteen of the seventeen seventh grade students have taken the California Short-Form Test of Mental Maturity, and the fourteen eighth grade students have taken this test. Table I shows the distribution of I.Q.'s based upon that test. Nineteen of these students are below average in ability according to their results on the California Short-Form Test of Mental Ability.

Table I

Average I.Q. as Measured by  
the California Short-Form Test  
of Mental Ability

Grade	Average I.Q.	Range	Above 90 I.Q.
7	84	67-96	6
8	83	69-101	5

Most of those I.Q.'s in the 90's were low 90's. Only two in each grade had I.Q.'s as high as 95. Eight, or about one-fourth, were below 80. This would indicate that in addition to having reading difficulty there is also a concomitant factor of low ability affecting their progress.

Table II

North Junior High School  
Iowa Tests of Basic Skills  
Grades 7 and 8, 1968-69

	Grade 7				Grade 8			
	Vocabulary		Reading		Vocabulary		Reading	
Pupils Taking Both Tests	17		17		13		14	
Mean Grade Equivalent	Pre	Post	Pre	Post	Pre	Post	Pre	Post
	4.5	5.2	4.6	4.6	4.8	5.0	4.5	5.0
No. Showing Gain	13		10		8		10	
No Change in G.E.	3		-		-		-	
No. Showing Loss	1		7		5		4	
Range in Change (Months)	-8 to +22		-21 to +10		-16 to +28		-8 to +21	

The summary of pre-test and post-test results in Table II shows the essential difference between results of the two tests. They were given in September, 1968, and in May, 1969. During this interval there would be an expected gain in grade equivalent of 9 months for an average group. However, disadvantaged pupils with functional level I.Q.'s averaging 83 or 84 will make much slower progress than the normal population.

Using the formula of  $.10 \times$  the I.Q. score for the expected growth in relationship to ability, this group would have been expected to show an aggregate gain of about seven to eight months in grade placement. However, this "rule of thumb" expectancy may be too high for these junior high students who may have developed poor work habits over the past several years and poor attitudes toward school thus resulting in lack of motivation to try. When using this criterion of seven to 8 months expected growth, the average gain did not meet expectation, though the seventh grade increase in Vocabulary came close.

Nearly as many students showed loss in Reading Comprehension as there were those who showed gains among the seventh grade students. In the eighth grade group it was Vocabulary that remained fairly stable while Reading showed a gain of five months in grade equivalent.

Table III is a comparison of mental ability with growth in achievement during the interval between tests. The California Short Form Test of Mental Maturity I.Q.'s were used for those students for whom this test was available. The numbers involved may be too few to be of great significance, but they do show considerable scatter with no strong correlation between ability and rate of increase in grade equivalent.



Table III

Comparison of Mental Ability  
and Growth in Achievement  
September 1968 to May 1969

## Grade 7 - Vocabulary

I.Q.	Loss	No Change	Gain in Months			
			1-5	6-10	11-15	Above 15
Above 100						
90-99		1	2	2	1	
80-89			1	3	1	2
70-79			1			
60-69		2				

## Grade 7 - Reading

I.Q.	Loss	No Change	Gain in Months			
			1-5	6-10	11-15	Above 15
Above 100						
90-99	2		2	2		
80-89	3		2	2		
70-79			1			
60-69	1			1		

## Grade 8 - Vocabulary

I.Q.	Loss	No Change	Gain in Months			
			1-5	6-10	11-15	Above 15
Above 100	1					
90-99			1	3		
80-89			1	1		
70-79	4					1
60-69				1		

Note: One student did not take the post-test so only thirteen usable sub-tests were available for this section of the table.

## Grade 8 - Reading

I.Q.	Loss	No Change	Gain in Months			
			1-5	6-10	11-15	Above 15
Above 100			1			
90-99	2					2
80-89	1			1		
70-79	1		2	1	2	
60-69			1			

It is unfortunate that there were not more complete sets of tests from the group to be incorporated into this study. The loss of the twenty-five seventh grade students' scores and the seven eighth grade students' scores who took the pre-test but not the post-test amounts to over half of those initially tested in this group. Greater credence might have been given to the study if these could have been included. It is recommended that more complete testing of students still in the program be accomplished at post-testing time. If these represent drop-outs from the program, there may be some value in including information on them in the total evaluation of the ESEA Project report.

With the limited number of students in the study only tenuous conclusions, at best, may be reached. The total change in Reading and Vocabulary for either grade is rather limited and did not meet adjusted expectations for their ability level. The Corrective Reading Program does not seem to be producing a reasonable amelioration of the students deficiencies in Vocabulary and Reading as measured by this instrument.

## APPENDIX G

Colorado Springs Public Schools  
Thomas B. Doherty, Superintendent  
Department of Pupil Accounting & Testing Services  
Helen K. Bailey, Director

Analysis of the Corrective Reading Program at Palmer High School

Grade 10

1968-69

Roy H. Stoller

The stated objective of this program, according to the project description in ESEA Title I project No. 69-092, is to raise the classroom performance of disadvantaged children in reading to individual expectancy level. The Gates-MacGinitie Reading Tests were selected to measure how well this objective has been accomplished. Level D was used for both testing sessions; tests were given in September, 1968, and May, 1969. Level D is ordinarily used for grades four, five, and six but was selected for these students with known reading disability as being more appropriate for their current reading level.

There were one hundred and twenty-four students who took the initial tests in September, 1968. Sixty-five of these did not take the May, 1969, test. The analysis of data included in this report is based only on those fifty-nine students who took both tests.

Table I presents the mean grade equivalent for pre-test and post-test results which attempt to measure three areas: Vocabulary, Comprehension, and Speech and Accuracy.

Table I

Comparison of Grade Equivalents,  
Pre- and Post-tests, Gates MacGinitie  
Reading Tests, Grade 10, 1968-69

Sub. Tests	Speed & Accuracy		Vocabulary		Comprehension	
	Pre	Post	Pre	Post	Pre	Post
Mean Grade Equivalents	6.4	7.2	6.3	6.7	6.1	6.4
No. showing Gain	38		37		36	
No change in R.E.	7		2		5	
No. showing Loss	14		20		18	
Range in change (Months)	-49 to + 72		-23 to + 33		-41 to + 37	

There was a mean grade equivalent increase in Vocabulary and Comprehension of 3.5 months. The greater gain on Speed and Accuracy needs to be examined rather carefully. This is a very brief time test and the slightest deviation from time limits will greatly affect results. The extremes in both gains and losses between tests casts doubt on the reliability of this measure. Three showed losses of 3 years or more and three others had recorded losses of 2.5 to 3 years. Ten had gains of 3 or more years with one showing a gain of 7.2 years in grade equivalent. There is no apparent explanation for such wide deviations, but they do exist and should be considered when evaluating results.

Table II will show another diversion of gains and losses in grade equivalents compared with mental ability as determined by the California Short-Form Test of Mental Ability. Mental test results were not available for five of the fifty-nine students in this study, and their changes cannot be shown in the table.

Table II

Comparison of Mental Ability and Growth  
in Achievement, September, 1968, to May, 1969,  
as measured by Gates McGinitie Reading Tests

## Speed and Accuracy

I.Q.	Loss	No Change	Gain in months			
			1-5	6-10	11-15	Above 15
100 or above	8	1		1	1	4
90-99	2			2	2	6
80-89	2	2	1	1	2	3
70-79	1	2	1	3	4	3
Below 70				1		1

## Vocabulary

I.Q.	Loss	No Change	Gain in months			
			1-5	6-10	11-15	Above 15
100 or above	4		2	1	5	2
90-99	6	1	3	1	1	1
80-89	3		3	4	1	
70-79	3		2	2	3	4
Below 70	1			1		

## Comprehension

I.Q.	Loss	No Change	Gain in months			
			1-5	6-10	11-15	Above 15
100 or above	8		2		2	3
90-99	3	1	1	5	1	1
80-89	1		3	1	2	4
70-79	4	3	4	1		2
Below 70					2	

The five with no recorded I.Q.'s had Speed and Accuracy changes ranging from a loss of 2.2 to a gain of 3.7 years in grade equivalents, a loss of eight months to a gain of 1.5 years on Vocabulary, and a loss of 1.9 to an increase of 1.3 on Comprehension.

One would normally expect a relatively greater gain for those with higher I.Q.'s than those whose ability is low. The distribution does not show this correlation. Eighteen, or 33%, had a loss or no change in grade equivalent on Speed and Accuracy and on Vocabulary, and twenty, or 39%, showed no change to a loss on Comprehension. During the interval between pre-test and post-test the average gain expected in relation to ability was about 9 months on grade equivalent scores. Mental ability of the group, based upon the latest California Short-Form Test of Mental maturity, is given in Table III. This includes the mean average I.Q. and the range for the fifty-four corrective reading students included in Table II.

Table III

Average I.Q. as Measured by  
The California Short-Form Tests  
of Mental Maturity

No. of Students	Mean Ave. I.Q.	Range	I.Q. Below 80	I.Q. 100 or Above
54	89	66-112	16	14

Assuming expected growth in relationship to ability approximates .10 times the I.Q. score, the average gain shown in Table I for Vocabulary and Comprehension is less than was anticipated. These students are handicapped by a history of reading deficiency and low achievement. Some are also low ability students. We have no control group with which to make comparisons between conventional teaching and the instructional method used in the Corrective Reading Program. Therefore we can offer no conclusive evidence that this approach is either more effective or less effective. Reliability of group mental test data in this

study could be questioned. Some of the pupils had not had one for five years. Difficulty with reading would result in a lower I.Q. than the actual potential of the individual. Individual testing is the only realistic way to establish some measure of potential with pupils of this age having a severe reading disability. However, the corrective reading program is not accomplishing its stated objective of raising the classroom performance in reading to individual expectancy levels. It may be that the progress made is more realistic than the objective, and that any gain is a major accomplishment. The other progress or problems of individuals may be obscured by statistical data. Are individuals making significant advances in reading that they would not have achieved without the benefits of this approach? Are students staying in school who might have been lost without corrective reading? These and other questions need to be considered in the total evaluation of the program.

One student's consistently high scores on pre-tests and post-tests suggest that he may have been misplaced. Another showed a gain of 7.2 years on Speed and Accuracy but a loss of 4.1 on Comprehension. Are there factors here that need individual attention? The scores for two persons reflected growth of 12 months or more on all three sub-tests and two others had gains of 8 months or more in all areas of the test. Sometimes progress cannot be measured by number, but the foregoing tables and commentary have attempted to point out both objectively and subjectively some of the possible merits and limitations of the corrective reading program. Further evaluation by the teachers and other personnel involved in the program should be consulted before any conclusions are drawn about the total effectiveness of corrective reading at the high school level.

## APPENDIX H

Colorado Springs Public Schools  
Thomas B. Doherty, Superintendent  
Department of Pupil Accounting & Testing Services  
Helen K. Bailey, Director

Palmer High School  
Slow Learner/Low Ability  
Mathematics Classes

Grades 10 and 11, 1968-69

Roy H. Stoller

A part of the Learning Investment for Tomorrow, ESEA Title I Project of the Colorado Springs Public Schools, is concerned with the slow learner/low ability student at the high school level. The criterion for selection of mathematics pupils at Palmer High School as stated in the project description for 1968-69, will be those assigned to the slow learner/low ability classes. Almost every one of these pupils come from a disadvantaged home. The activities of the classes were intended to provide a more stimulating learning environment. Desk calculators and the EDL Mathematics Builder were to be utilized in the program.

One hundred and forty-five tenth and eleventh grade students of this program were initially tested in September, 1968. The post-test was given to class members in May, 1969. Of the test results, there were 64 tenth grade students who had completed pre- and post-tests on either computation or Problem Solving, or both, sub tests. Fifteen eleventh graders also had usable test results. Sixty-six others who took the pre-test did not take the post test, and fourteen had post-tests with no pre-test records. The Metropolitan Advanced Arithmetic Tests, form BM, were used for the test evaluation of this program.

Table I depicts the mean average grade equivalent for pre- and post-tests. Seventy-seven scores were used for Computation averages, and there were pre- and post tests results available for seventy students on Problem Solving and Concepts.



Table I

Metropolitan Advanced Arithmetic Tests  
Mean Average Grade Equivalents  
for Grades 10 and 11

Grade Level	Computation			Problem Solving and Concepts		
	Number	Mean Grade Equivalent		Number	Mean Grade Equivalent	
		Pre-Test	Post-Test		Pre-Test	Post-Test
10	62	7.1	7.9	56	7.9	8.1
11	15	7.5	8.0	13	8.1	8.3
Total	77	7.2	7.9	69	7.9	8.2

The mean grade equivalent at pre-test time was 7.9 for Problem Solving and Concepts as contrasted with a mean grade equivalent of 7.1 on Computation. However, this initial advantage was largely dissipated by post-test time through a greater gain in Computation than in Problem Solving in Concepts skills as measured by this instrument. The largest increase in grade equivalent was achieved by the tenth grade students on the Computation test.

The California Short-Form Test of Mental Maturity I.Q.'s were obtained from Pupil Accounting and Testing Services for all pupils who have had this test. Table II reflects the wide range of these I.Q. scores as well as the average for each grade.

Table II

Average I.Q. as Measured by  
The California Short-Form Test  
of Mental Ability

Grade	# of Student	Ave. I.Q.	Range	Below 80	Above 100
10	63	96	66-120	10	26
11	14	93	66-114	3	5

The functional level of I.Q., as measured by the California Short-Form Test of Mental Maturity, was generally higher for the tenth grade students than it was for the eleventh grade pupils in the program. The mean I.Q. is in the (low) average range of mental ability classification and suggests that the majority of them are not low-ability students.

With the I.Q.'s available it is possible to show the relationship between ability and achievement on the Metropolitan Advanced Mathematics Test. This is presented in Table III. Since there were so few eleventh grade students, and their pattern did not deviate markedly from that of the tenth grade students, they are incorporated into the table. They are, however, identified by numbers placed in parentheses in the columns where their ability-achievement relationship placed them.

Table III

Comparison of Mental Ability and Growth  
in Achievement, September 1968, to May, 1969,  
as measured by Metropolitan Advanced Mathematics  
Tests and the California Short-Form Test of Mental Maturity

I.Q.	Loss	No Change	Computation			
			Change in Months			
			1-5	6-10	11-15	Above 15
Above 109	1		2 (1)	1	3	2
100-109	3 (1)		4 (1)	4	8 (2)	6 (1)
90-99	2	1 (1)	3	3	5 (1)	2
80-89	4 (3)		4	1	2	1
70-79	3 (1)		2	3	3 (1)	
Below 70			1 (1)			1

## Problem Solving and Concepts

I.Q.	Loss	No Change	Change in Months			
			1-5	6-10	11-15	Above 15
Above 109	2		2	1	2 (1)	3
100-109	5 (1)	3 (1)	10 (2)	1 (1)	1	1
90-99	4	3	2	2 (1)	2	1
80-89	2	4 (2)	2 (1)	2	1	
70-79	7 (2)	1		1		1
Below 70	2 (1)					

The average gain in grade equivalent for the normal population would be expected to be about 10 months during the school year. Though the mean average for this group was less, there were 45 of 75 who registered a gain of six months or more on the Computation Test and 19 of 68 with an increase of six or more months on the Problem Solving and Concepts Test.

As a group they are still achieving almost three years below their expected grade placement. Considering their deficiency in these mathematics areas, the gain of six months or more would seem to be a significant one. One disturbing element is the great number whose grade equivalent score regressed from pre-test to post-test without any apparent relationship to the ability of students involved.

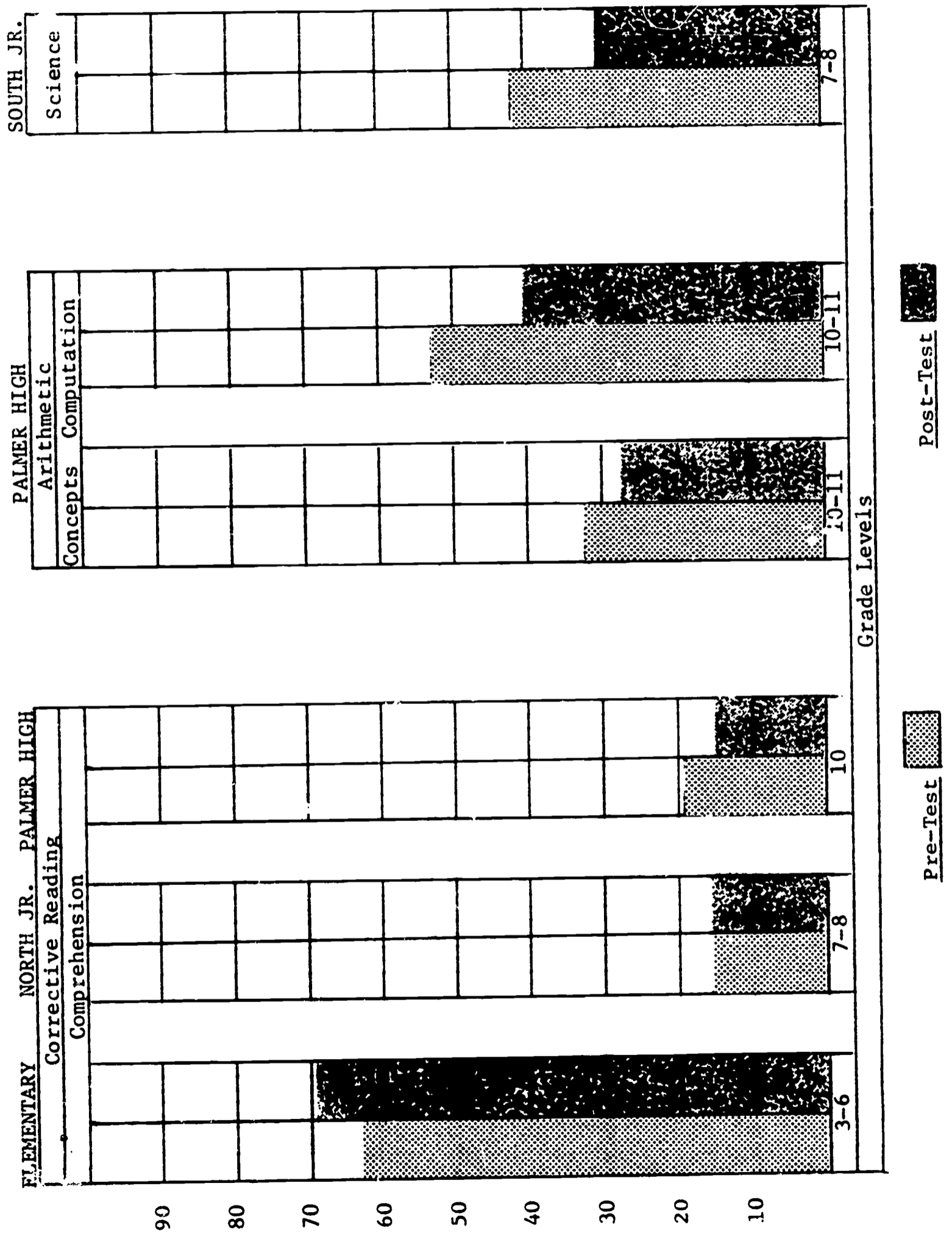
Test results were grouped by teacher and class, and an analysis of classes may be of interest. There seemed to be no grouping by ability or achievement level. Class ranges of I.Q.'s included 70-112, 79-120, 78-114, and 66-118, for example; and grade equivalent scores varied by more than three years and by as much as five years in most of the classes. Post-test results were just as varied with wide ranges of gains and losses in each class.

The loss of large numbers of students raises a question or two. Are these students no longer in the program? If not, what is the reason or reasons for their loss? Did many drop for lack of achievement or failure? If so, the group in this study would represent the best of the classes, and on this basis what success could one claim for the program? If many were still in the class but not tested, how would this have affected the total evaluation?

Until these questions are answered it is doubtful if any unassailable conclusions can be offered about the degree of success of the program.

APPENDIX I

PERCENTAGE OF PUPILS BELOW 25th PERCENTILE - NATIONAL NORMS



## APPENDIX J

Behavior Inventory Data in Evaluation  
of the Buena Vista Teacher-Counselor Program

TABLE I

Boys

N=34	Mean Initial Rating	Mean Post Rating	t	p
Academic	16.08	20.11	4.59	.001
Social	14.64	15.29	1.50	N.S.
Emotional	7.29	9.05	2.72	.02

Girls

N=28	Mean Initial Rating	Mean Post Rating	t	p
Academic	21.21	25.21	4.70	.001
Social	16.10	17.57	3.42	.01
Emotional	9.85	11.28	2.78	.01

TABLE II

Primary

N=31	Mean Initial Rating	Mean Post Rating	t	p
Academic	16.39	21.64	5.91	.001
Social	15.16	16.64	3.59	.01
Emotional	6.81	9.52	4.24	.001

Intermediate

N=31	Mean Initial Rating	Mean Post Rating	t	p
Academic	20.41	23.19	4.02	.001
Social	15.48	16.00	1.03	N.S.
Emotional	10.09	10.61	.89	N.S.

TABLE III

Intensive

N=46	Mean Initial Rating	Mean Post Rating	t	p
Academic	17.39	21.69	5.46	.001
Social	15.02	15.97	2.44	.02
Emotional	8.03	9.60	2.70	.01

Limited

N=16	Mean Initial Rating	Mean Post Rating	t	p
Academic	21.31	24.50	4.51	.001
Social	16.12	17.31	2.96	.01
Emotional	9.50	11.37	3.35	.02