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ABSTRACT

This collection of reports evaluates ten Title I programs which were implemented in the Cleveland (Ohio) public and parochial schools during the 1980-81 school year. The following projects are discussed: (1) Child Development Project; (2) Children in Institutions Project; (3) Cleveland Fundamental School Basic Skills Reinforcement Project; (4) Diagnostic Reading Clinic Project; (5) English-as-a-Second-Language Project; (6) Mathematics Skills Improvement Project; (7) Project STAR (Skills Training for Achievement in Reading); (8) Pupil Adjustment Project; (9) Reading Improvement Project; (10) Reading Strategy Project; and (11) Resident Tutor Project. Objectives and outcomes for each program are presented together with recommendations for program improvements. Appendices to each report include achievement test results, attendance and enrollment data, and the results of attitude and opinion surveys. (JCD)

EVALUATION REPORTS

1980-1981

TITLE I

ELEMENTARY AND SECONDARY EDUCATION ACT - 1965

DEPARTMENT OF RESEARCH, DEVELOPMENT AND EVALUATION

Cleveland Public Schools

Cleveland, Ohio

1982

The activity which is the subject of this report was supported in whole, or in part by the U.S. Department of Education. However, the opinions expressed herein do not necessarily reflect the position or policy of the U.S. Department of Education and no official endorsement by the U.S. Department of Education should be inferred.

CLEVELAND PUBLIC SCHOOLS

Department of Research, Development and Evaluation

TITLE I EVALUATION REPORTS

1980-1981

Cleveland, Ohio

1982

FOREWORD

Evaluation is an integral part of the process by which schools can improve their educational programs. Through the information generated by evaluative activities, sounder decisions can be made about the effects of instruction on pupil learning.

The Cleveland Public Schools are proud of the Department of Research, Development and Evaluation for the excellent evaluative services provided for Title I programs.

This publication, Title I Evaluation Reports--1980-81 presents the latest findings about the effects of Title I programs in the Cleveland schools.

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Superintendent of Schools

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CLEVELAND PUBLIC SCHOOLS

TITLE I EVALUATION REPORTS

1980-1981

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Project STAR	Patricia Mathews
Pupil Adjustment Project	Linda Edwards
Reading Improvement Project	Pauline Davis
Reading Strategy Project	Doris Webster
Resident Tutor Project	Marlene McMillan

TABLE OF CONTENTS

INTRODUCTION

Since the spring of 1966, the Cleveland Public Schools have implemented program components under Title I of the Elementary and Secondary Education Act. These components have been directed at improvement of educational opportunities for disadvantaged youth attending Cleveland schools.

Members of the Department of Research, Development and Evaluation have had the responsibility for designing and implementing the evaluation of these program components. This publication contains their evaluation reports for the 1980-81 program period. These reports present information about the effectiveness of each program in attaining the objectives proposed for each component.

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CHILD DEVELOPMENT PROJECT

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1980-1981

CHILD DEVELOPMENT

1980-81 Title I Evaluation

PURPOSE AND OVERVIEW

The Child Development Project gives eligible four-year old children basic experiences not generally available in the home. These experiences help the children develop learning skills needed for success in school. Language and other pre-reading skills are emphasized. Each project class includes about 20 children, who attend for a half-day, five days a week. Each class has a teacher and an aide, and parents are encouraged to work with their children at school and at home.

SERVICE SUMMARY

Pupils Served: 1,483 Grades Served: Pre-K Years in Operation: 16.5

Schools: 35 public

(See Appendix A.)

Staffing:

- 1 Project Manager (FT)
- 5 Coordinators (PT - 40%): Curriculum; Supportive Services; Field Services; Dental; Health/Nursing
- 5 Consultant Teachers (3 FT Curriculum/Instruction; 2 PT - 40%: Spec. Servs.; Rdg.)
- 36 Teachers (35 FT; 1 PT - 50%)
- 5 Social Workers (4 FT; 1 PT - 40%)
- 1 Speech Therapist (FT)
- 35 Educational Aides (34 FT; 1 PT - 50%)
- 3 Clerks (FT)
- 3 Laborers (FT)

Total Title I Expenditures: $624,613 Per Pupil Cost: $421

SUMMARY OF FINDINGS

During 1980-1981 Child Development operated as proposed. Classroom and other project staff participated in a wide variety of inservice activities. Teacher consultants visited each project classroom at least three times; the average number of observations was eight. Project staff worked with other school and community personnel to provide maximum supportive services for Child Development pupils and their families.

Children's average gains in both language and mathematics exceeded those expected. Their average score in language moved from the bottom fourth to the national average. Also, in areas of self-sufficiency, emotional maturity, social skills and self-concept, the pupils' average gains were greater than proposed. In all these, the 1980-1981 gains were greater than the preceding year--possibly attributable to a school year with fewer disruptions as well as to project staff's ongoing efforts to improve their skills.

OBJECTIVES AND OUTCOMES

Process Objective 1: Differentiated inservice meetings will be scheduled for instructional and supportive services personnel.

Outcome: Project records clearly indicated that this objective was attained.

- The Child Development staff, with other Early Childhood personnel, provided several (series of) inservice sessions such as:
  - Affirmative Education Phase III (9/17,18,19/80) emphasizing staff learning/teaching styles;
  - Early Childhood's Role in Bilingual Education (12/12/80);
  - Affirmative Education Phase IV (2/12/81) focusing on multicultural education.
- Child Development teachers had a special meeting with the directing supervisors for Compensatory Education Programs and Early Childhood Education relevant to end-of-school-year procedures (5/28/81).
- Social workers were inserviced by the Supportive Services Coordinator on at least two occasions (10/10/80; 3/30/81).
- All project teachers and classroom aides participated in workshops on assessment and language experiences.
  - Instructional staff were first inserviced on the use of a new assessment tool in the fall (10/6,7,8/80), with a follow-up workshop several weeks later (12/15,16/80). (The assessment instrument provides detailed directions for observing, and forms for periodically recording, each child's level of mastery of carefully specified skills in areas such as motor, social, visual memory, auditory discrimination.) On reaction sheets completed at the close of these workshops, 97% of the participants rated them "excellent" or "good."
  - All classroom staff were involved in one of two LEIEC (Language Experiences Individualized and Extended for young Children) workshops. Those from 15 schools introduced to LEIEC during 1979-1980 met on February 23 or 24, 1981; those from the other 21 schools were introduced to LEIEC on March 18 or 19, 1981. Ratings of "excellent" or "good" were submitted by all participants.
- Project teacher consultants--who received formal inservice themselves (10/17/80; 3/12/81)--provided for classroom teachers and assistants the most highly differentiated inservice of all. Each Child Development teacher was provided individualized, on-site inservice by a teacher consultant on at least three occasions during 1980-1981; the median number of visits/observations was eight per teacher.

Process Objective 1 - (continued).

- Beyond inservice training specifically provided by and for project personnel, staff engaged in a variety of professional-growth activities. Benefits of these more individual efforts, such as those noted below, were shared appropriately with other project staff.

  - Project "central staff" were involved in orientation to the Bowdoin model (for parents of preschool and first-grade children) on September 25, 1980 and to services of the Mental Development Center (November 14, 1980). Child Development was represented at the Indochinese Conference in Columbus, Ohio (9/30-10/1/80) and--by the Curriculum Coordinator--at the NAEYC (National Association for Education of Young Children) Conference in San Francisco, California (11/20-23/80).

  - Project supportive and "central" staff members received informal, individual inservice training through maintenance of contacts with professional special-interest groups within and beyond the the school system. The following were typical examples.

    = The Health/Nursing Coordinator met not only with school nurses but also with the Metropolitan Health Planning Corporation (12/23/80; 1/27, 2/23/81) and other health-oriented community groups.

    = The Field Services Coordinator was actively involved with the Federation for Community Planning and other social agencies.

    = Child Development social workers, with other Early Childhood staff in this discipline, met not only with the Coordinator of Supportive Services for inservice (10/10/80; 3/30/81) but were regularly represented at sessions of the National Association of Social Workers.

    = The Speech Therapist assigned to Child Development continued to participate in systemwide inservice for speech staff.

Process Objective 2: Utilization of effective teaching techniques will be encouraged through use of a Classroom Observation Checklist with each teacher at least once during the year.

- Outcome: This objective was not attained during 1980-1981. Teacher consultants' records indicated that they had used the Checklist (Appendix B) with most (91.4%)--but not all--Child Development teachers during their on-site visits/observations (mentioned just above, in relation to the first process objective). Checklists completed by the consultants were discussed and left on file with the teachers, following observations.

Process Objective 3: Health maintenance and social competency of families of participants will be encouraged through cooperative efforts of project staff, school staff and community resources.

Outcome: Project records documented attainment of this objective.

Three issues of The Bridge (newsletter for parents of children in Early Childhood Education programs) were sent home with pupils--in January, March and June, 1981. Through words and pictures, parents were informed about matters such as: volunteering in the classroom, parent meetings--past and forthcoming; services provided by community agencies (TOT-LINE, TEL-MED, Parenting Center at neighborhood branch of public library, etc.).

Under the supervision of Directing Supervisor for Early Childhood Education and the Project Manager, the Coordinator of Field Services and her consultant teacher--along with the Coordinator of Health Services, the Reading Specialist and other Early Childhood "central staff"--implemented a series of citywide programs for Early Childhood parents.

Participants were asked to complete reaction sheets after each session. (Frequently, however, parents did not indicate in which Early Childhood program[s] their children were enrolled.) They were asked to provide suggestions/comments and to record their perceptions of the overall value of the meeting by marking on a ten-point scale, with 1 = "Disappointing/Not Helpful" and 10 = "Worthwhile/Very Helpful."

- On November 13, 1980, 127 Early Childhood parents (70 with children in Child Development) representing 53 schools met to learn about the projects and to plan parent programs for the year. On the 40 reaction sheets from parents identified as Child Development, the mean rating was 9.3 (of the possible 10).

- On January 29, 1981 Child Development parents (N = 22) participated in an Early Childhood citywide program, "What [Cuyahoga County] Cooperative Extension Offers." The mean rating of the value of this session was 8.2, based on the reaction sheets of 18 project parents.

- With Family Health Association personnel serving as discussion leaders, a total of 39 Child Development parents considered "Discipline: Love and Limits" at a workshop held in their cluster (elementary and secondary schools grouped for desegregation) during February, 1981. Seven such workshops were held, one in each cluster. A total of 29 reaction sheets were submitted by parents who indicated having children in Child Development; the mean rating on these discipline workshops was 9.4 (of a possible 10).

- On April 8, 1981 Miss Earnestine Simmons, Head of Children's Services, East Cleveland Public Library, was featured at the fifth annual Early Childhood parent reading readiness workshop

Process Objective 3 - (continued)

held at the (Main) Cleveland Public Library. Approximately 30 project parents were among those learning "How to Help Your Child Bloom," and 12 marked this project on their reaction sheets--yielding a mean of 9.9, the highest for any session.

- In May, 1981 two workshops for parents, at schools, were held by the Cuyahoga County Cooperative Extension Service, with four Child Development parents in these groups learning more about feeding their families. A total of 28 parents submitted reaction sheets, but few indicated in which Early Childhood program(s) their children were participating. The mean rating was 9.3--for all reactions to both programs.

The high ratings of these citywide, Early Childhood parent programs (provided by Child Development in cooperation with related projects) reflected the staff's success in meeting needs of children and families through parent involvement/education.

Cooperative efforts of project staff, school staff and community resources for promoting health maintenance and social competency of project children and their families were most thoroughly documented by supportive services staff. Their statistics were compiled into the Project Manager's periodic reports to the Directing Supervisor, Compensatory Education Programs.

- These efforts began with the intake process, at which time reports of the child's recent physical examination and immunization were required. During the intake interview, the parent(s) provided the interviewer (project-teacher or member of supportive/"central" staff) with information about the child's medical and social history.

- Throughout the year, project staff screened 1,123 children for speech, 929 for hearing and 705 for dental problems. As necessary, referrals (of approximately 235 children/families) were made to specialized school personnel and/or community resources. Social workers logged 457 observations of 214 children in classrooms, with 109 agency inquiries and 47 referrals. The Speech Therapist also completed diagnostic testing for 57 project children. The part-time Dental Coordinator taught 43 project classes about care of teeth, and toothbrushes were provided for all children. In addition to maintaining contact with 25 community agencies and conferring with an average of 3.6 (general fund) school nurses per week, the part-time Health/Nursing Coordinator also provided direct service to 87 Child Development pupils with special needs.

- Contact among project and Early Childhood supportive services personnel, principals, teachers and non-project (i.e., general fund) supportive services staff were frequent--to identify and develop strategies for better meeting the needs of individual

Process Objective 3 - (continued)

children. The average number of such contacts per person per week was: 11.6 for a social worker, 5.1 for the speech therapist and 14.6 for the part-time Health/Nursing Coordinator (including those with school nurses mentioned above).

- Supportive services staff reported approximately 675 contacts with Child Development children's families. Slightly over half (54.8%) the contacts were made by telephone. Social workers made most (103) of the home visits.

Product Objective 1: Project participants' mean post-test scores on Tests of Basic Experiences [Language, Mathematics] will be at least seven NCE units higher than the mean pre-test TOBE scores.

Outcome: This objective was clearly attained.

- TOBE Language/Mathematics (Level K) were administered by the teachers to their children included in the sample during the first week of November, 1980 and again early in May, 1981. Raw scores were submitted to the evaluator for conversion to NCE-units, based on the publisher's only available norms--November prekindergarten for the pre-test and November kindergarten for the post-test. Scores on both pre- and post-tests were available for 167 participants, (from the original sample of 210). Results of the analyses have been included as Appendix C.

  - In Language, the pre-test mean was 35.1 NCE's; on the post-test, the mean had increased to 51.6, reflecting an average gain of 16.5 NCE units. Based on the norms described above, the mean score moved from 23 %-ile to 53 %-ile. Furthermore, this change was statistically significant ($p < .001$).

  - The pre-test mean in Mathematics was 37.6 NCE's, which increased to 46.2 on the post-test. Based on the available norms, the mean score moved from 28 %-ile to 43 %-ile. Also, this average gain of 8.6 NCE units was statistically significant ($p < .001$).

  The 1980-1981 gains returned to the expected levels, following the 1979-1980 drop--presumably attributable to fewer weeks of instruction between pre- and post-testing. TOBE results for the past five years have been included as Appendix D.

Product Objective 2: Children will show significantly higher ($p < .05$) levels of self-sufficiency, emotional maturity, social skills and self-concept at the end of the year, as compared to project entry, on the Levine-Elzey Rating Scale (or other Early Childhood appropriate instruments).

Product Objective 2 - (continued)

Outcome: This objective was attained, at a level of significance beyond that proposed.

During the first week in November and early in May, teachers rated each child in the randomly selected, projectwide sample on the 33-item Levine-Elzey Preschool Social Competency Scale. Both pre- and post-ratings were available for 163 children.

The mean gain on Self-sufficiency (13 items) was .86, on Emotional Maturity (9 items) .70, and on Social Skills (10 items) .88; the gain on the single-item Self-concept factor was .40; the maximum rating on any factor was four (4). Additional data have been presented in Appendix E. All gains were statistically significant ($p < .001$).

The 1980-1981 gains approximated those for 1977-1978. The lower mean gains during the two intervening years may have been attributable to the many disruptions of the school-year schedule (work stoppages, etc.) and the shorter period of instruction between pre- and post-ratings. (See Appendix F for mean gains from 1977-1978 through 1980-1981.)

CONCLUSIONS

All project objectives for 1980-1981 were attained, with one minor exception. Relevant to Process Objective 2, teacher consultants utilized the Classroom Observation Checklist at least one time with only 91.4%--instead of the proposed 100%--of the project teachers. The return of student gains in both cognitive and affective areas to the proposed levels may have reflected the greater continuity in teachers' work with the children throughout this past school year (which had been diminished in recent, preceding years by serious disruptions in the school-year schedule).

On the basis of findings reported above and awareness of project staffing reductions for 1981-1982, the evaluator recommends that the Child Development staff:

- focus inservice for teachers on workable procedures for effectively implementing highly individualized instruction for the children without the assistance of an educational aide;
- make every effort to utilize the Classroom Observation Checklist at least once with each teacher, preferably during the first semester;
- continue to optimize cooperative efforts with staff of other projects, regular (general fund) personnel in the schools and community resources/agencies, to maximize supportive services to children and families.

APPENDIX A

CHILD DEVELOPMENT

Schools Served: 1980-1981

Alfred A. Benesch
Anton Grdina
Bolton
Buckeye-Woodland
Captain Arthur Roth

Case
Charles H. Lake
Charles Orr
Chesterfield
Daniel E. Morgan

East High
East Clark
East Madison
Giddings
Glenville High

Hazeldell
Henry W. Longfellow
Iowa-Maple
John W. Raper
Joseph F. Landis

Louis Pasteur
Margaret A. Ireland
Marion-Sterling
Mary B. Martin
Mary M. Bethune

Miles Standish
Mount Pleasant
Orchard
Paul L. Dunbar
Paul Revere

Scranton
Stephen E. Howe
Tremont
Wade Park
Woodland Hills

APPENDIX B

Cleveland Public Schools
Division of Early Childhood Education

OBSERVATION CHECKLIST

Teacher _____ Date _____

School _____ Room _____

Observer _____ Session: A.M.____ P.M. ____

Circle: CD KR

I. ENVIRONMENT

A. PHYSICAL

☐ Effective use of physical plant

☐ Centers established, labeled and well organized (list those in use)

☐ Safety precautions taken

Observation Checklist (continued)

A. PHYSICAL (continued)

☐ Art Center near water if possible

☐ Block Center coded (according to size and shape of blocks)

☐ Listening Center with appropriate audio-visual equipment

☐ Creative work (children's) attractively displayed

☐ Number and alphabet charts placed in appropriate centers at children's eye level

A. PHYSICAL (continued)

☐ Learning environment seems flexible and under control

☐ The noise level seems appropriate for the activities in progress

RECOMMENDATIONS

B. MATERIALS

☐ Children obtain, set-up and put materials away appropriately

Observation Checklist (continued)

B. MATERIALS (continued)

☐ Children are using materials appropriately

Materials are appropriately programmed for centers that will:

☐ develop both fine/gross motor skills

☐ encourage creativity
art, blocks, sand/water

☐ respond to various developmental levels

☐ Effective organization of materials by the teacher

☐ appropriate containers

☐ controls

☐ complete sets

B. MATERIALS (continued)

RECOMMENDATIONS

III. CURRICULUM IMPLEMENTATION

A. RECORDS/TO BE DISCUSSED AND SHARED

☐ Evidence of continuous assessment of children
- centers programmed
- center sheets
- individual instruction

RECOMMENDATIONS

Observation Checklist (continued)

B. PLANNING

☐ Evidence of current daily plans with stated goals and objectives for targeted children

☐ Evidence of designated responsibilities for:

☐ teacher assistant

☐ volunteers

RECOMMENDATIONS

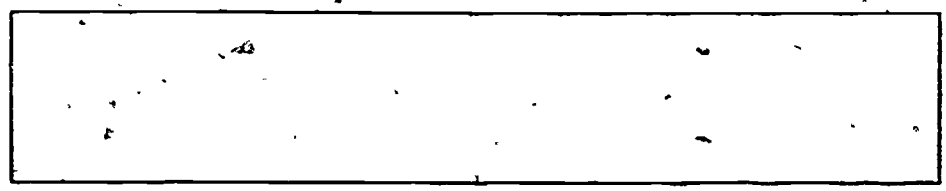
C. SCHEDULING

_____ Minutes in self-selected and individual instructional activities

_____ Minutes in small group, teacher initiated activity Lotto, Peabody, Macmillan, etc.

_____ Minutes in total group

RECOMMENDATIONS



Observation Checklist (continued)

B. INSTRUCTIONAL ACTIVITIES

☐ Discussion Center - (sharing ideas, demonstrations and evaluation sessions)

☐ Library - (browsing and reading and being read to)

☐ Language - (games and activities for developing language ability and reading readiness concepts).

☐ Math Center - (games and activities for independent and small group investigation of concepts)

☐ Science Center - (sensory experiences and the discovery of the world and nature)

D. INSTRUCTIONAL ACTIVITIES (continued)

☐ Special Concept Area - (multi-sensory materials displayed which relates specifically to the concept in focus)

☐ Manipulative Center - (learning through exploration and experimentation)

☐ Block Center - (sensory and motor stimuli through physical activity and imaginative expression)

☐ Art Center - (self-expression with an assortment of materials)

☐ Housekeeping - (self-expression and dramatization)

Observation Checklist (continued)

E. INDIVIDUAL - SMALL GROUP

☐ Small group and individual children are permitted to operate in learning centers for long periods of uninterrupted time

☐ Children's activities are adapted to meet their individual needs and attention spans

☐ Adults circulate among children instructing them, asking questions and giving individual attention

Children receive individual instruction from:

☐ teacher

☐ teacher assistant

☐ another adult

E. INDIVIDUAL - SMALL GROUP (continued)

Children receive small group instruction from:

- ☐ teacher
- ☐ teacher assistant
- ☐ another adult

☐ Children receive instruction in language development (Lotto, Peabody, LEIEC, Macmillan)

☐ Children are encouraged to solve problems

☐ Children move around the room as appropriate to activities in progress

Observation Checklist (continued)

E. INDIVIDUAL - SMALL GROUP (continued)

RECOMMENDATIONS

F. TOTAL GROUP

☐ Activity stimulated interest of all or most of the group

☐ Alternative quiet activities are provided for those children not able to cope

☐ Adults are participating in the activities

F. TOTAL GROUP (continued)

Total group activity is composed of:

RECOMMENDATIONS

III. HUMAN RELATIONS - GUIDANCE

☐ Adults appear to work well together

☐ Adults use well modulated voices in the classroom

Observation Checklist (continued)

III. HUMAN RELATIONS - GUIDANCE (continued)

☐ Adults deal with "appropriate behavior" quietly and personally

☐ Adults operational style is in keeping with the philosophy of the Division of Early Childhood

☐ Children help each other

☐ Children respond to classroom limits

APPENDIX C

CHILD DEVELOPMENT: 1980-1981

TESTS OF BASIC EXPERIENCES, LEVEL K
(N = 167)

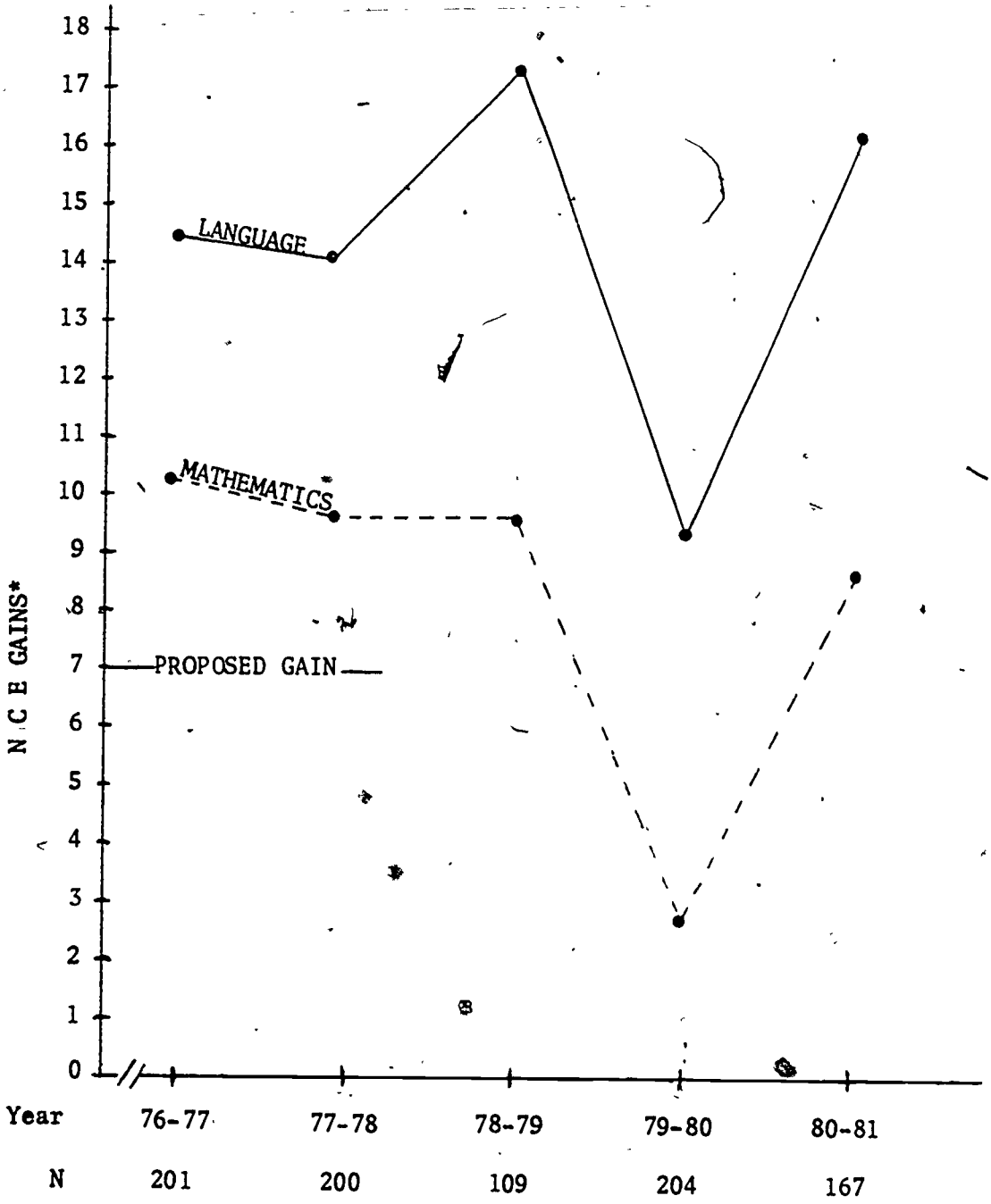
TEST	PRE- (10/80) MEAN*	S.D.	%-ILE**	POST- (5/81) MEAN*	S.D.	%-ILE**	MEAN CHANGE	t	SIGNIF. LEVEL
Language	35.1	14.9	23	51.6	21.8	53	16.5	10.23	$p < .001$
Mathematics	37.6	15.5	28	46.2	19.2	43	8.6	5.69	$p < .001$

*Means are expressed in NCE units based on national norms, described below.
**Percentiles are national norms: prekindergarten for the pre-test, kindergarten for the post-test.

APPENDIX D

CHILD DEVELOPMENT

NCE GAINS ON TESTS OF BASIC EXPERIENCES
1976 - 1981



*NCE units were based on publisher's national norms: pre-kindergarten for the pre-test, kindergarten for the post-test. Gains of 7 NCE's were proposed.

APPENDIX E

CHILD DEVELOPMENT: 1980-1981

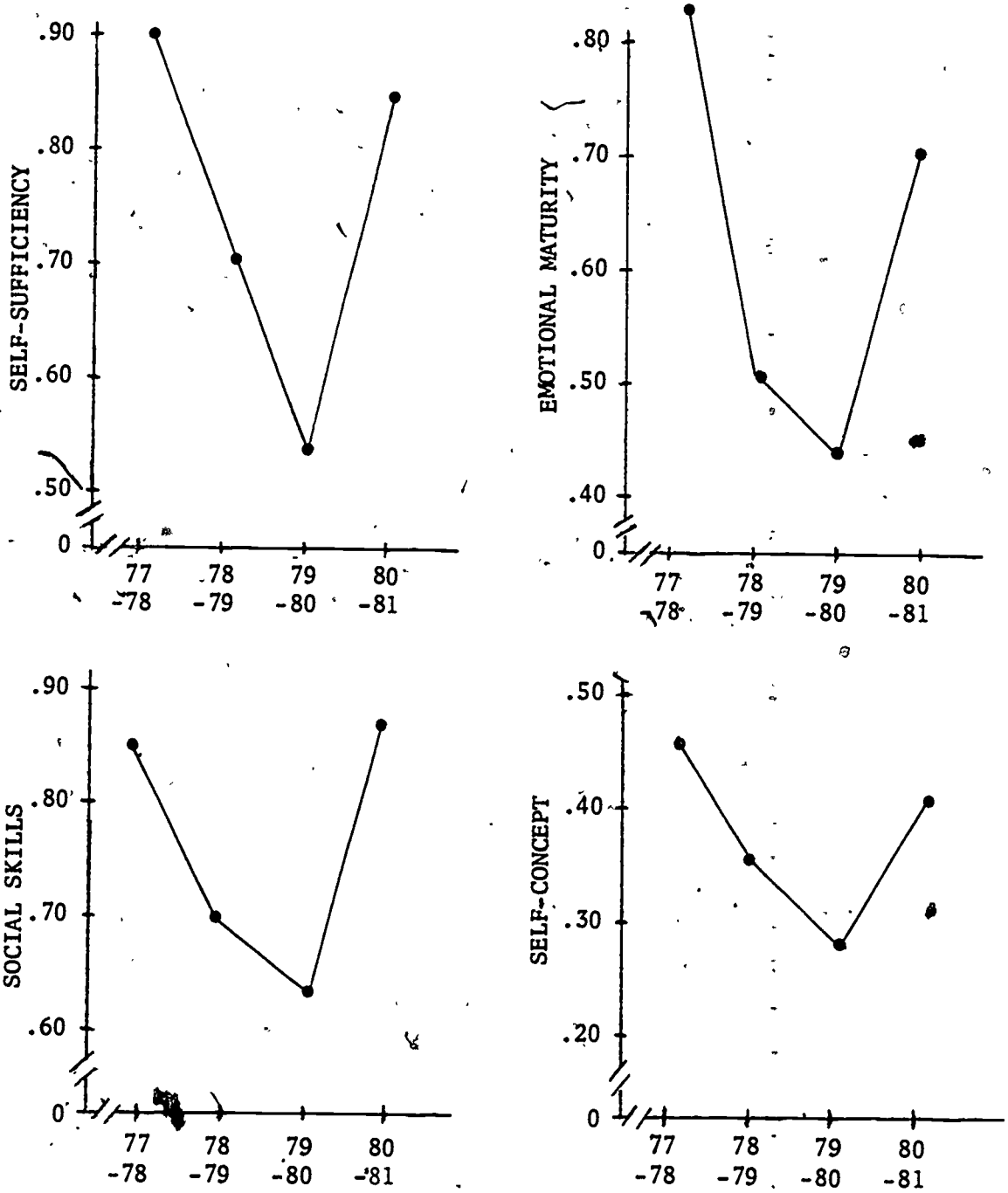
LEVINE-ELZEY PRESCHOOL SOCIAL COMPETENCY SCALE
(N = 161)

FACTOR	PRE- (10/80)		POST- (5/81)		t	SIGNIF. LEVEL
	MEAN	S.D.	MEAN	S.D.		
Self-sufficiency	2.41	.59	3.27	.50	20.59	$p < .001$
Emotional Maturity	2.63	.64	3.33	.57	14.18	$p < .001$
Social Skills	2.36	.61	3.24	.52	19.75	$p < .001$
Self-concept	2.78	.51	3.18	.53	8.18	$p < .001$

APPENDIX F

CHILD DEVELOPMENT

MEAN GAINS ON LEVINE-ELZEY PRESCHOOL SOCIAL COMPETENCY SCALE: 1977-1981



NOTE: N=203 (1977-78), 174 (1978-79), 203 (1979-80), 161 (1980-81).

CHILDREN IN RESIDENTIAL SCHOOLS

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1980-1981

CHILDREN IN RESIDENTIAL SCHOOLS

1980-81 Title I Evaluation

PURPOSE AND OVERVIEW

Children residing in institutions serving orphaned, neglected and delinquent children are automatically eligible for Title services. The Children in Residential Schools project provides additional instructional and supportive services to such children beyond that which is normally available to them through their on-grounds schools or in the public or non-public schools they attend during the day. At the Cuyahoga County Youth Development Center, the Cleveland Public Schools operates an on-grounds, formal educational facility, Harry L. Eastman School. At Harry L. Eastman, students are provided individualized and small group tutoring in school subjects and classes for corrective reading instruction. At nine other institutions which maintain their own on-grounds schools or whose students attend nearby public or non-public schools, the project provides after-school tutoring in school subjects in which students are having difficulty. Other educational supports such as school supplies and field trips are also provided.

SERVICE SUMMARY

Pupils Served: 594 (School year and summer) Grades Served: 1-12 Years in Operation: 14

Schools: 1 school and 9 residential institutions Staffing: 17 Teacher-Tutors (7 FT, 10 PT)

Total Title I Expenditures: $250,054 Per Pupil Cost: $421

SUMMARY OF FINDINGS

The evaluation data indicated that at Harry L. Eastman School, project services were delivered essentially as proposed. Teacher-tutors provided extra individualized and small group instruction in career education, health skills, art, physical education and mathematics. Students with reading weaknesses were provided daily corrective reading classes by two reading specialists. Reading scores showed the proposed degree of improvement when the scores for all grade levels were combined, but the statistical analysis cast doubt on whether the gains demonstrated by the students were reliable ones.

Although after school tutoring service was proposed in nine other residential institutions, the service was actually provided in only four and at reduced levels. The project manager pointed out that the project has little control over the degree to which the institutions take advantage of the resources offered through the project.

OBJECTIVES AND OUTCOMES

Process Objective 1 - Institutions Receiving Tutorial Services: Teacher-tutor personnel delivering the following amounts of services will be assigned to each of the nine institutions:

1.	Cleveland Christian Home	2 PT (67% FTE)
2.	Ohio Boys' Town	1 PT (50% FTE)
3.	The Jones Home of Children's Services	1 PT (50% FTE)
4.	Metzenbaum Children's Center	2 PT (67% FTE)
5.	The [illegible]pe Network	1 PT (10% FTE)
6.	Augustine Society Group Home	1 PT (16% FTE)
7.	Looking Glass	1 PT (16% FTE)
8.	Open Doors for Youth	1 PT (10% FTE)
9.	Salvation Army Group Home	1 PT (16% FTE)

Outcome: An examination of project records showed that this objective was only partially achieved. Only four of the nine institutions used the available Title I monies for tutoring services, and only one of the four delivered this service at FTE levels specified in the objective. Table I shows the institutions providing tutoring service and the amount of service provided.

Table 1

Staffing Pattern and Level of Tutoring Service at Institutions Providing Tutoring to Students

Institutions Providing Tutoring Service	Number of Tutors		Full-Time Equivalency	
	Proposed	Actual	Proposed	Actual
Cleveland Christian Home	2 PT	3 PT	.67	.59
The Jones Home of Children's Svcs.	1 PT	2 PT	.50	.63
Metzenbaum Children's Center	2 PT	3 PT	.67	.35
Augustine Society Group Home	1 PT	1 PT	.16	.02

Queried about the lower than expected level of tutoring service offered at the institutions, the project manager pointed out that Title I monies are allocated by the state to each of the institutions and that decisions about how that money is spent rest with the institution staff (within the limits imposed by Title I guidelines). The project office can make recommendations, appoint staff at the institution's request and insure that Title I regulations are being followed, but it cannot impose staff, materials or other services. The project manager reported that the five institutions not providing tutoring service did not respond to requests for direction regarding the appointment of tutoring staff. He also noted that 1980-81 was the first year in the project for four of the five.

The project manager reported that the teacher-tutors at Metzenbaum Children's Center and the Augustine Society Group Home were teachers in Cleveland Public Schools who tutored at the institutions after hours.

Process Objective 1 - (continued)

At the Cleveland Christian Home and the Jones Home the teacher-tutors were teachers working at the institutions' own on-grounds schools who provided tutoring service after-hours using Title I resources.

Process Objective 2 - Institutions Receiving Tutorial Services: Pupils will be identified and referred cooperatively for tutorial help by the institutional staff and the students' regular classroom teachers.

Outcome: This objective was achieved. The project manager reported referrals for tutoring service are generally made in three ways:

1. A teacher in the institution's own on-grounds school may identify a student as in need of extra help and refer him to the tutor serving that institution. (Often, the referring teacher and the tutor are the same person.)

2. A teacher in the public school attended by the student may identify him as in need of tutoring and refer him through the social worker serving the institution. If the tutor serving the institution works during the day in the same public school as the referring teacher, students may be referred to the tutor directly.

3. A student who desires extra help may request it directly.

The project emphasizes providing assistance to institutionalized students in the areas of reading and mathematics, although help is given as needed in other school subjects. Service is provided in the form of individualized or small-group tutoring sessions held in the institution after school hours. The project also provides monies for other educational supports, such as field trips, supplies and instructional materials and equipment.

Examination of records submitted by the teacher-tutors documented the number of students who received tutoring and other services at each of the institutions. These data are presented in Table 2.

The table shows that no services of any kind were delivered to two of the institutions designated to receive them, Ohio Boys Town and Looking Glass. The project manager reported that the staff of Ohio Boys Town did not respond to repeated requests for direction regarding staffing and supplies needs. At Looking Glass, some instructional equipment was purchased, but delivered too late for use with students during 1980-81. The remaining seven institutions provided tutoring and/or other educational support to their students.

Process Objective 2 - (continued)

Table 2

Numbers of Students Receiving Tutoring and Other Services at Each of the Institutions Served by the Project

Institution	Students Tutored	Students Receiving Tutoring or Other Educational Services*
Cleveland Christian Home	34	34
Ohio Boys Town	0	0
The Jones Home of Children's Svcs.	42	42
Metzenbaum Children's Center	35	123
The Agape Network	0	11
Augustine Society Group Home	24	86
Looking Glass	0	0
Open Doors for Youth	0	36
Salvation Army Group Home	0	39
TOTAL	135	371

*Includes field trips, purchase of equipment, supplies, instructional materials, etc.

Process Objective 3 - Cuyahoga County Youth Development Center: Teacher-tutors will assist students by providing information relative to improvement of grades in subject areas of weakness and attitude toward school.

Outcome: Project records indicate that this objective was achieved. Students attending the Harry L. Eastman School at the Cuyahoga County Youth Development Center were provided with information and instruction in a variety of subject areas. This instruction was over and above that normally provided the institution by the Cleveland Public Schools. It was delivered by five full-time teacher-tutors working with individuals and small groups. Table 3 shows the subjects and the numbers of students receiving information in each.

Table 3

Title I Supported Instructional Areas and Numbers of Students Served in Each at Harry L. Eastman School

Subject	Number of Students*
Career Education	223
Physical Education	68
Health Skills and Careers	85
Arts and Crafts Skills	89
Mathematics Skills	75

*Duplicated counts

Process Objective 4 - Cuyahoga County Youth Development Center: Corrective reading classes, speech therapy and psychological services will be provided as needed to students with reading, speech or psychological problems.

Outcome: Project records indicate that this objective was achieved. The records show that 207 students were evaluated for reading deficiency by the Title I reading specialists at Harry L. Eastman School. Of these students, 140 were selected to receive instruction daily in formal corrective reading classes. These classes were taught by two full-time Title I reading specialists who used a variety of instructional materials purchased with Title I monies. In addition, 97 students received instruction in English-reading classes by teacher-tutors.

The project budget contained monies to support speech therapy and psychological services if those were needed at levels beyond those normally provided the institution by the Cleveland Public Schools and the county. Project records indicated that extra speech and psychological services were not required in 1980-81.

Product Objective 1 - Cuyahoga County Youth Development Center: For students receiving the equivalent of at least one semester's service at the Cuyahoga County Youth Development Center, a gain of two NCE units will be observed from the comparison of pre to post performance as measured by the Comprehension subtest of the Stanford Diagnostic Reading Test.

Outcome: The data indicate that this objective was technically achieved, but that the gains demonstrated may not be reliable.

Project records show that 207 students attending the Harry L. Eastman School at the Cuyahoga County Youth Development Center were administered the Comprehension subtests of the Stanford Diagnostic Reading Test (Brown Level, Form A) shortly after entry. Students were administered the same tests again just before leaving the institution or at the end of the school year. Because of the entry and leaving patterns at the institution, both pre and post data were available for only 70 students who received instruction for at least the equivalent of one semester.

The analysis of the test data showed that the average pre-post gain in Total Comprehension for all grade levels combined was 2.3 NCE units, which meets the criteria set in the objective. However, the size of the gain closely approached, but did not reach statistical significance as determined by a t-test for repeated measures. This means there is some doubt as to the reliability of the gain. (See Appendix B for the results of statistical tests.) Table 4 presents the pre and post test results by grade.

Table 4

Pre and Post Test Results by Grade Level of Students at Harry L. Eastman School (Stanford Diagnostic Reading Test, Total Comprehension, Brown Level)

Grade	N	Pre mean NCE*	Post mean NCE *	Mean NCE Gain
7	12	46.2	47.0	+ .8
8	19	37.7	43.0	+ 5.3
9	20	30.2	31.9	+ 1.7
10	12	32.8	33.3	+ .5
11	6	25.2	28.8	+ 3.6
12	1	50.0	35.0	-15.0
TOTAL	70	35.3	37.6	+ 2.3

*See Appendix C for an explanation of which norms tables were used in the derivation of the NCE scores.

The table shows that although the objective criterion of an average gain of at least 2 NCEs was achieved overall, this result was due entirely to the performance at grades 8 and 11. None of the gains at the individual grade levels was statistically significant. The Title I reading specialists reported extreme difficulty in motivating the students to take the reading tests seriously.

The objective criterion was stated in terms of NCE units. To help the reader see how the project students performed relative to other students the same age, Table 5 presents the percentile ranks of their average NCE scores based on national norms.

The percentile data show that most of the students served by the project rank in the lower score ranges of students nationally, both before and after participation.

Table 5

Percentile Ranks of Average Pre and Post Scores Obtained on the Stanford Diagnostic Reading Test by Students at Harry L. Eastman School

Grade	N	Pre Percentile	Post Percentile
7	12	43	44
8	19	28	37
9	20	17	20
10	12	21	21
11	6	12	16
12	1	50	24

CONCLUSIONS

The evaluation data gathered for the 1980-81 operations of the Children in Residential Schools project indicated that project services were delivered essentially as proposed to the Harry L. Eastman School at the Cuyahoga County Youth Development Center. Teacher-tutors provided instruction beyond that normally offered at the school in a variety of subjects including career education, health skills, physical education, art and mathematics. In addition, corrective reading classes were provided daily for students identified as deficient in reading skills. Reading Comprehension scores obtained on students at Harry L. Eastman School showed that the proposed average pre-post gain of at least 2 NCE points was achieved, but the statistical analysis indicated that this gain may not be reliable.

In addition to the services offered at Harry L. Eastman, after school tutoring services in school subjects were proposed for students in nine other institutions, but the data showed that the service was provided in only four of the nine. In only one of these four was tutoring provided at the levels specified in the proposal. It was pointed out that the project office does not have direct control over the implementation of project services in these institutions and that four of the five institutions not providing tutoring service were in the project for the first time in 1980-81.

In summary, three of the four process objectives were attained and one was partically attained. The project objective was technically attained, but there is some doubt as to the reliability of the result. Some weakness was evident in insuring that services were delivered at an adequate level to institutions scheduled for tutoring services, but in general the project operated as proposed.

It is recommended that steps taken to insure that institutions are fully aware of the resources available to them under the Children in Residential Schools project and that they are encouraged to make the fullest use possible of them. In addition, it is recommended that alternatives to the Stanford

Diagnostic Reading Test be examined for use in measuring gains in reading achievement. An instrument is needed that provides both beginning of year and end of year norms at all grade levels tested.

APPENDIX A

Institutions Served by Children in Residential Schools Project in 1980-81

Cuyahoga County Youth Development Center

Cleveland Christian Home

The Jones Home

Looking Glass

Metzenbaum Children's Center

Open Doors for Youth

Ohio Boys Town Inc.

Salvation Army Group Home

The Agape Network

Augustine Society Group Home

APPENDIX B

Means, Standard Deviations and results of *t* - Tests on Stanford Diagnostic Reading Test (Brown Level, Form A) Total Comprehension NCE Scores of Students in Grade 7 - 12 at Harry L. Eastman School

Statistic	Grade 7	8	9	10	11	12	Total
Number of Students	12	19	20	12	6	1	70
Pre Mean NCE	46.17	37.68	30.20	32.83	25.17	50.00	35.27
Post Mean NCE	47.00	43.00	31.95	33.33	28.83	35.00	37.54
Pre S.D.	15.30	19.47	13.17	24.47	22.03	0.00	18.90
Post S.D.	13.32	22.44	15.95	26.02	26.09	0.00	20.73
Mean NCE Gain	.83	5.31	1.75	.50	3.67	-15.00	2.27
Gain S.D.	3.33	14.31	9.40	7.80	4.46	0.00	9.93
t	.86	1.62	.83	.22	2.01	--	1.91
df	11	18	19	11	5	--	69
p	$>.05$	$>.05$	$>.05$	$>.05$	$>.05$	--	$>.05$

APPENDIX C

Norms Used for Converting Total Comprehension Raw Scores to NCE Scores on the Stanford Diagnostic Reading Test (Brown Level, Form A) Administered to Students in Grades 7 - 12 at Harry L. Eastman School

In order to measure the amount of growth in reading skill most accurately, the pre and post raw scores obtained on the test should be converted to NCE scores using the norms tables most appropriate to the times of year the test was administered. Where tables were available, pre scores were converted using beginning of year norms and post scores were converted using end of year norms. At grades where only beginning of year norms were available, the pre scores were converted using the beginning of year norms for that grade level and the post scores were converted using the beginning of year norms for the next higher grade level. The table below shows which norms were used for interpreting the scores at each grade level tested. (At all grade levels, national norms were used.)

Grade Tested	Pretest Norms	Posttest Norms
7	Grade 7 Beginning of Year	Grade 7 End of Year
8	Grade 8 Beginning of Year	Grade 8 End of Year
9	Grade 9 Beginning of Year	Grade 9 End of Year
10	Grade 10 Beginning of Year	Grade 11 Beginning of Year
11	Grade 11 Beginning of Year	Grade 12 Beginning of Year
12	Grade 12 Beginning of Year	Grade 13 Beginning of Year

CLEVELAND FUNDAMENTAL SCHOOL BASIC SKILLS REINFORCEMENT PROJECT

Prepared by

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Typed by

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1980-1981

CLEVELAND FUNDAMENTAL SCHOOL BASIC SKILLS REINFORCEMENT PROJECT

1980-81 Title I Evaluation

PURPOSE AND OVERVIEW

The purpose of the project is to provide specialized small-group instruction for pupils attending The Cleveland Fundamental School who are experiencing difficulty in mathematics or reading. Pupils eligible for this service receive remedial assistance from special reading and mathematics teachers within the confines of a special resource center designed for this intensive instruction. Each day, the students leave their regular classrooms and participate in carefully planned activities, individual or small-group, for forty minutes. The instruction provided by the project is in addition to the reading and mathematics instruction the students receive in their regular classrooms.

SERVICE SUMMARY

Pupils Served: 139 Grades Served: K - 6 Years in Operation: 2

Schools: 1 public Staffing: 1 Project Manager, PT
2 Reading Consultant Teachers, FT
1 Math Consultant, FT

Total Title I Expenditures: $99,431 Per-Pupil Cost: $715

SUMMARY OF FINDINGS

In its second year of operation, the Cleveland Fundamental School Basic Skills Reinforcement Project has provided a service that addresses and meets the remedial needs of students and is perceived as valuable by the classroom teachers of these students. Students in grades two through six were pre-tested in the fall and post-tested in the spring. Students made greater gains than were expected in Reading and in Math at all grade levels. Regular classroom teachers were provided with 2 hours of inservice about the program; they rated the quality of inservice very high.

OBJECTIVES AND OUTCOMES

- Objective 1: The reading skills of participating pupils in grades two through six will improve as evidenced by an increase of at least four NCE units on standardized reading tests administered prior to and following project participation.

- Outcome: Objective 1 was attained. The Comprehensive Test of Basic Skills (CTBS) Reading Comprehension sub-test was administered to all participating pupils in grades two through six on a pre-post basis the fall of 1980 and the spring of 1981. Pre NCE units were derived from fall norms and post NCE units were derived from spring norms. The objective criterion was met with every grade level. NCE unit gain by grade level is presented in the following table.

NCE UNIT GAIN
Reading Comprehension

Grade	n pupils	Level and Form of Test	Pre Test Date	Post Test Date	Treatment Time (Weeks)	Average Pre/Post NCE Difference
2	6	Level C, Form S	10/80	5/81	28	+ 20.67
3	12	Level 1, Form S	10/80	5/81	28	+ 8.16
4	17	Level 2, Form S	9/80	4/81	29	+ 9.00
5	15	Level 2, Form T	9/80	5/81	31	+ 7.07
6	13	Level 2, Form S	9/80	5/81	32	+ 9.92
Total	63					

The objective criterion standard was stated in terms of NCE units. The following table will enable the reader to see the pupil standing represented by percentile ranks, based on national norms and relative to students of the same age.

PERCENTILE RANK
Reading Comprehension

Grade	Pre-Test	Post-Test
2	27	64
3	27	40
4	17	29
5	16	27
6	17	31

It may be concluded, from the percentile data, that the students served by this project in reading started at very low percentile rankings and made marked gains after treatment. The growth is most noteworthy for grade 2 pupils.

Objective 2: The mathematics skills of participating pupils in grades two through six will improve as evidenced by an increase of at least four NCE units on standardized mathematics tests.

Outcome: Objective 2 was attained. All participating pupils in grades two through six completed all math subtests of the CTBS on a pre-post basis in the fall of 1980 and the spring of 1981. Pre NCE units were derived from fall norms and post NCE units were derived from spring norms. The increase in NCE units on the tests is shown in the following table.

NCE UNIT GAIN
Mathematics Total Score

Grade	n pupils	Level and Form of Test	Pre Test Date	Post Test Date	Treatment Time (Weeks)	Average Pre/Post NCE Difference
2	6	Level C, Form S	10/80	5/81	29	+ 18.00
3	6	Level 1, Form S	11/80	4/81	20	+ 31.17
4	7	Level 2, Form S	9/80	5/81	30	+ 12.43
5	11	Level 2, Form T	9/80	4/81	29	+ 20.73
6	9	Level 2, Form S	9/80	3/81	25	+ 16.34
Total	39					

Pupil standing in Math is presented, in the following table, by the use of percentile ranks.

PERCENTILE RANK
Mathematics

Grade	Pre-Test	Post-Test
2	13	38
3	6	45
4	17	36
5	12	41
6	17	43

Pupils pre-tested, before treatment, ranked very low in terms of percentiles. All grades made substantial gains in percentile ranks following treatment, especially grades three and five.

Objective 3: Project Staff will maintain communication with classroom teachers throughout the project year to facilitate improvement in reading and mathematics as evidenced by 70 percent of participating teachers providing a positive rating of usefulness of information/inservice resulting from their contact with project staff.

Outcome: Objective 3 was achieved. A teacher opinionnaire was used to measure classroom teachers' reactions to the usefulness of service, information, and inservice provided by Title I staff. A copy of the instrument may be found in Appendix A. Teachers were asked to use a five-point scale (5=most positive, 1=most negative) to rate Title I services along the following dimensions: techniques used and the success of service, level of communication between classroom teacher and consultant teacher regarding pupils served, and value or practicality of inservice sessions provided by Title I staff. Fourteen of the twenty teachers or 70% completed the survey.

Of the teachers returning surveys, 100% provided positive ratings (i.e., an average rating of 3 or above). The following table shows that, on a scale from 1-5 (five representing the most positive responses), The Title I teachers were viewed as providing very useful services.

Classroom Teacher Reaction to Project Service

Grade Level	n teachers	Average Rating of Service: Reading	Math
Primary	7	4.85	4.84
Upper	7	4.80	4.83

ADDITIONAL FINDINGS

Additional information related to project operations is summarized below. The information was derived from examination of project records and observation of project operations.

- Pupils recommended by the regular classroom teacher for participation in the project had to meet the following selection criteria: performance at or below the 33rd percentile on the reading comprehension and/or any math subtest of the following tests: the Metropolitan Readiness Test (grade one), Stanford Diagnostic Reading or Math Tests (grades two and three), or the CTBS from the previous year (grades four-six).

- Each Consultant Teacher serviced approximately fifty pupils each day (range = 47-55). During each of the seven forty-minute periods per day, an average of seven pupils were served (range = 3-9). The sites for instruction were in the Title I Resource Room apart from the pupils' regular classroom.

The Title I Staff planned and implemented 2 hours of inservice, as proposed, for the classroom teachers. One session was devoted to the Reading service and the other session focused on Math. At each workshop, the Title I teachers provided these "how-to's": 1) enriching lesson plans, 2) reinforcing skills, and 3) checking out materials from the Title I Resource Room.

CONCLUSIONS

In its second year of operation, the Cleveland Fundamental School Basic Skills Reinforcement Project has provided a service that addresses the remedial needs of students and is perceived as valuable by the classroom teachers of these students. The project has achieved all three of its proposed objectives. Test data reveal that the pupils served by this project, though still in relatively low percentile ranks, made substantial gains after treatment. The classroom teachers rated this program highly, assigning an average rating of 4.8 on a scale of 5.

APPENDIX A

TEACHER REACTION SHEET

BASIC SKILLS REINFORCEMENT PROJECT

TITLE I

FUNDAMENTAL EDUCATION CENTER

Directions: Please give your impressions of the usefulness of service, information, and inservice resulting from your contact with the Title I project staff (Reading: Mrs. Victory - grades 1-3, Ms. Stephens - grades 4-6; Math: Mrs. West). Circle the number along each continuum which most closely represents your feelings concerning each item. Note that a "5" represents the most positive response, while a "1" represents the most negative response.

Grade_____

X RATING			NUMBER RESPONDING IN EACH CATEGORY 5 4 3 2 1	
		SERVICE TO STUDENTS		
5.0 5.0	Reading Math	PURPOSE FOR TREATMENT WAS CLEAR	Reading 14 Math 14	PURPOSE FOR TREATMENT WAS NOT CLEAR
5.0 5.0	Reading Math	METHODOLOGY FOR TREATMENT WAS CLEAR	Reading 14 Math 14	METHODOLOGY FOR TREATMENT WAS NOT CLEAR
4.86 4.86	Reading Math	SERVICE BENEFICIAL	Reading 12 2 Math 12 2	SERVICE NOT BENEFICIAL
		INFORMATION SHARED WITH YOU RE: STUDENTS		
4.79 4.79	Reading Math	NUMBER OF CONTACTS WAS ADEQUATE	Reading 11 3 Math 11 3	NUMBER OF CONTACTS WAS INADEQUATE
4.71 4.71	Reading Math	INFORMATION SHARED WAS VALUABLE	Reading 11 2 1 Math 11 2 1	INFORMATION SHARED WAS NOT VALUABLE
4.79 4.79	Reading Math	WAS ABLE TO ACT ON INFORMATION SHARED	Reading 12 1 1 Math 12 1 1	WAS NOT ABLE TO ACT ON INFORMATION SHARED
		GROUP INSERVICE SESSIONS		
4.86 4.86	Reading Math	SESSIONS WERE WORTHWHILE	Reading 12 2 Math 12 2	SESSIONS NOT WORTHWHILE
4.71 4.71	Reading Math	NEW KNOWLEDGE ACQUIRED AT SESSIONS	Reading 11 2 1 Math 11 2 1	NO NEW KNOWLEDGE ACQUIRED SESSIONS
4.71 4.71	Reading Math	TIME ALLOTTED FOR SESSIONS WAS SUFFICIENT	Reading 11 2 1 Math 11 2 1	TIME ALLOTTED FOR SESSIONS WAS INSUFFICIENT
4.86 4.86	Reading Math	INFORMATION SHARED WAS PRACTICAL	Reading 12 2 Math 12 2	INFORMATION SHARED WAS IMPRACTICAL

Comments: Very impressed with the program (n = 4)

Screening should be reviewed (n = 2)

DIAGNOSTIC READING CLINIC

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1980-1981

DIAGNOSTIC READING CLINIC

1980-81 Title I Evaluation

PURPOSE AND OVERVIEW

The Diagnostic Reading Clinic is designed to provide specialized in-depth service to pupils in the upper elementary grades who evidence multiple and complex reading difficulties. Students are transported to the Diagnostic Reading Clinic to receive reading diagnosis. An instruction plan is developed, based on the child's reading difficulties, to be implemented in the school reading center by the clinician, classroom teacher and other support personnel. Forty-five minutes per day of instruction for approximately 32 weeks or until the child is considered remediated is provided for each child being serviced.

SERVICE SUMMARY

Pupils Served: 2,068 Grades Served: 4, 5, 6 Years in Operation: 17 (15.5 yrs. - Title I; 1.5 yrs. - OEO)

Schools: 19 public
1 non-public
20 total
(See list in Appendix A)

Staffing:
24 Teachers, FT
3 Psychologists, FT
2 Coordinators, FT
1 Nurse, FT
1 Clerk, FT
8 Drivers, FT .5 PT
3 Teachers Assistants, FT
1 Speech Therapist, FT
6 Education Aides, FT
1 Supervisor, PT

Total Title I Expenditures: $1,066,798 Per Pupil Cost: $516

SUMMARY OF FINDINGS

Pupils qualifying for participation in the Diagnostic Reading Clinic received a variety of evaluations to correctly identify all aspects of the pupils reading difficulties. A plan was developed for each pupil based on medical and reading evaluations. A sample of test results for children who were tested prior to the beginning of participation in the program, and again after completing the specialized reading program, indicated that the expected gains were made in their reading test scores as a result of participation in the program. Classroom teachers of these pupils reported that over half of the students who participated in the Diagnostic Reading Clinic could independently handle the usual classroom reading materials in their grade at least half of the time. These teachers and also the parents of participating pupils had opportunities to discuss their pupils's reading progress with the reading teacher.

OBJECTIVE AND OUTCOMES

Objective 1: Pupil participants will evidence a post treatment mean score on a standardized reading test that ia at least seven NCE units higher than the mean pre-test score.

Outcome: Objective 1 is considered attained. The Comprehension subtest of The Gates-McGinitie Reading Test was administered to each child at the beginning of treatment and again at the end of treatment when the child was considered remediated as determined by the Clinician. The average number of weeks of service was 32 weeks. A comparison of the pre-post test results for 198 randomly selected children in grades 4-6 realized a mean gain of 7.05 NCE units. The following mean NCE gains are reported by grade:

TABLE 1

NCE Gains by Grade
on Comprehension Subtest of Gates-McGinite Reading Tests

GRADE	N	MEAN NCE GAIN	NUMBER REPORTING NCE GAIN OF 7
FOURTH	74	6.19	35 (47%)
FIFTH	66	6.50	37 (56%)
SIXTH	58	8.26	36 (62%)

The data in Table 1 show that although performance was only slightly below the objective criterion for grades four and five, achievement of the objective criterion for the project as a whole was due primarily to the strong performance at grade six.

The following percentiles are reported by grade for pre-post comprehension test results. These percentiles reflect norms appropriate to times of year tests were taken.

TABLE 2

Percentiles of Mean Pre and Post test Comprehension scores for Students in the Diagnostic Reading Clinic.

GRADE	PRE %	POST %
FOURTH	13.75	21.81
FIFTH	11.53	19.24
SIXTH	13.58	25.32

The data in Table 2 show that when participants are compared with other students in the nation they rank in the lower 25 percent nationally on the Comprehension subtest, both at the pre-test and the post-test.

Although gains were made, percentiles indicated that the target population evidences serious reading difficulties that will require continuing participation in this project.

Objective 2: As reported by classroom teachers, at least two out of three pupils receiving full service will evidence observable independent performance with classroom materials at least half of the time.

Outcome: Objective 2 is not attained. A questionnaire was distributed to teachers of 198 randomly selected pupils in June, 1981. Responses to the question related specifically to this objective were obtained from the teachers of 154 students. The responses of these teachers indicated that 60% of the sample of students could independently handle the usual classroom reading materials used in their grade at least 50% of the time. Twenty-seven percent of the pupils could handle the reading material from 24 to 49% of the time, and 13% of the pupils could use the usual reading material less than 24% of the time. See Appendix B for summaries of responses.

Objective 3: Pupils will receive the coordinated services of related disciplines in the diagnosis and correction of reading difficulties.

Outcome: Objective 3 is considered attained. All students upon entering the program are given a series of medical and reading evaluations by the special services staff which form an integral part of prescriptive recommendations of the staff prior to implementation of treatment. The records form the basis of a case study for each student.

Examination of case studies of 205 randomly selected students revealed that 100 pereent of the students received at least on of these services and 81 percent received all four of the services. The following lists the percentage of students receiving specific services:

- Ninety-five percent (N=195) of the pupils in the sample received psychological testing.
- Eighty-nine percent (N=183) of the pupils in the sample received a vision test.
- Eighty-four percent (N=173) of the pupils in the sample received a hearing test.
- Eighty-one percent (N=167) of the pupils received a speech evaluation.

Objective 4: Parents of at least 50 percent of participating pupils will be involved in support of the center's efforts to remediate the reading difficulties of their child.

- Outcome: Objective 4 is considered attained. Results of a questionnaire sent to parents of 198 randomly selected pupils in June, 1981, revealed that 80 percent of the responding parents (N=113) reported that they had contact with their child's reading teacher at least once during the project year. An average of 1.28 parent - teacher contacts was reported. See Appendix C for summaries of parent responses. The following kinds of contacts were reported:

  - Sixty-three percent of the sample of parents reported that they had received written progress reports from their child's reading teacher.

  - Forty-eight percent of the sample of parents reported having telephone or in-person conference contacts with their child's reading teacher.

  - Five percent of the parents reported that their child's reading teacher visited their home.

- Additionally, examination of a random sample of 205 case studies revealed that an average of three parental contact forms were contained in each pupil's case study.

Objective 5: At least 50 percent of the classroom teachers of pupils served by the project will receive consultative services from the clinic staff.

- Outcome: Objective 5 is considered attained. Results of a questionnaire to teachers of 198 randomly selected pupils revealed that 89% of the responding teachers (N=151) had an average of three opportunities to discuss their pupil's progress with the Reading Clinician.

  - Forty-two percent of the teachers reported having contacts in the form of written reports.

  - Sixty percent of the teachers reported having conferences with their pupil's Reading Clinician.

ADDITIONAL FINDINGS

- Fifty-eight percent of the parents responding to a questionnaire reported that they believed their child had been helped "A Lot" by the program.

- Ninety-four percent of the parents responding to the same questionnaire reported that they had seen their child's reading habits change.

- Parents' reported observing the following changes in their child's reading habits:

  - Sixty-one percent reported that their child makes an effort to read printed materials on signs or different types of displays.

  - Fifty-one percent reported that their child attempts to apply reading skills to newspapers or magazines.

  - Fifty percent of the parents report their child reads more for pleasure.

- Teacher responses to a questionnaire reported the following degree of change in their pupil's reading behavior:

  - On a scale of "1" to "5" (1 being "Worse" to 5 being "Better"):

    - Forty-three percent of the pupils were rated 4 ("Somewhat Better") or 5 ("Better") in confidence in word attack.

    - Fifty percent of the pupils were rated 4 ("Somewhat Better") or 5 ("Better") in their general attitude toward school.

    - Forty-two percent of the pupils were rated 4 ("Somewhat Better") or 5 ("Better") in their independence in reading.

- Project records document that 2,068 pupils were served during the 1980-81 project year.

  - Number of participants who received the following services:

    - Psychological -- 1,065 pupils
    - Health -- 1,519 pupils
    - Speech & Hearing -- 1,270 pupils

CONCLUSIONS

Project records and case studies document that services were delivered to participating students in the form of specialized instruction relating to pupil diagnosis.

Of the five objectives, four or 80 percent were fully achieved; one was not achieved.

Project records and average length of service verify the severity of the reading problems of the participants. Although the objective criterion for NCE gains was met, gains were limited due to the complexity of the reading difficulties of the target population.

The data in Table 2 show that participants in the sample are reading in the lower 25th percentile when compared with students nationally. This could account for their lack of ability to independently handle the usual classroom reading materials in their grade at least 50 percent of the time.

It is recommended that present participants will benefit from continuing participation in the project.

APPENDIX A

Schools Served

Diagnostic Reading Clinic

1980-1981

Public	Non-Public
Anthony Wayne	St. Michael
Buhrer	
Clark	
Daniel E. Morgan	
Forest Hills Parkway	
George Washington Carver	
Gordon	
Kentucky	
Margaret Ireland	
Mount Pleasant	
Mary B. Martin	
Mary Bethune	
Orchard	
Paul Revere	
Stephen E. Howe	
Tremont	
Union	
Walton	
Watterson - Lake	

APPENDIX B

Cleveland Public Schools

DIAGNOSTIC READING CLINIC

Teacher Questionnaire

N=161

_____ has been receiving the services of the Diagnostic Reading Clinic. We are interested in securing from you, his/her classroom teacher, some observations about his/her present reading performance. Please fold, staple and return this questionnaire on or before: Friday, June 19, 1981.

Check the appropriate answer.

1. Did you have and opportunity to discuss this child's progress with the Reading Clinician? Yes 134 (89%) No 17 (11%)

   Approximately how many times? 3 (Mean)

   Check which of the following contacts you have had with the Clinician? You may check more than one.

   Written reports - 42% Other _____

   Conferences - 60% _____

2. Based on your observations, about what proportion of the time can this child independently handle the usual classroom reading material used in his grade?*

less than 24%	25 to 49%	50 to 74%	75 to 100%
13%	27%	42%	18%

3. Circle the number that corresponds to the degree of change in this child's behavior.

   5 - Better
   4 - Somewhat Better
   3 - No Better, No Worse
   2 - Somewhat Worse
   1 - Worse

   A. Pupil confidence in word attack.

   1 (2%) 2 (12%) 3 (43%) 4 (33%) 5 (10%)

   B. Pupil's general attitude toward school.

   1 (6%) 2 (9%) 3 (35%) 4 (31%) 5 (19%)

   C. Pupil independence in reading.

   1 (7%) 2 (18%) 3 (33%) 4 (35%) 5 (7%)

4. In your opinion, what is the area of greatest reading improvement for this child?

   41% ⬡ Comprehension 35% ⬡ Vocabulary 23% ⬡ Word Analysis

5. Child's days of absence for this year as of the date of this report. ____

APPENDIX C

Cleveland Public Schools

DIAGNOSTIC READING CLINIC

Parent Questionnaire
N=113

_____ has been receiving extra help in reading this year from the Diagnostic Reading Clinic program. Please complete and return this questionnaire to your child's reading teacher on or before: Monday, June 15, 1981.

Check the appropriate answer.

N=106 1. Have you had contact with your child's reading teacher? 80% ☐ Yes 20% ☐ No

Approximately how many times? 1 (Mean)

. If yes, check which kinds of contact you have had.

Conferences (telephone or in person) ☐ 48%

Written Progress Reports ☐ 63%

Home Visits ☐ 5%

Other 4% _____

_____

N=108 2. Was your child helped by this program?

58% ☐ A lot 40% ☐ Somewhat 2% ☐ Not at all

= 85 3. Have you seen your child's reading habits change? 94% ☐ Yes 6% ☐ No

N=113 . If yes, check which changes you have seen?

A. Reads more for pleasure. ☐ 50%

B. Brings home more library books. ☐ 34%

C. Uses more library books for homework assignments. ☐ 18%

D. Makes an effort to read printed materials on signs or different types of displays. ☐ 61%

E. Attempts to apply reading skills to newspapers or magazines, if they are available. ☐ 51%

F. Other 7% _____

THANK YOU!

Department of Research, Development and Evaluation
May, 1981

ENGLISH-AS-A-SECOND LANGUAGE PROJECT

Prepared by

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1980-1981

ENGLISH-AS-A-SECOND LANGUAGE PROJECT

1980-81 Title I Evaluation

PURPOSE AND OVERVIEW

This project is designed to help second-language learners acquire an adequate level of proficiency in understanding, speaking and reading the English language. Pupils served by this project are provided, in a special classroom apart from their regular classrooms, with extra classes in speaking and reading English and acculturation activities. These special sessions, which average approximately forty-five minutes daily, are followed up with additional individual and small-group remediation provided by teacher assistants, where available. A full-time community coordinator plans and implements parent and community involvement in the program.

SERVICE SUMMARY

Pupils Served: 660 Grades Served: Preschool-8 Years in Operation: 14

Schools: 15 public
3 non-public
18 total

(See Appendix A, Table 1, for list)

Staffing:
1 Project Manager, FT
1 Consultant Teacher, FT
1 Teachers, FT
8 Assistants, FT
1 Clerk, FT
1 Community Coordinator, FT

Total DPPF Expenditures: $560,715 Per Pupil Cost: $850

SUMMARY OF FINDINGS

The 1980-81 English-As-A-Second Language Project had positive effects on the speaking skills of the students serviced, and met with some success in increasing the reading skills of its participants. Students in Pre-School through grade six Speaking classes were pre-tested in November and post-tested in May. They showed more than expected improvement in listening comprehension skills at all grade levels. Approximately half of those served were enrolled in reading classes. Students in reading classes, grades one-six, were pre-tested in November and post-tested in May. Four grade levels (out of six) made greater than expected gains in Reading Vocabulary, and three grade levels (out of six) grew more than expected in Reading Comprehension.

OBJECTIVES AND OUTCOMES

Process Objectives

Objective 1: Assignment of an English-As-A-Second Language team, consisting of an ESL teacher and a teacher assistant, to schools will be based on concentration of non-English speaking students.

Outcome: Objective 1 was achieved. Eighteen schools and a total of 660 students participated in the 1980-81 ESL program. These schools were selected because of their high concentration of non-English speaking children. Four of the 17 ESL teachers had full-time teacher assistants; six teachers had teacher assistants for half the day.

Objective 2: Pupils will be grouped according to needs in oral English and reading skills.

Outcome: Objective 2 was achieved. All students were screened prior to assignment. This screening involved the use of separate instruments for reading and speaking. On all instruments, students had to score at the 33rd percentile or below before acceptance into the program. Screening instruments for speaking and reading classes, by grade level, are listed in Appendix A, Table 3. A total of 527 students were enrolled in speaking classes and 292 students were enrolled in reading classes. Of these totals, 159 students were enrolled in both speaking and reading classes. The schools and number of students served can be found in Tables 1 and 2 of Appendix A.

Objective 3: Curriculum program will be carefully structured to include language structures and vocabulary that are readily available within the daily experiences of children and geared to the proficiency levels of participants.

Outcome: Objective 3 was achieved. Curriculum guidelines, previously developed by the project for the speaking and reading classes, were reviewed by four curriculum committees. These committees then developed additional guidelines and curriculum materials for Child Development, Kindergarten , Primary, and Upper Elementary levels. Children served by the project progress to higher levels of proficiency as measured by criterion-referenced tests.

Objective 4: Parent involvement and participation in the learning experience of the children will be actively enlisted by the project staff.

Outcome: Objective 4 was achieved. The Community Coordinator assigned to the project completed 763 home visits, initiated 73 community contacts, held 22 conferences with principals, participated in 58 parent education meetings, five ESL Parent Advisory Committee meetings and nine city-wide Parent Advisory Committee meetings. In addition, ESL teachers are available to parents on an individual, as-needed basis.

Product Objectives

Objective 1: Participants in reading classes will show improvement in the level of reading vocabulary (+7 or more NCE* units) on the mean pre-post scores obtained on the reading vocabulary subtest of the Comprehensive Tests of Basic Skills (grades one-six).

Outcome: Objective 1 was achieved at four out of six grade levels. All tests were administered on a pre-post basis, with the pre-tests being administered in November, 1980 and the post-tests administered in May, 1981, in accordance with the city-wide testing schedule. Pre NCE units were derived from fall norms and post NCE units were derived from spring norms. The pre-post results, by grade level, can be found in Table I of Appendix B.

These data indicate that for grade 1, the average NCE gain was negative (-13.19). For grade 2, although the gain was positive (+5.11), it was below the stated criterion of +7 or more NCE units. For grades 3-6, the NCE gain was above (+9.22, +14.46, +10.74, and +10.95 NCE units respectively) the stated criterion.

Although the objective criterion standard was stated in terms of NCE units, the following table will enable the reader to see the pupil standing represented by percentile ranks, based on national norms and relative to students of the same age.

PERCENTILE RANK
Reading Vocabulary

Grade	Pre-test	Post-test
1	41	19
2	14	19
3	20	35
4	11	29
5	9	19
6	5	13

Again, the greatest impact appears at grades 3-6. Relatively little movement occurred at grade 2 and test performance actually declined at grade 1. It will be noted that post-test percentiles are still relatively low on the percentile scale; however, the students at grades 3-6 did make good gains.

*NCE (Normal Curve Equivalent) units are normalized, equal-interval, standard scores with a mean of 50 and a standard deviation of 21.06, derived by dividing the distance from the mean to the 99th percentile by the same distance measured in terms of normal curve standard deviation units (2.3267). The resulting scale includes 98% of the population which lies between the 1st and the 99th percentile.

Objective 2: Participants in reading classes will show improvement in the level of reading comprehension (+7 or more NCE units) on the mean pre-post scores obtained on the reading comprehension subtest of the Comprehensive Test of Basic Skills (grades one-six).

Outcome: Objective 2 was achieved at three out of six grade levels. All tests were administered on a pre-post basis, with the pre-tests administered in November, 1980 and the post-tests administered in May, 1981, in accordance with the city-wide testing schedule. Pre NCE units were derived from fall norms and post NCE units were derived from spring norms. The pre-post results, by grade level, can be found in Table I of Appendix B.

These data indicate that for grades one and two, the average NCE gain was negative (-15.38 and -13.37 respectively). For grade three, although the gain was positive (+6.75) it was below the stated criterion of +7 or more NCE units. For grades four-six, the NCE gain was above (+14.77, +19.38 and +7.70 units, resepctively) the stated criterion.

Pupil standing in Reading Comprehension is presented in the following table by the use of percentile ranks.

PERCENTILE RANK
Reading Comprehension

Grade	Pre-test	Post-test
1	52	26
2	25	9
3	19	29
4	9	25
5	8	31
6	6	11

Pre-post gain in grades 3-6 is once more documented using percentile ranks. It can also be seen, using this percentile table, that grades 1 and 2 post-test scores and percentile ranks declined. It will be noted that post-test percentiles are still relatively low on the percentile scale, but respectable gains were made at grades 3-6.

Objective 3: Participants in speaking classes at the pre-school and kindergarten levels will show significant improvement ($p < .05$) in listening comprehension skills on the mean pre-post scores obtained through and administration of the Test of Auditory Comprehension of Language (TACL).

Outcome: Objective 3 was achieved. The Test for Auditory Comprehension of Language (TACL) was administered to 100 Child Development and Kindergarten students in ESL speaking classes on a pre-post basis in November, 1980 and in May, 1981. Using a t-test, there were statistically significant gains ($p < .001$) between pre-and post-test scores for both grade levels for all three of the subtests (Vocabulary, Morphology, Syntax). These gains far exceeded the objective criterion. Table 2 in Appendix B presents the results of this testing.

Mean total raw scores were then converted into percentile ranks, using an age-range norms table. Students moved from a percentile rank of 11 on the pre-test to a post-test percentile rank of 54.

Objective 4: Participants in speaking classes in grades one through six will show significant improvement ($p < .05$) in listening comprehension and oral production skills on the mean pre-post scores obtained through the administration of the Language Assessment Scale.

Outcome: Objective 4 was achieved. Students (N=190) in speaking classes in grades one through six were administered both the listening comprehension and the oral production subtests of the Language Assessment Scale (LAS) on a pre-post basis in November, 1980 and May, 1981. Students in grades one through five were administered Level I of the LAS and grade six students were administered Level II of the LAS. The results of this testing can be found in Table 3 of Appendix B. These results indicate that for both the comprehension and oral production subtests of the LAS, the pre-post gains were significant at the .001 level at all six grade levels.

There are no norms tables that will allow for interpretations of these raw scores in terms of student standing relative to other students of the same age. However, in order to supply the reader with more information regarding the educational significance of the raw scores, the following analysis is offered. The Comprehension Subtest of the LAS consists of ten items. Students' mean gain score pre-post across the six grade levels was 2.10. This is an improvement of approximately 20% across the ten items.

The Oral Production Subtest categorizes students' language proficiency along five levels. Project students gained approximately one full proficiency level from pre to post-test. The gain score averaged 1.12 across the six grades.

ADDITIONAL FINDINGS

As a part of the project activities, students from ESL schools participated in 25 field trips. A list of field trips taken can be found in Appendix C.

Every attempt was made to coordinate the ESL reading evaluation with the city-wide testing program and the bilingual program, thereby eliminating dual testing of some students. This cooperation proved effective this school year.

CONCLUSIONS

The 1980-81 English-As-A-Second Language Project was successfully implemented according to guidelines contained in the process objectives. The project achieved its language skill objectives at all grade levels. The other two reading objectives were achieved at some grade levels. At grades 3-6,

students made respectable reading gains. The post-test data for grades 1 and 2 is disappointing in that student scores dropped from pre to post-test. Project Management, when interviewed, offered this possible explanation for the decline in post-test scores: Grades 1 and 2 students, being young and inexperienced at test-taking, were subjected to different pre-testing and post-testing conditions. The pre-test was administered in a small (N=5) group setting, with careful test monitoring. The post-test was administered as a part of the city-wide testing program in a large (N=35) group with less structure and monitoring. Test results from previous years do not show this pattern of decline nor this method of post-test administration for these two grade levels.

The following are recommendations for the 1981-82 year:

- Cooperation between ELS, bilingual, and city-wide testing programs should continue.

- Project administration should identify the reasons why reading gains in both vocabulary and comprehension are below the stated criterion at some grade levels and should take any programmatic action necessary to eliminate or reduce the difference between stated criteria and actual attainment levels.

- It is important to note that ESL has lost teacher assistants each year; if the assistants are completely eliminated from the program due to budget reductions, the services to children in areas of concentrated individual reinforcement of skills presented and contact with parents will be severely limited. It is therefore recommended that the teacher assistants be retained on the ESL team.

APPENDIX A

TABLE I

Schools and Students Served

1980-81

Schools Served

Public	Non-Public
Buhrer	St. Francis
Case	St. Michael
East Madison	St. Vitus
Joseph Landis	
Kentucky	
Marion Seltzer	
McKinley	
Milford	
Orchard	
Paul Dunbar	
Riverside	
Scranton	
Tremont	
Walton	
Waverly	

TABLE 2

Count of Pupils by Grade Level

Grade	No. of Students		
	Public	Non-Public	Total
Child Development	36	---	36
Kindergarten	119	29	148
Grade 1	90	11	101
Grade 2	75	6	81
Grade 3	79	9	88
Grade 4	73	5	78
Grade 5	56	8	64
Grade 6	52	7	59
Grade 7	--	4	4
Grade 8	--	1	1
Total	580	80	660

APPENDIX A (Cont'd)

TABLE 8

SCREENING TESTS

READING CLASSES

Screening Test	Grade	Screening Test	Grade
For students previously in Cleveland System: Metropolitan Readiness Test, Kindergarten administration (Spring, 1980) For students new to Cleveland System: ESL teacher administered Metropolitan Readiness Test, Fall, 1980	1	For students previously in Cleveland System: CTBS, Level C, Form S, 2nd grade administration (Spring, 1980) Reading Vocabulary or Reading Comprehension: Passages subtest For students new to Cleveland System: ESL teacher administered California Achievement Test, Level II, Form A Reading Comprehension or Reading Vocabulary subtests (Fall, 1980)	3
For students previously in Cleveland System: CTBS, Level B, Form S first grade (Spring, 1980) administration, appropriate score one one of the following subtests: Word Recognition I; Comprehension; Word Recognition II For students new to Cleveland System: ESL teacher administered California Achievement Test, Level II, Form A Reading Comprehension or Reading Vocabulary subtests	2	Stanford Diagnostic Reading Test 2, Reading Comprehension subtests, Green Level, Fall 1980. Administration through city-wide testing or ESL teacher administered California Achievement Test, Level II, Form A Reading Vocabulary or Reading Comprehension subtests (Fall, 1980)	4

TABLE 3

SCREENING TESTS

READING CLASSES

Screening Test	Grade
Stanford Diagnostic Reading Test 2, Reading Comprehension subtest, Brown Level, Fall, 1980. Administration through city-wide testing or CTBS, Level II, Form S, 4th grade administration (Spring, 1980) Reading Vocabulary or Reading Comprehension subtest.	5
Stanford Diagnostic Reading Test 2, Reading Comprehension subtest, Brown level, Fall, 1980. Administration through city-wide testing program or ESL teacher administered California Achievement Test, Level 3, Form A, Reading Vocabulary or Reading Comprehension, Fall 1980	6

TABLE 3

SCREENING TESTS

SPEAKING CLASSES

Screening Test	Grade
Screening Test for Auditory Comprehension of Language (STACL) Fall, 1980 Administration	CD K
SPLIT TEST (Schutt: University of Arizona) Verbal Fluency-English Subtest; Fall, 1980 Administration	1 2
Fall, 1980 Administration of Language Assessment Battery English Level II, Grades 3-6	3-6

APPENDIX B

Technical Tables

APPENDIX B

TABLE 1

Vocabulary and Comprehension Subtests
Mean NCE Gains by Grade

		Vocabulary NCE			Comprehension NCE		
Grade	N	Pre-test $\bar{X}$	Post-Test $\bar{X}$	$\bar{X}$ Gain	Pre-test $\bar{X}$	Post Test $\bar{X}$	$\bar{X}$ Gain
1	13	45.85	32.46	-13.39	51.92	36.54	-15.38
2	19	27.21	32.32	+ 5.11	35.53	22.16	-13.37
3	31	32.94	42.16	+ 9.22	32.19	38.94	+ 6.75
4	26	24.35	38.81	+14.46	20.77	35.54	+14.77
5	26	20.88	31.62	+10.74	20.81	40.19	+19.38
6	20	14.65	25.60	+10.95	16.25	23.95	+ 7.70
Total	135						

APPENDIX B (Cont'd)

TABLE 2

Summary of Pre-Post Testing

TACL, Child Development and Kindergarten

	Vocabulary	Morphology	Syntax
N	100	100	100
Pre-Test $\bar{X}$	27.70	24.52	5.46
Post-Test $\bar{X}$	35.53	37.78	8.13
S. D. Pre	7.36	8.55	2.40
S. D. Post	3.13	5.85	1.78
t	13.024*	18.179*	10.340*
X pre-post gain	7.83	13.26	2.67
S. D. pre-post gain	6.01	7.29	2.58

$p < .001$

TABLE 3

Summary of Pre-Post Testing

Language Assessment Scale, Grades 1-6

Grade	1		2		3		4		5		6	
Subtest	Comp.	Oral Prod.	Comp.	Oral Prod.	Comp.	Oral Prod.	Comp.	Oral Prod.	Comp.	Oral Prod.	Comp.	Oral Prod.
N	53	53	35	35	31	31	21	21	31	31	19	19
Pre Test $\bar{X}$	4.15	1.02	4.46	1.34	5.97	2.06	4.86	1.71	5.39	1.81	6.63	1.68
Post Test $\bar{X}$	6.58	2.09	6.63	2.77	7.58	3.16	7.14	2.62	7.58	2.94	8.11	2.63
S. D. Pre	2.15	0.77	2.63	1.06	1.92	1.03	2.29	1.10	2.70	1.14	2.19	1.00
S. D. Post	1.56	0.97	1.68	1.11	2.81	1.13	1.39	0.92	1.69	0.77	1.37	0.83
t	8.371*	8.009*	6.096*	9.220*	3.233*	9.382*	4.824*	5.396*	6.472*	7.105*	5.271*	4.869*
X Pre-Post Gain Gain	2.43	1.08	2.17	1.43	1.61	1.10	2.29	0.90	2.19	1.13	1.47	0.95
S. D. Pre-Post Gain	2.12	0.98	2.11	0.92	2.78	0.65	2.17	0.77	1.89	0.88	1.22	0.85

*$p < .001$

APPENDIX C

ESL Field Trips
1980-81

Zoo

Aquarium

Western Reserve Historical
Society, Crawford Auto-Aviation Museum

Natural History Museum

Hale Farm

Greenhouse

Neighborhood Tour

Trailside Interpretive Center

Garden Center

North Chagrin Metropolitan Park

Channel 8

Pick-N-Pay

Rainbow Babies' and Children's Hospital

Cleveland Public Library

MATHEMATICS SKILLS IMPROVEMENT PROGRAM

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1980-1981

MATHEMATICS SKILLS IMPROVEMENT PROGRAM

1980-81 Title I Evaluation

PURPOSE AND OVERVIEW

The Mathematics Skills Improvement Program (MSIP) is designed to serve students in grades 3-6 (2-8 in non-public schools) who have demonstrated difficulties in the acquisition of basic mathematics skills. Mathematics consultant teachers provide these students with daily remedial instruction in specially equipped mathematics laboratories outside of the regular classroom. Instruction is provided on an individualized and small-group basis and is in addition to the mathematics instruction provided by the regular classroom teacher. Additional services provided by the project include workshops and inservice training for the Title I mathematics consultant teachers, involvement of parents in the instructional program of the project, demonstrations of mathematics teaching techniques for regular classroom teachers and publication of a newsletter to disseminate pertinent information about the project to parents and staff.

SERVICE SUMMARY

Pupils Served: 3,081 Grades Served: 3-6 public, 2-8 non-pub. Years in Operation: 13½

Schools: 49 public, 10 non-public, 59 total (See list in Appendix A)

Staffing: 1 Project Manager, FT; 58 Consultant Teachers (57 FT, 1 PT)

Total Title I Expenditures: $1,882,183 Per Pupil Cost: $611

SUMMARY OF FINDINGS

The evaluation data indicated that the program services of the Mathematics Skills Improvement Program were delivered essentially as proposed. Some difficulties were noted in maintaining specified project enrollment levels in the non-public schools, and in schools served by part-time mathematics consultants. Also, it was found that the number of school days on which project services were available fell somewhat short of that proposed, and recommendations were made aimed at increasing the amount of instructional time offered. Extensive parent involvement activities were conducted by the project staff and the attitudes toward the project of the parents of participating students were highly positive. A regular series of staff development activities was also held for the project teachers.

The results of mathematics achievement testing at grades 4, 5 and 6 showed that participants in the program showed significant growth in their mathematics skill levels. The rate of growth exceeded the standard established by the project objectives. Despite the substantial improvement in achievement levels, however, students continued to score relatively low as compared with national norms.

OBJECTIVES AND OUTCOMES

Process Objective 1: Each full-time MSIP consultant will provide an average daily enrollment of 48 mathematics underachievers from grades three through eight with remedial instruction in mathematics skills. An enrollment variance of no more than seven percent (7%) will be acceptable.

Outcome: An examination of enrollment summaries maintained by each consultant teacher revealed that this objective was achieved in the public schools but not in the non-public schools. All public schools served by full-time mathematics consultants had average project enrollments within the range of 44.6 to 51.4 students (48 students + 7%). The actual enrollment averaged 48.01 and ranged from 45.625 to 50 students. In the non-public schools only two of the five schools with full-time consultants attained the objective. Enrollments ranged from 39.5 to 47.9 and averaged 42.45.

Records maintained by the project office showed that in 1980-81, the project served a total of 3,081 students in grades two through eight. The majority of students served (2,747 or 89%) were in grades 4-6. Students who were served in grades 2, 7 and 8 were in non-public schools only. (Appendix B presents the numbers of public and non-public students served by grade level.) Students identified for service were scheduled for daily instruction in a mathematics laboratory with a mathematics consultant teacher. Instruction was individualized and in small groups and was in addition to the mathematics instruction received in the regular classroom.

Process Objective 2: Each part-time MSIP consultant will provide an average daily enrollment of 20 mathematics underachievers from grades three through eight with remedial instruction in mathematics skills. An enrollment variance of no more than seven percent (7%) will be acceptable.

Outcome: The data obtained from enrollment summaries maintained by each consultant teacher indicate that this objective was not achieved. Although the overall average enrollment was 19.85 students, only one of the two public and five non-public schools with part-time MSIP consultants fell within the 18.6 to 21.4 student enrollment range specified by the objective (20 students + 7%). Average enrollments for individual schools ranged from 15.6 to 24 students.

Process Objective 3: MSIP consultants will provide for each remedial mathematics student one 40-minute period of small group instruction for at least 90% of the days that the school is in session each semester.

Outcomes: Data available from project records indicate that this objective was not achieved. Only two of the 59 project schools offered MSIP instruction for at least 90% of the days school was in session.

The percentage of instructional days ranged from 63.9% to 92.8% and averaged 83.9%. Eighty-five percent of the schools offered MSIP instruction for at least 80% of the days school was in session.

Asked why most project schools had recorded periods of no project instruction totaling between four and five weeks of the school year, the project manager reported that a number of factors were involved. First, all project consultant teachers participate in monthly inservice meetings, on which days their mathematics instruction is not offered. Over the course of the year, inservice meetings consume almost two weeks of instructional time. Second, in calculating the number of instructional days, the days on which a mathematics consultant teacher was absent due to illness were counted as days on which instruction was not offered. Third, it was reported that between two and three weeks are required in the fall to identify and schedule the students who are to receive instruction. Although test data are already available for many students from tests administered the previous spring, the identification process is complicated by high pupil mobility rates and delays in the transfers of records which require the consultant teachers to administer additional tests in the fall to determine eligibility. The practice in most schools has been to wait until most of the eligible students have been identified and scheduled before beginning the instructional program.

Process Objective 4: When surveyed, 75% of the parents of MSIP students will be able to acknowledge being contacted by the Mathematics Skills Improvement Project.

Outcome: The data available indicate that the objective was achieved. In May, 1981 each mathematics consultant teacher was provided with a supply of questionnaires to distribute to the parents of a sample of the students receiving project services. A total of 94 parent questionnaires were returned. Analysis of the responses to the questionnaire showed that 93% of the parents responded in the affirmative when asked if they had received any written information about the special mathematics instruction being provided for their children.

Further analysis of the questionnaire responses showed that 67% of the respondents had made at least one visit to their child's MSIP class during the 1980-81 school year. In addition, 88% of the parents reported that they believed that their child had improved in his mathematics skill more than before. (A summary of the parent questionnaire responses is presented in Appendix C.)

Project records show that, with the exception of May, 1981, a meeting for parents of participating children was held every month from October, 1980 through June, 1981, a total of eight parent meetings. These meetings dealt with a variety of topics ranging from explanations of project operations and procedures to the distribution of instructional materials and the explanation of methods for parents to use to help teach their children at home. The culminating activity for the year

was a Math Mini-Fair held in June in which all of the mathematics consultant teachers worked with parents on the use of home-instructional materials designed and constructed by the consultants. Details on the individual parent meetings may be found in Appendix D.

Product Objective 1: The MSIP observed group mean post-test performance will be at least five NCE units above the expected group mean score which has been estimated by regression analysis of Spring, 1980 and Spring, 1981 CTBS Mathematics Test scores. Analysis will be by grade levels three, four, five and six.

Outcome: The data show that this objective was achieved at grade 4, 5 and 6. Data were not available for grade 3. The mean post-test performance for all grade levels combined was 8.54 NCE units above the expected mean post-test score, exceeding the five NCE units specified by the objective.

To assess progress toward the attainment of the objective, the test performance of the students served by the project was compared with an estimate of what their test performance would have been if they had not participated. This "expected" level of performance was obtained by conducting a regression analysis on the Spring, 1980 and Spring, 1981 test scores of students who did not quality for Title I service and who did not participate in MSIP. The analysis made it possible to predict the 1981 test performance of MSIP students from their performance levels the previous year. Their actual 1981 scores were then compared with their expected 1981 scores to determine if participation in the project had raised their performance levels above the level that would have been expected if they had not participated.

Data were collected for grades 4, 5 and 6 using the Comprehensive Tests of Basic Skills (CTBS) Mathematics Tests administered city-wide in the Spring of 1980 and 1981. (Regression analysis could not be conducted for grade 3 because mathematics tests are not administered city-wide at grade 2, and so the 1980 data needed to derive the expected scores for grade 3 in 1981 were not available.) The analysis was conducted using the Total Mathematics score from the CTBS. Appendix E shows the specific level, form and dates of administration of the tests administered at each grade. Table I shows the results of the comparison between actual and expected post-test Total Mathematics NCE scores achieved by the MSIP students at each grade level.

Table 1

Actual and Expected CTBS Total Mathematics Post-test NCE Scores of Students Participating in Mathematics Skills Improvement Program

Grade	N	Expected Average NCE Score	Actual Average NCE Score	Actual-Expected Difference	% of Students Gaining 5 NCEs
4	433	30.05	36.60	+ 6.55*	55%
5	547	28.39	39.41	+11.02*	67%
6	236	29.96	36.42	+ 6.46*	65%
Total	1216	29.29	37.83	+ 8.54	63%

*Statistically significant ($p < .001$)

Table 1 shows that the objective criterion of a mean difference of at least 5 NCE units between actual and expected post-test scores was exceeded at each grade level and for the project as a whole. In addition, the differences between actual and expected average scores were statistically significant at all three grade levels as determined by t-test for correlated measures. The table also shows that at each grade level, over half the students achieved the objective criterion on an individual basis. (Data on the 1980 and 1981 test scores of both MSIP and non-MSIP groups along with the regression analysis and t-test statistics may be found in Appendix F.)

The objective criterion was stated in terms of NCE units. To help the reader see how the project students rank relative to other students the same age, Table 2 presents the percentile ranks of their average NCE scores based on national norms. Percentile ranks are presented for the students' scores in 1980 and 1981.

Table 2

Percentile Ranks of Average 1980 and 1981 Total Mathematics Scores Obtained on the CTBS by Students Participating in the Mathematics Skills Improvement Program

Grade	1980 Percentile	1981 Percentile
4	17	26
5	14	31
6	14	26

The table shows that despite the substantial gains in performance, students served by the project still rank in the lower third of students nationally after participation in the project and are likely to require continued service.

ADDITIONAL FINDINGS

Project records showed that regular inservice meetings were conducted for the project's mathematics consultant teachers. Consultants attended a total of seven such meetings between September, 1980 and May, 1981. In addition, separate inservice meetings were held for MSIP consultant teachers who joined the project for the first time in 1980-81. Topics for the meetings included MSIP record-keeping procedure, testing procedures, the use of new mathematics textbooks, student selection procedure, diagnosis and correction of skill weaknesses, the use of instructional games, materials development and the like. Appendix G presents details on each inservice meeting held.

CONCLUSIONS

The evaluation data showed that with some exceptions, the project services offered by the Mathematics Skills Improvement Program were delivered as proposed. Two of the four process objectives were achieved. The data also showed that the project had a positive impact on student mathematics achievement as the participating students demonstrated test score gains beyond the levels specified by the project's one product objective.

Supplementary mathematics instruction was provided in individualized and small group settings for over 3,000 elementary school students who had demonstrated weaknesses in mathematics skills. Program enrollment levels were maintained at proposed levels in the public schools served by full-time mathematics consultants, but some difficulty was noted in maintaining projected levels in the non-public schools and in schools served by part-time mathematics consultants. Additionally, the project objective dealing with the number of school days on which instruction would be made available was not met as the number of instructional days fell somewhat below projected minimum levels. The project manager cited delays associated with pupil identification and scheduling and time lost due to staff inservice sessions and staff absence as factors contributing to reduced instructional time. Other project activities included extensive activities for parents of participating students, and inservice sessions for the project staff. Parent reaction to the project was highly positive.

Student mathematics test scores averaged 8.5 NCE units higher than would have been expected had they not participated, but students still scored in the lower one third of students nationally.

The Mathematics Skills Improvement Program has been demonstrated to be a worthwhile project which effectively contributes to the improved mathematics achievement of the students it serves. Several recommendations are offered for future operations:

1. Means should be explored for decreasing the amount of non-instructional time noted in project operations. Possible means might include reducing the amount of time devoted to project staff inservice meetings or attempting to schedule them after hours or on weekends. The latter would, of course, have implications for the project budget. Another possibility would involve beginning instruction in the fall with those students for whom eligibility information is readily available without waiting for the MSIP rosters to be completely filled before beginning. Students without eligibility information could then be added as the information became available. The testing of students lacking eligibility information would be speeded if MSIP purchased and had on hand its own testing materials. This is particularly true in non-public schools where testing materials are not always readily available.

2. It is the recommendation of the project manager that Process Objective 3 be reworded to focus on the opening date of MSIP instructional activities rather than total number of instructional days offered by the project.

APPENDIX A

Schools Served by Mathematics Skills Improvement Program

1980-81

Public Schools

Andrew J. Rickoff
Anthony Wayne
Artemus Ward
Benjamin Franklin
*Brooklawn
Buhrer
Case
Charles H. Lake
Chesterfield
Clark
Cranwood
Daniel E. Morgan
East Madison
Emile B. DeSauze
Euclid Park
Forest Hills Parkway
Fullerton
Garfield
George W. Carver
Gordon
Gracemount
Halle
*Henry W. Longfellow
Kenneth W. Clement
Kentucky
Margaret Ireland
Marion-Sterling
Mary B. Martin
Mary M. Bethune
McKinley
Memphis
Miles Park
Milford
Mount Pleasant
Nathaniel Hawthorne
Oliver Hazard Perry
Orchard
Paul Revere
Robert Fulton
Stephen E. Howe
Tremont
Union
Verda Brobst
Wade Park

*1 semester of service only

APPENDIX A (continued)

Schools Served by Mathematics Skills Improvement Program

1980-81

Public Schools (continued)

Walton

Warner

Watterson-Lake

Willow

William Harper

Non-Public Schools

St. Aloysius

St. Joseph Collinwood

St. Catherine

Mt. Pleasant Catholic

St. Paul Croation

St. Benedict

Holy Rosary

Immaculate Heart of Mary

St. Rose

Annunciation

APPENDIX B

Number of Students Served by the Mathematics Skills Improvement Program by Grade Level

Grade	Number of Students			Percent of Total
	Public	Non-Public	Total	
2	--	10	10	.3
3	188	76	264	8.6
4	1020	65	1085	35.2
5	822	52	874	28.4
6	731	57	788	25.6
7	--	32	32	1.0
8	--	28	28	.9
Total	2761	320	3081	100%

APPENDIX C

PARENT SURVEY RESPONSE SUMMARY

CLEVELAND PUBLIC SCHOOLS

Mathematics Skills Improvement Project

Dear Parent:

We are pleased that your child was part of a group who were given special instruction in Mathematics. We now wish to know how you feel about this special help. Please help us by circling your answers to the questions below.

ITEM	FREQUENCY OF RESPONSE		
1. Did you know that your child was receiving special instruction in mathematics?	YES - 98%	NO - 2%	
2. Did you receive any written information about this special mathematics instruction?	YES - 93%	NO - 7%	
3. Did your child bring home to show you any arithmetic paper or other object from his arithmetic teacher?	YES - 89%	NO - 11%	
4. Have you visited your child's special mathematics class?	YES - 67%	NO - 33%	
5. Did your child talk to you more about his arithmetic class this semester than before?	MORE - 64%	SAME - 35%	LESS - 1%
6. Do you feel your child improved in arithmetic more this semester than before?	MORE - 88%	SAME - 11%	LESS - 1%

Please have your child return this questionnaire to his special math teacher on the next school day.

Thank you very much.

APPENDIX D

Parent Meetings Held by Mathematics Skills Improvement Program in 1980-81

Date	Meeting Topic(s)
October 29, 1980	Purpose and Structure of MSIP
	Presentation by project manager of Project Pride on "Being Aware of Myself"
November 19, 1980	Introduction of components of MSIP
	Ways of improving parent participation
	Distribution of descriptive materials on the MSIP and home-activity materials
	Demonstration of mathematics games
December 17, 1980	Mathematics games
	Techniques for teaching addition facts
	Election of officers
January 28, 1981	Distribution of descriptive materials on the MSIP and home activity materials
	Home use of materials for teaching division
February 25, 1981	Techniques for teaching multiplication at home
March 17, 1981	Observation of MSIP classrooms
March 25, 1981	Report on observations of MSIP classrooms
	Discussion of MSIP Mini-Fair
	Mathematics games
April 29, 1981	Review of MSIP proposal for purpose of making recommendations for 1981-82
June 3, 1981	MSIP Mini-Fair distribution and demonstration of home-activity mathematics materials designed by mathematics consultant teachers

APPENDIX E

FORMS, LEVELS AND DATES OF ADMINISTRATION OF COMPREHENSIVE TESTS OF BASIC SKILLS USED IN EVALUATION OF MATHEMATICS SKILLS IMPROVEMENT PROGRAM

1980-81

Grade	1980 Test Level	Form	Date	Grade	1981 Test Level	Form	Date
3	2	S	April, 1980	4	2	S	May, 1981
4	2	T	April, 1980	5	2	T	April, 1981
5	2	S	March, 1980	6	2	S	March, 1981

APPENDIX F

Mean 1980 and 1981 CTBS Total Mathematics NCE Scores for MSIP and Non-MSIP Students with Regression Analysis and t-Test Statistics

Grade	NON-MSIP STUDENTS								MSIP STUDENTS								
	N	1980 $\bar{x}$ NCE	1980 S.D.	1981 $\bar{x}$ NCE	1981 S.D.	Regression Statistics 1980-1981 r	Slope	y Intercept	N	1980 $\bar{x}$ NCE	1980 S.D.	1981 $\bar{x}$ NCE	1981 S.D.	Expected 1981 $\bar{x}$ NCE	Expected 1981 S.D.	1981 Difference (Expected vs Actual)	t	df
4	3440	59.13	8.62	53.84	15.26	.457	.809	6.01	433	29.72	10.28	36.60	14.93	30.05	7.32	+ 6.55	8.97*	432
5	3272	58.78	9.21	55.68	14.55	.551	.872	4.43	547	27.48	10.09	39.41	14.35	28.39	8.79	+11.02	17.28*	546
6	3132	56.71	8.79	53.58	12.62	.559	.802	8.12	236	27.25	10.29	36.42	11.14	29.96	7.43	+ 6.46	9.46*	235

*2-tail $p < .0001$

NOTE: Students were included in the analysis as part of the MSIP group if they achieved an NCE score of 42 (33rd percentile) or below on the 1980 test and received project services. Students were included in the analysis as the non-MSIP group if they achieved an NCE score above 42 on the 1980 test and did not receive project services. All other students were eliminated from the analysis. In addition, following the recommendations of Title I technical consultants from Educational Testing Service, the students who scored in the top 20% on the 1980 test were arbitrarily eliminated from the analysis to minimize the chances of ceiling effects contributing to non-linearity of the regression line.

APPENDIX G

Inservice Activities Conducted for Staff of Mathematics Skills Improvement Program in 1980-81

Date	Audience	Topic(s)
September 17, 18, 19 (All day)	Public school mathematics consultants	Procedures for record-keeping, student testing and student selection
		Major ingredients of MSIP
		Distribution of instructional materials
September 23 (All day)	Non-public school mathematics consultants	Same as above
October 2 (All day)	Public and non-public school mathematics consultants	Title I regulations as applied to MSIP
	Project STAR teachers	Structure and use of new mathematics textbook
		Student eligibility procedures
October 27 (All day)	First year mathematics consultants	Construction of instructional materials
		Techniques for teaching place value
December 9, 10 (All day)	All mathematics consultants	Diagnosis and correction of mathematics skills deficiencies (Dr. James Heddens, Kent State University)
January 30 (Half day)	All mathematics consultants	Attribute blocks and their use in a mathematics lab
February 26, 27 (All day)	Newly hired mathematics consultants	Procedures for record-keeping, student testing and student selection
		Major ingredients of MSIP
		Distribution of instructional materials
March 30 (All day)	All mathematics consultants	Problem-solving strategies through the use of mathematics games
April 30 (Half day)	All mathematics consultants	Planning and production of materials for MSIP Mini-Fair for parents
May 22 (Half day)	All mathematics consultants	Completing preparations for MSIP Mini-Fair

PROJECT STAR

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1980-1981

PROJECT STAR

1980-81 Title I Evaluation

PURPOSE AND OVERVIEW

Project STAR (Skills Training for Achievement in Reading) offers Grade 4-12 students who are poor readers three types of assistance: (1) Block Classes - Grade 7 public school students attend English and social studies classes scheduled for consecutive 45 minute periods in the same room. A Block teacher and aide assist the regular English and social studies teachers in teaching these classes. Project staff also provide Block students with 45 minutes of daily study skill tutoring; (2) Learning Centers - A project teacher and aide provide public school students in Grades 7-9 with one 45 minute period of daily programmed reading instruction; (3) Nonpublic School Classes - Grade 4-8 students receive one 45 minute period of reading instruction daily. One senior high school provides Grade 10-12 students with reading and study skill instruction.

SERVICE SUMMARY

Pupils Served: 4,123 Grades Served: 4-12 Years in Operation: 15

Schools: 24 public
19 nonpublic
43 total
(See list in Appendix A)

Staffing:

1 Project Manager, FT	4 Consultant Teachers, FT
2 Social Workers, FT	32 Learn. Cent. Teach., FT
22 Block Teachers, FT	18 Nonpublic Teachers, FT
5 Clerks, FT	55 Educational Aides, FT

Total Title I Expenditures: $3,043,090 Per Pupil Cost: $742

SUMMARY OF FINDINGS

All public school groups (Grades 7-9) exceeded the attendance rate of their grade level counterparts, but by less than previous years. The same groups failed to attain project reading objectives in seven of eight comparisons, with data indicating limited or no progress in comprehension and vocabulary for most groups. Block Class students attained the everyday reading skill objective but not the study skills objective. Nonpublic students achieved reading objectives in five of eight comparisons, but all groups failed to do so in mathematics computation. Aides continued to make two or more contacts with the proposed percentage of parents and each school continued to maintain an active PAC. Survey results show that nonpublic staff report difficulty serving students on a "pull-out" basis and that student and parent reaction to project services continues to be generally positive.

A longitudinal study revealed that until two years ago, the project generally achieved its objectives. Organizational and instructional changes in the last two years (modification/elimination of Block Classes and introduction of Learning Centers) have greatly increased the number of pupils served while reducing per pupil costs; however, these changes have been accompanied by declines in achievement and attendance gains. While other factors may be involved, the recent organizational decisions should be re-examined.

OBJECTIVES AND OUTCOMES

NOTE: As a preface to this review of project activities, the reader should be aware of various events which affected project operations during the 1980-81 school year.*

- As requested by the Director of Government Programs of the Catholic Diocese of Cleveland, Project STAR teachers in 12 of the 19 participating nonpublic schools provided their students with mathematics skill reinforcement assistance in addition to reading skill instruction.

- Beginning on February 17, 1981 STAR Block teachers and aides were no longer scheduled into the English and social studies classes of project students to collaborate with the regular teachers in providing classroom instruction. Instead, the Block teacher and aide provided STAR students with one 45-minute period daily of reading and study skills reinforcement instruction scheduled during an elective or study hall period. This change was made at the direction of the Department of Desegregation Implementation to accommodate the installation of a programmed course of study (THINK) in all junior high English classes and the change to a seven period school day.

- At the direction of the Department of Desegregation Implementation, beginning February 16, 1981, STAR aides were no longer to conduct the monthly meeting of the Title I Parent Advisory Committee in their schools. The aides were to continue to set the monthly meeting dates, locate the meeting room, and notify STAR parents of the meeting dates, but the Project Manager of Parent Liaison Services, Department of Desegregation Implementation, assumed sole responsibility for conducting the meetings. STAR aides, however, continued to make periodic parent contacts as prescribed in the 1980-81 project proposal.

- On April 30, 1981 approximately 20 of the 22 STAR Block/Skills Reinforcement teachers received notices of non-reappointment for the 1981-82 school year. Such notices were issued in response to declining enrollment and a predicted budget deficit. Although second semester Block/Skills Reinforcement Class organization was not directly affected by this situation, STAR teacher morale was influenced as demonstrated by an increased rate of absence among staff during the remaining two months of the school year.

Reactions to these events were obtained from project staff and students. A discussion of these reactions appears in the ADDITIONAL FINDINGS section of this report.

The achievement results cited in this evaluation report represent the efforts of those students who were offered a full year (38 weeks) of project instructional assistance. The outcomes have been presented

* On November 5, 1980, the Administrator of Desegregation directed (Dir. No. 41) that administrative supervision of all compensatory education programs including Project STAR be transferred to the Associate Administrator of Educational Services, Department of Desegregation Implementation.

separately for each type of instructional treatment provided to project students' (i.e., Block/Skills Reinforcement, Learning Center, and Nonpublic classes). The achievement of these three groups should not be compared because it is impossible to be certain that eligible students were randomly assigned to treatment group within each participating project school. As a result, systematic sampling biases may be present. Appendix A contains a complete list of participating schools and other information related to the instructional services provided within each school.

Product Objective 1a: Project STAR Block Class and Learning Center participants will evidence a mean gain of at least four NCE's in test score as reflected by pre/post Stanford Diagnostic Reading Test (Brown Level, Form A) scores in (1) auditory vocabulary and (2) total reading comprehension.

Outcomes: Data indicate that Grade 5 and 6 nonpublic school student participants attained the proposed criterion on both subtests. Grade 8 nonpublic school students attained the criterion only on the reading comprehension subtest, while Grade 9 public school Learning Center students achieved the criterion only in auditory vocabulary. Block/Skills Reinforcement (Grade 7), Learning Center (Grades 7 and 8) and Grade 7 nonpublic school participants failed to attain the proposed criterion on either subtest.

Block/Skills Reinforcement Classes - All Block Class participants were administered the Stanford Diagnostic Reading Test (SDRT) during the week of October 20, 1980 and June 1, 1981. The elapsed time between the two test administrations approximated 141 days with a total of approximately 208 hours of actual instructional time being offered to each participant. Table 1 provides the mean pre and post NCE score and the mean NCE gain score for each SDRT subtest administered. (Refer to Appendices B-5 and C-5 for participating Block Class subtest results by school.)

TABLE 1

SDRT Results for Block/Skills Reinforcement Classes

	Auditory Vocabulary				Reading Comprehension			
Gr.	N	$\bar{X}$ pre NCE	$\bar{X}$ Post NCE	$\bar{X}$ NCE Gain	N	$\bar{X}$ Pre NCE	$\bar{X}$ Post NCE	$\bar{X}$ NCE Gain
7 only	249*	31.08	32.04	+ .96	705	27.39	26.89	- .50

* Due to computer programming problems, the analysis was conducted on an approximate 35% random sample of those 705 students for whom both pre and post auditory vocabulary subtest scores were available.

Learning Center Classes - The SDRT was administered on a pre basis to each Learning Center grade-level group during a different time period (i.e., Grade 7 - week of October 20, 1980, Grade 8-week of

October 27, 1980, and Grade 9-week of November 3, 1980). All groups, however, were administered the same test on a post basis during the week of June 1, 1981. The approximate elapsed time between test administrations was as follows: Grade 7-141 days or 106 hours, Grade 9-136 days or 102 hours, and Grade 9-131 days or 98 hours. Table 2 provides the mean pre and post NCE score and the mean NCE gain score for each SDRT subtest administered to Grade 7-9 Learning Center participants. (Refer to Appendices B-6 through B-8 and C-6 through C-8 for participating Learning Center subtest results by school.)

TABLE 2

SDRT Results for Learning Center Classes

	Auditory Vocabulary				Reading Comprehension			
Gr.	N	$\bar{X}$ Pre NCE	$\bar{X}$ Post NCE	$\bar{X}$ NCE Gain	N	$\bar{X}$ Pre NCE	$\bar{X}$ Post NCE	$\bar{X}$ NCE Gain
7	199*	34.61	35.41	+ .80	394	31.75	33.45	+1.70
8	243*	36.44	34.39#	-2.05	661	33.33	31.39#	-1.94
9	118	32.75	37.23#	+4.48	119	30.79	32.47#	+1.68

* Due to computer programming problems, the analysis was conducted on an approximate 50% random sample of the 394 Grade 7 students and an approximate 37% random sample of the 661 Grade 8 students for whom both pre and post auditory vocabulary subtest scores were available.

\# Because spring norms were unavailable for Grades 8 and 9, ninth grade fall norms were used to interpret the post scores at these grade levels.

Nonpublic School Classes - All nonpublic school student participants were administered the SDRT during the week of September 8, 1980 and May 11, 1981. The elapsed time between the two test administrations approximated 155 days with a total of approximately 116 hours of actual instructional time being offered to each participant. Table 3 provides the mean pre and post NCE score and the mean NCE gain score for each SDRT subtest administered. (Refer to Appendices B 1-4 and C 1-4 for nonpublic results by school.)

TABLE 3

SDRT Results for Nonpublic School Classes

	Auditory Vocabulary				Reading Comprehension			
Gr.	N	$\bar{X}$ Pre NCE	$\bar{X}$ Post NCE	$\bar{X}$ NCE Gain	N	$\bar{X}$ Pre NCE	$\bar{X}$ Post NCE	$\bar{X}$ NCE Gain
5	49	39.87	50.40	+10.53	48	26.92	36.33	+ 9.41
6	111	43.25	47.66	+ 4.41	100	34.40	44.61	+10.21
7	115	41.73	44.81	+ 3.08	113	36.91	40.13	+ 3.22
8	156	44.54	47.78*	+ 3.25	156	35.61	40.01*	+ 4.40

* Because spring norms were unavailable for Grade 8, ninth grade fall norms were used to interpret the post scores at this grade level.

Product Objective 2a: Project STAR Block Class participants will evidence a significant increase ($p \leq .05$ in pre/post Everyday Skills Tests mean raw scores in Reading (Test A).

Outcome: Data indicate that Grade 7 Block/Skills Reinforcement Class participants attained the proposed criterion, but that Grade 9-12 nonpublic school participants did not.

The content of the EST Reading subtest reflects the instructional objectives which guide the project's Block social studies/skills reinforcement curriculum and the one nonpublic senior high school skills improvement assistance program. The criterion-referenced test contains 45 items measuring the student's ability to read and comprehend a message communicated by printed material as confronted in everyday life. The subtest was administered to STAR public and nonpublic students during the week of November 10, 1980, and May 25, 1981. The elapsed time between the two test administrations approximated 116 days with a total of approximately 168 hours of actual instructional time being offered to a Block participant (2 periods/day) and a total of approximately 87 hours of actual instructional time being offered to a nonpublic participant. The pre and post gains were analyzed by t-tests for correlated measures. Table 4 provides the mean pre and post raw score, the mean raw score gain, and the t-value for the two participant groups. (Refer to Appendix D-1 for participating school subtest results).

TABLE 4
EST Reading Subtest Results for Block/Skills Reinforcement and Nonpublic Senior High School Classes
(45 total items)

Treatment	Gr.	N	$\bar{X}$ Pre Raw Score	$\bar{X}$ Post Raw Score	$\bar{X}$ Raw Score Gain	t-value
Block	7	708	25.48	28.98	+3.50	10.54*
Nonpublic	9-12	28	34.82	35.96	+1.14	1.56

* $p < .05$, two-tailed probability

NOTE: Although the Block Classes' mean raw score gain attained statistical significance ($p < .05$), the educational significance of this change is unknown because of the unavailability of norm group data.

Product Objective 2b: Project STAR Block Class participants will evidence a mean gain of at least four NCE's in test score as reflected by pre/post Everyday Skills Test scores in Study Skills (Test B).

Outcome: The objective was not attained.

The EST Study Skills subtest first appeared as part of the Comprehensive Test of Basic Skills, Form R, Level 3. It has two timed

parts: (1) Using Reference Materials; and (2) Using Graphic Materials. The 20 items of Using Reference Materials measure the student's ability to use library materials. The 30 items in Using Graphic Materials emphasize the understanding and use of legends and symbols, drawing conclusions, and extending interpretation beyond the data of a source map, diagram, table, etc. The subtest was administered to STAR public school participants only during the week of November 17, 1980 and June 1, 1981. The elapsed time between the two test administrations approximated 121 days with a total of approximately 171 hours of actual instructional time being offered. The one nonpublic senior high school (Cleveland Central Catholic) participating in skills reinforcement activities was not included in the analysis due to the unavailability of appropriate grade level norms. Table 5 provides the mean pre and post NCE score and the mean NCE gain score for the Block Class group. (Refer to Appendix D-2 for Block Class results by schools.)

TABLE 5
EST Study Skills Subtest Results for Block/Skills Reinforcement Classes

Treatment	Gr.	N	$\bar{X}$ Pre NCE Score	$\bar{X}$ Post NCE Score	$\bar{X}$ NCE Gain
Block	7	668	21.80	22.81	+1.01

Product Objective 3a: Project STAR Block Class and Learning Center participants will attain an average 1980-81 attendance rate equal to or better than the average attendance rate for all 7th, 8th, and 9th grade pupils within the participating schools.

Outcome: Data indicate that the objective was attained by all Block Class and Learning Center treatment groups.

An approximate one month delay occurred in the 1980-81 opening of the Cleveland Public Schools for reasons associated with the implementation of Phase III of the system's desegregation plan. The school year for students officially began on September 29, 1980, and closed on June 30, 1981. The school year progressed without experiencing any major interruptions (except for traditional vacation time) for a total of 180 actual instructional days.

Table 6 presents both STAR and non-STAR student 1980-81 school attendance rates by grade and treatment group as well as the difference in rates between the two groups. Nonpublic school attendance comparisons could not be made due to the unavailability of data for nonproject students in these schools. (Refer to Appendix F for public school attendance results by school.)

TABLE 6

Comparison of STAR and NonSTAR Attendance Rates for 1980-81

Treatment	Gr.	N	STAR Att. Rate	Nonproject Att. Rate	(STAR minus NonSTAR)
Block	7	1161	79.33%	78.37%	+ .96%
Learn. Cen.	7	667	79.17%	78.37%	+ .80%
Learn. Cen.	8	1028	79.03%	76.77%	+2.26%
Learn. Cen.	9	225	76.78%	74.03%	+2.75%

Special Nonpublic School Product Objective: Nonpublic Project STAR participants receiving mathematics skill reinforcemnt instruction will evidence a mean gain of at least four NCE's in test score as reflected by pre/post CTBS (Form Q, Level 3 or Form T, Level 3) scores in mathematics computation.

Outcome: Data indicate that the proposed criterion was attained at Grade 7 but not at Grade 5, 6 and 8.

As noted, 12 of the 18 nonpublic participating schools elected to provide their STAR eligible students with both reading and mathematics computation reinforcement instruction. The Comprehensive Test of Basic Skills, Mathematics Computation subtest was administered to nonpublic students on a pre basis during the week of October 13, 1980 and a post basis during May, 1981. Grade 5 and 6 students' were tested using CTBS Form Q, Level 2 and Grade 7 and 8 received Form T, Level 3. The elapsed time between the two test administrations approximated 126 days with a total of approximately 92 hours of actual instructional time being offered to each participant. Table 7 provides the mean pre and post NCE score and the mean NCE gain score for each participating nonpublic grade level group. (Refer to Appendix E for nonpublic subtest results by school.)

TABLE 7

CTBS Mathematics Computation Results for Participating Nonpublic School Classes

Gr.	N	$\bar{X}$ Pre NCE	$\bar{X}$ Post NCE	$\bar{X}$ NCE Gain
5	17	41.17	40.64	- .53
6	48	39.68	38.50	-1.18
7	67	43.87	47.95	+4.08
8	73	44.94	47.16	+2.22

Process Objective 1a: The educational aide will complete a minimum of two home contacts with the parent or guardian of 80 percent of the STAR Block Class and Learning Center participants.

Outcome: Data indicate that process objective 1a was attained by project's educational aides. A review of aides' parent involvement records reveals that two or more home contacts were made with the parents or guardians of 83% of the public school participants who were enrolled in the Block and Learning Center Classes (i.e., 2,874 of the 3,463 students' parents).

The type of contact reported by the public school educational aides included home visits, phone calls, school conferences, or classroom visits made with the parents. Such contacts were primarily initiated by project staff in an effort to familiarize parents with the program's instructional rationale and the progress of their child's skill development. Also, parents oftentimes would be provided with suggestions in how to encourage and assist their child to improve his/her reading skills. Reported contacts did not include parent attendance at Parent Advisory Committee (PAC) meetings. As stated previously, PAC meeting activities were placed under the jurisdiction of the Department of Desegregation Implementation. Due to the absence of aides in 17 of the 18 nonpublic project schools, home contact efforts were not pursued on a systematic basis in these schools.

Process Objective 1b: Each ESEA Title I Project STAR junior high school will have a Parent Advisory Committee.

Outcome: A review of educational aides' parent involvement data indicated that objective 1b was attained.

As previously discussed, STAR aides assumed responsibility for organizing and conducting monthly PAC meetings within their respective schools until January 22, 1981. After this date, STAR aides assumed responsibility only for notifying parents of subsequent meeting dates and locations, while Department of Desegregation Implementation personnel developed the agenda and conducted the actual meetings. Although nonpublic schools were not required to establish their own Committees, they were encouraged to send representative parents to their local district school and city-wide Committee meetings.

ADDITIONAL FINDINGS

Achievement Test Percentile Scores - The request is frequently made to relate project achievement to the national norm group. Such a comparison can be made through the use of a percentile rank. A percentile rank for a given test score indicates the percent of pupils at a particular grade placement in the national norm group who received scores equal to or lower than the given score. Table 8 and Table 9 present the percentile rank of the mean pre/post NCE scores attained by the project's three treatment groups

on the various standized test instruments used during the 1980-81 funding year.

TABLE 8

Block/Skills Reinforcement and Learning Center Classes Percentile Rank Results

Grade	Test/Subtest	Pre Test %-ile	Post Test %-ile
7	SDRT Aud. Vocabulary	18	19
Bl/Sk	SDRT Read. Comprehension	14	13
Reinf.	EST Study Skills	9	10
7	SDRT Aud. Vocabulary	23	24
Lrng. Ctr.	SDRT Read. Comprehension	18	21
8	SDRT Aud. Vocabulary	25	23
Lrng. Ctr.	SDRT Read. Comprehension	21	18
9	SDRT Aud. Vocabulary	20	27
Lrng. Ctr.	SDRT Read. Comprehension	17	20

As shown in Table 8, all Block and Learning Center student achievement fell below the 33rd percentile on both the pre test and post test. Furthermore, with the possible exception of the Grade 9 Learning Center vocabulary results, the public school treatment groups demonstrated limited or no post percentile score improvement in relation to the national norm group within any subtest area.

A review of nonpublic school results indicated that the majority of Grade 5-8 post achievement scores approached or exceeded the 33rd percentile on each subtest administered. The only exceptions include the Grade 5 reading comprehension and Grade 6 mathematics computation subtest areas. Grade 5 and 6 students were the only nonpublic school groups to demonstrate no post percentile score improvement in relation to the national norm group occurred in the mathematics computation subtest area). (Refer to Table 9 appearing on the following page of this report).

Longitudinal Overview of Achievement Test Results and Attendance*

In previous STAR evaluation reports, it has been the practice to present a comparative summary of public school project achievement results over a period of three or more years. This summary has been introduced to provide an indication of the consistency of project treatment effectiveness in the public schools. When examining a summary of this type it is important to note that, although many key variables may remain relatively constant over the period of

*Nonpublic achievement and attendance data have not been included in the longitudinal overview discussion.

TABLE 9

Nonpublic School Classes Percentile Rank Results

Grade	Test/Subtest	Pre Test %-ile	Post Test %-ile
5	SDRT Aud. Vocabulary	30	50
	SDRT Read. Comprehension	13	25
	CTBS Math. Computation	33	32
6	SDRT Aud. Vocabulary	37	45
	SDRT Read. Comprehension	22	38
	CTBS Math. Computation	30	29
7	SDRT Aud. Vocabulary	34	39
	SDRT Read. Comprehension	26	31
	CTBS Math. Computation	37	45
8	SDRT Aud. Vocabulary	39	45
	SDRT Read. Comprehension	24	31
	CTBS Math. Computation	39	44

years under review, changes in the project's instructional organization or other unforseen circumstances may have a profound impact upon participating students' progress.

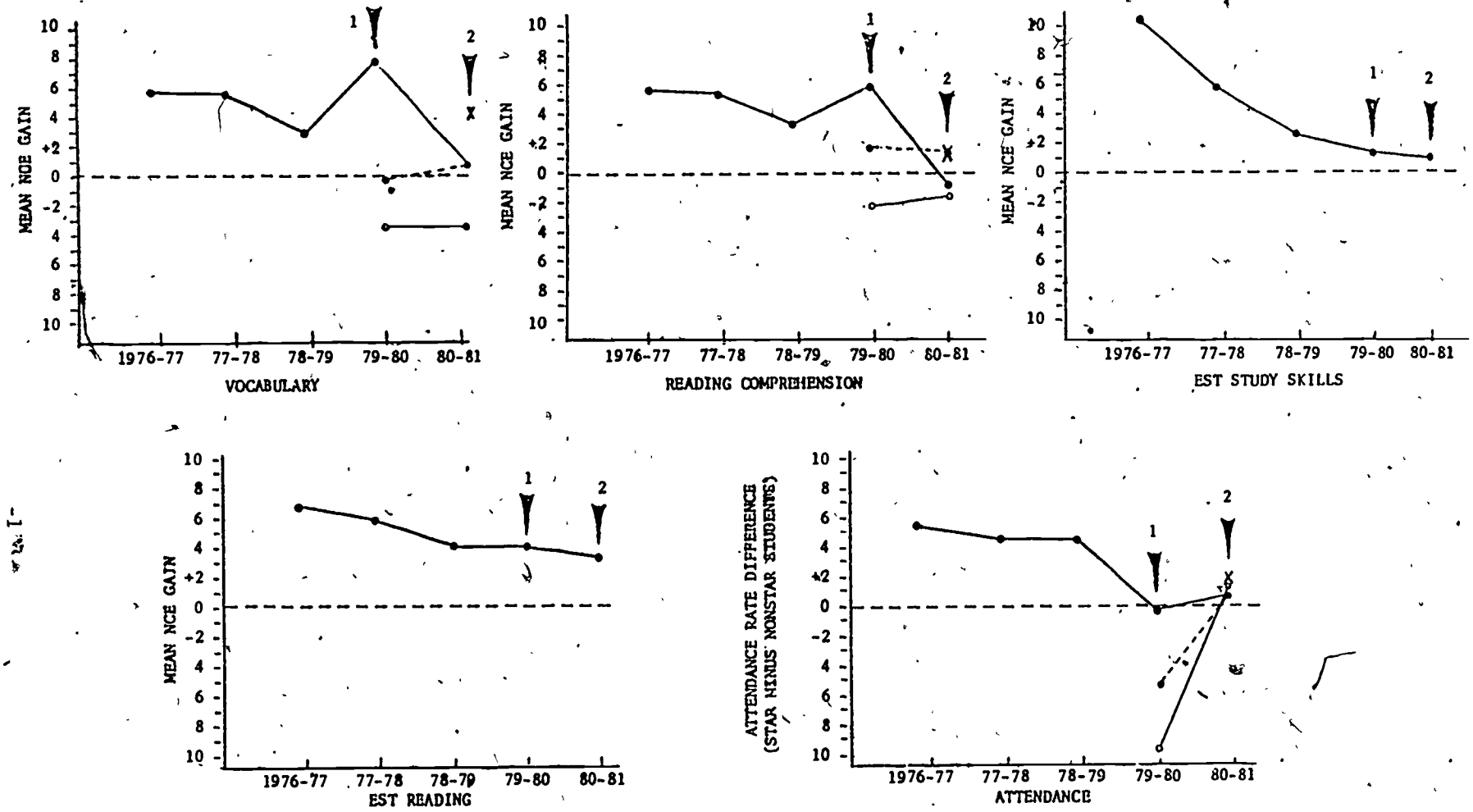
When reviewing STAR public school outcomes over a period of five years (i.e., 1976-77 through the 1980-81 school years), a number of constants can be identified. These constants include: eligibility requirements for student participation, continuous participation of Grade 7 students, project treatment focus on reading and study skills, utilization of the same test instrument to measure functional reading/study skill progress, and acquisition of student vocabulary and reading comprehension achievement data. The major changes that have occurred in STAR organization took place in 1979-80 and 1980-81. In both years changes involved the amount of instructional time project personnel offered students and the degree of continuity in the supervision of project students' daily school activity.

The pattern of changes in achievement and attendance results in Project STAR over the past five years is graphically illustrated in Figure 1 on page 11 of this report. The following review will discuss these changes in relation to the changes that have occurred in project organization and procedures. It should be recognized that because the evaluation design was not structured specifically to investigate these relationships, the conclusions that are drawn are very tentative. Despite its limitations, however, such an analysis can serve to raise questions which warrant further investigation.

Until 1979-80, Project STAR was intended to help selected Grade 7 students cope with the transition from elementary to junior high school by providing them with an educational setting midway between the self-contained classroom of the elementary school and the departmentalized organization of the junior high. Students remained in the same room with their STAR teacher (who was their homeroom teacher) and an aide for a three-period block of time

FIGURE 1

Overview of Achievement Test and Attendance Results for School Years 1976-77 through 1980-81



KEY

- Grade 7 Block/Skills Reinforcement Classes
- Grade 7 Learning Center Classes
- Grade 8 Learning Center Classes
- X Grade 9 Learning Center Classes

* Major Change in Block/Skills Reinforcement Class Instructional Treatment

1 1979-80 Both reading/English and social studies/skills reinforcement classes increase from one to two periods. Team Leader and aide assists students a total of five periods per day.

2 1980-81 During the first semester, both reading/English and social studies/skills reinforcement classes reduced from two to one period each. During the second semester, the Team Leader and aide provide a total of only one period of reading/skills reinforcement assistance daily.

each day during which they received instruction in English/reading, social studies, and mathematics. During the mathemetics period, the STAR teacher was assisted by a certificated mathematics teacher. Students also received a fourth period of instruction in study skills from their STAR teacher later in the day. As a result of this organizational plan, the typical STAR student's daily school activity was primarily supervised by one STAR teacher and aide, a plan designed to lend continuity to the supervision of the student's school activities. A typical daily schedule of project activities of a participating STAR Block student prior to 1979-80 is illustrated in Figure 2.

FIGURE 2

STAR Block Class Organization (1976-77 Through 1978-79)

PERIOD →		1	2	3	4	5	6	7	8	9
SUBJECT →	HOMEROOM	ENGLISH/ READING	SOCIAL STUDIES	MATHEMATICS		STUDY SKILLS				
PRIMARY TEACHER →	STAR Teacher A					STAR Teacher A				
ASSISTING TEACHER →				Math Teacher						

An indication of the progress students made while participating in the 1976-79 organizational structure can be obtained by referring to Figure appearing on page 10. Upon reviewing the graphs, the reader will note that achievement and attendance progress of Block students during 1976-77 through 1978-79 declined slightly in most achievement subtest areas as well as in attendance. The only exception to this pattern occurred in the EST Study Skills area were a sharper decline in mean NCE gain score took place. Despite these declines, however, achievement and attendance gains exceeded or approximated the proposed objective criteria. Student reading progress during these years was measured using the Comprehensive Test of Basic Skills, Form T or S, Level 3. (Refer to Appendix G for complete mean pre and post test score data, attendance rates, and STAR treatment descriptions.)

For 1979-80 changes were made in the program which increased the amount of reading instruction, but which also decreased the continuity of staff supervision of the student's school activity by breaking the instructional day into blocks taught by different teachers. Mathematics was discontinued as a project emphasis.

Students were scheduled into a double period of English/reading and a double period of social studies/study skills instruction. The two double periods took place in different rooms and generally at different times during the day. While attending the double English/reading period, students were instructed by a STAR English teacher and an aide; however, students were "pulled out" on a staggered basis for one period of reading instruction in a separate Learning Center staffed by another STAR teacher and aide for a total of 90 days each during the year. While attending the double social studies/study skills period, students were instructed by a third STAR teacher and aide for one period of social studies and one period of study skills. During the social studies period, the STAR teacher was assisted by a non-project social studies teacher. Later in the day, students attended a "vocational skills reinforcement class," which was

a home economics or industrial arts class taught by a non-project teacher assisted by one of the student's STAR teachers and aides. Either the STAR English teacher or the STAR social studies teacher also served as the student's homeroom teacher. Figure 3 shows a typical daily schedule for a STAR Block student in 1979-80.

FIGURE 3

1979-80 STAR Block Class Organization

PERIOD →		1	2	3	4	5	6	7	8	9
SUBJECT →	HOMEROOM	ENGLISH	READING		SOCIAL STUDIES	STUDY SKILLS			VOC. SKILLS REINF.	
PRIMARY TEACHER →	STAR Teacher A	→	STAR Teacher B (90 days/yr)		STAR Teacher C	→			Vocational Education Teacher	
ASSISTING TEACHER →					Social Studies Teacher				STAR Teacher A or C	

Also in 1979-80 a separate Learning Center program was established for students in Grades 7, 8 and 9 who did not participate in the Block Class. These students attended one period daily of programed reading instruction in a Learning Center staffed by STAR teacher and aide.

By referring to Figure 1, the reader will note that accompanying the 1979-80 increase in time devoted to reading instruction, a substantial mean NCE gain score increase occurred in the reading subtest areas (i.e., vocabulary and reading comprehension). The gains recorded in these areas exceeded the proposed objective criteria. (It should, however, also be noted that at the beginning of this school year the CTBS test instrument was replaced by the Stanford Diagnostic Reading Test, Brown Level, Form A.) The gain score recorded in the EST study skills area continued to decline, while the EST reading score closely approximated the previous year's outcome. The time, however, devoted to social studies/skills reinforcement instruction failed to increase as dramatically as in reading. Also, it should be noted that accompanying the decrease of continuity in student supervision, a sharp decline was demonstrated in the students' attendance rate.* Finally, the 1979-80 school year witnessed the initial opening of the project's Learning Centers. Grade 7 and 8 Center participants, however, demonstrated limited or no progress in reading as evidenced by their gain scores. Learning Center participant attendance rates were also dramatically less in comparison to non-project students in the same grades. (Refer to Appendix C for complete mean pre and post test score data, attendance rates and STAR treatment descriptions.)

For 1980-81 further changes were made which decreased the amount of reading instruction and further reduced the amount of direct supervision of students by the STAR staff. STAR teachers, for example, no longer served as homeroom teachers for STAR students. Grade 7 Block students were taught one period each of English and social studies by non-project teachers assisted by a STAR teacher and aide. These classes were scheduled consecutively in the same room. Students continued to receive one period per day of study skills instruction from the STAR teacher and aide, but maximun class size was increased from 25 to 30 students. Learning Center students, who did not participate

* Attendance rates also may have been influenced by the massive reassignment of students called for in Phase II desegregation implementation plan which was initiated on March 17, 1980, in all junior high schools.

in the modified block schedule, received one period daily of programmed reading instruction in a Learning Center staffed by a STAR teacher and aide for the entire year.

Effective the second semester of 1980-81 further changes were made. STAR teachers and aides no longer assisted the non-project English and social studies teachers in providing instruction in those subjects to STAR Block students. STAR teachers and aides continued to provide one period daily of study skill instruction to STAR Block students. Figure 4 illustrates the typical daily schedule of activities for a Block Class participant during each semester of the 1980-81 school year.

FIGURE 4

1980-81 STAR Block Class Organization

Semester 1

PERIOD →		1	2	3	4	5	6	7
SUBJECT →		ENGLISH	SOCIAL STUDIES			STUDY SKILLS		
PRIMARY TEACHER →		English Teacher	Social Studies Teacher			STAR Teacher A		
ASSISTING TEACHER →		STAR Teacher A →						

Semester 2

PERIOD →		1	2	3	4	5	6	7
SUBJECT →						STUDY SKILLS		
PRIMARY TEACHER →						STAR Teacher A		
ASSISTING TEACHER →								

By referring to Figure 1, the reader will note that accompanying the substantial decrease in time devoted to Block Class reading instruction during the 1980-81 school year, a drastic decline in gain scores occurred in both reading subtest areas. Block students demonstrated limited progress in the vocabulary subtest area and no progress in the reading comprehension area. Also, EST subtest gain scores continued to decline.

The reader should be reminded that the April 30, 1981, issuance of lay-off notices for the following year to most Block teachers may also have influenced student performance.

Despite the fact that by the end of the first semester the Block teacher supervised the activity of their STAR students for one period per day only, Block participants did evidence a slight improvement in their school attendance rate relative to their Grade 7 student counterparts.

Although Grade 7 and 8 Learning Center participants were unaffected by the organizational changes encountered by their Block Class counterparts, the two groups continued to demonstrate limited or no progress in reading as evidenced by their gain scores. Both groups' attendance rates, however, evidenced a dramatic improvement relative to their grade-level student counterparts. (Refer to Appendix G for complete mean pre and post test score data, attendance rates, and STAR treatment descriptions.)

To summarize, the longitudinal analysis indicated that as major changes were made in the project's organization, changes were noted in student achievement and attendance. With an increase in the amount of reading instructional time in Block Classes, students' reading achievement appeared to improve. Conversely, as reading instructional time in these classes was reduced, achievement appeared to decline. The introduction of a new instructional approach (Learning Centers), which is apparently designed to replace the Block Class approach, has produced little improvement in student achievement. Additionally, STAR student attendance rates traditionally exceeded that of all students during the time when project teachers assumed responsibility of supervising the activity of not more than 25 students from homeroom through the major portion of the remaining school day. With the fragmentation in the STAR Class schedule and in the teacher's inability to provide continuity during the students' school day, attendance rates of project students began to resemble those attained by their grade level counterparts. Although it is possible that variables other than the organizational and instructional changes of the past two years have contributed to the changes in achievement and attendance (teacher lay-offs, start of busing, etc.) the relationships which appeared to surface in this analysis warrant the close attention of project management.

Project Cost Comparison From 1976-77 Through 1980-81 - During the same period covered by the longitudinal analysis of achievement and attendance, the project demonstrated a rapid increase in the number of pupils served and a decrease in the per pupil cost of delivering project services. Figure 5 on the following page shows for the past five years of operation the pattern of changes in both these variables.

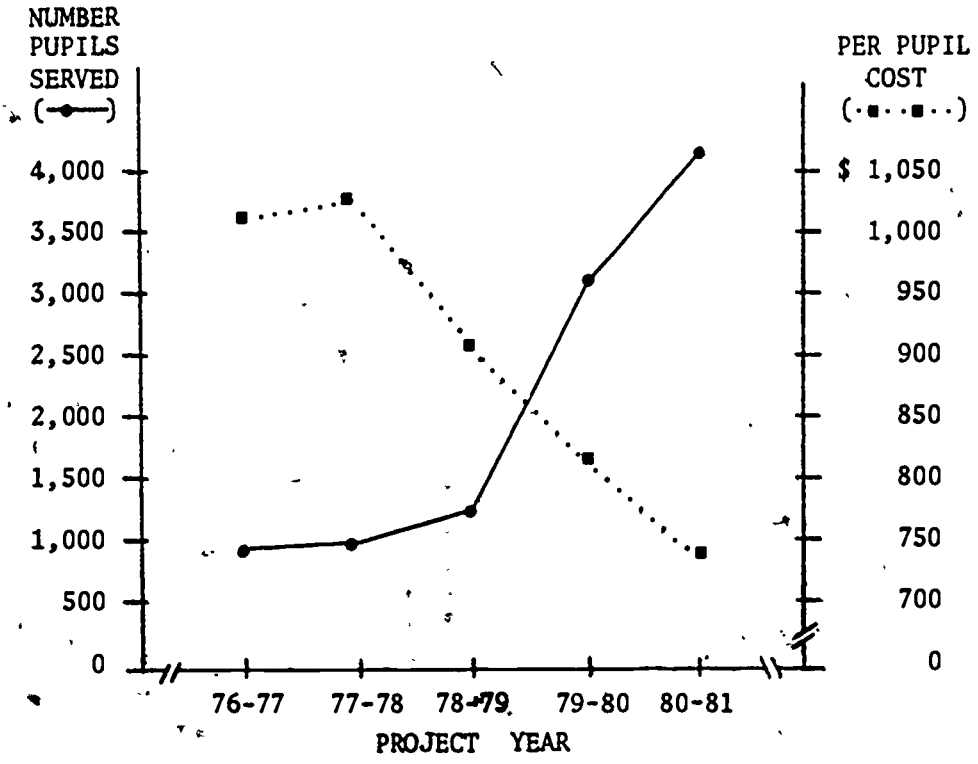
The figure shows that, accompanying the organizational changes that were made in the project, the number of pupils served increased over four-fold and the per pupil cost was reduced by over 25%. Appendix H presents the number of pupils served, the total project expenditures and the per pupil cost for each of the years 1976-77 through 1980-81.

Survey of Public School STAR Staff, Parents, and Students* - Efforts were made to ascertain how various groups viewed their involvement in 1980-81 project activities. To accomplish this, a variety of specific questionnaires were developed to obtain the perceptions of those who had direct contact with

* Refer to Appendix I for further details regarding survey findings.

FIGURE 5

Pupils Served and Per Pupil Cost in Project STAR
from 1976-77 through 1980-81



project services. Those questionnaires were distributed to project staff, students and parents in June of 1981. The following highlights the major findings obtained from the responses of 16 Block Team Leaders, 26 Learning Center teachers, 40 educational aides, 503 parents, 248 Block students, and 338 Learning Center students.

- A majority of the 42 responding STAR Block and Learning Center teachers (64%) indicated that they "encountered difficulty scheduling students" into their project classes at the beginning of the school year. This finding represents a slight increase from the previous year when 57% of the teachers responded to the same question in a similar manner. Both Block and Learning Center teachers appeared to be equally affected by the problem. Respondents continued to report having to locate eligible students who had study hall assignments or elective class periods and re-schedule this time for participation in project activities. This disruption continues to prevail because STAR classes are not programmed into the master school schedule prior to the beginning of the school year. These scheduling problems appear to have an extremely detrimental effect on participant student attitudes. Most teachers report that students strongly object to being removed from their previously scheduled elective classes. This resentment reportedly lingers for several weeks among many students making it difficult for staff to obtain their cooperation.

- When Block teachers were asked what effect the second semester organizational change had on the quality of instructional assistance that could be provided to their students (i.e., changing from Block to Skill Reinforcement classes), a majority (or 62%) of the 16 respondents indicated a "very positive" or "positive" rating, 6 percent reported that the change had "no effect," and 19 percent failed to respond to the question.

- When responding, teachers who indicated a positive rating appeared to consider the question in terms of their ability to plan instructional activities that addressed the unique needs of each student. Most reported that acting as instructional assistants in the students' regular English and social studies classes during the first semester afforded them little time to develop individual instructional prescriptions for students. During the second semester, their total instructional time was spent performing project duties designed to meet the individual needs of their students. The Block teacher respondent indicating a negative rating tended to comment that the second semester change lacked organization and clear operational objectives.

- Sixteen (or 61%) of the 26 responding Learning Center teachers indicated that "the amount of time students were required to attend the Center (i.e., 45 minutes daily during the entire school year) was "about right". A substantial number of the remaining respondents (8 individuals, or 35%) indicated "much too much time" or "a little too much time" was being scheduled. When asked to explain their rating, this latter group of respondents reported that their students tended to tire of the fab format after the first semester. They attributed this reaction to the lack of variety in the labs' teaching materials and format. One individual reported supplementing lab instruction with activities outside the regular format as well as making attempts to find ways to introduce more relevance to the students' lab work and school assignments. The use of such approaches reportedly helped to maintain Learning Center student interest throughout the year.

- A variety of comments was obtained from the responding project teachers (N=42) when asked for their suggestions regarding how project services can be improved. The following suggestions were among those cited most frequently: relate project instruction more specifically to students' classroom subjects; re-establish project efforts aimed at obtaining the active involvement and interest of parents; insure that Project STAR is incorporated within the master school schedule; motivate student learning by awarding grades which would appear on student report cards; and increase ability of project staff to work with their students during a greater portion of the school day (e.g., restore STAR homerooms, utilize more block scheduling, establish working relationships with guidance counselors).

- Responding educational aides (N=40) appeared to reiterate many of the same concerns held by their project teacher colleagues when asked to indicate "the greatest problem" they have encountered in their duties.

Approximately one out of every four respondents indicated not being able to obtain the involvement of project parents. Suggested ways of improving parental interest included resuming the responsibility of conducting home visits (as opposed to making only home contacts); sponsoring a program at the end of each semester to discuss the progress made by students; re-establishing the project's direct relationship with the Parent Advisory Committee (PAC); and requesting greater involvement of the Desegregation Community Coordinator in all PAC meetings. The second most frequently cited problem encountered involved the lack of student interest or motivation in learning (Approximately 20% of the aides cited this problem.) Recommended actions to deal with this problem included: assigning a STAR grade on the student's report card; obtaining more interesting instructional material; providing greater variety in the instructional format of the Learning Center.

- An overwhelming majority (81%) of the 503 responding parents indicated that they felt their child was doing "much better" or "somewhat better" in reading this year in comparison to the previous year. Of the remaining respondents, 17 percent indicated that their child was doing "about the same" and 2 percent responded "somewhat worse" or "worse." Most respondents believed that their child was "very satisfied" or "more or less satisfied" with the STAR class during the first semester (i.e., 78% responding in this manner) as well as the second semester (i.e., 82% responding in this manner). Those responding "undecided" changed little for each semester (i.e., 14% and 11%, respectively) as did those who indicated "more or less satisfied" and "very dissatisfied" (i.e., 7% and 5%, respectively).

- Block/Skills Reinforcement student respondents (N=248) appeared to be less positive about their involvement in the project than did their Learning Center counterparts (N=338). When asked, for example, whether being in the STAR class "helped me do better in my regular classes," a "strongly agree" or "agree more than disagree" response was recorded by 60 percent of the Block students versus 70 percent of the Center respondents. A similar breakdown in response was indicated when students were asked whether the STAR teacher did a "good job in teaching me how to read" (72% vs. 82%) and whether they were "reading better this year than last" (79% vs. 82%). This same response pattern appeared to be operating when respondents were asked if they were "glad to be in a STAR class." A smaller percentage of both groups, however, indicated a positive response to the question (44% vs. 59%). The remaining respondents in the two groups indicated a "not sure" response (23% vs. 17%) or negative response (32% vs. 23%) to the latter question.

Survey of Nonpublic School STAR Staff, Parents, and Students*

- A majority of STAR nonpublic school teacher respondents (i.e., 53%, or 8 of the 15 respondents) reported encountering difficulty scheduling students into their project classes. When, asked to describe the difficulties, the most common response related to the "pull-out" procedure implemented in all nonpublic schools. This procedure entailed removing eligible STAR students from their regular classroom assignments and providing small groups of these students with reading and/or mathematics instructional support. STAR teachers who encountered scheduling difficulties were oftentimes confronted with the resentment of

* Refer to Appendix I for further details regarding survey findings.

regular classroom teachers who viewed project assistance as an interruption in the students' regular classwork. This resentment was especially evident in schools where the same students were assigned to more than one Title I project. In one school, a teacher respondent indicated that STAR participants resented being selected to receive project services because they were made to "make-up" material that they missed during their regular class assignments.

- Three out of every four nonpublic teachers (11 of 15) cited either the variety of project reading materials or the opportunity to individualize student instruction as being the single feature of the project which has contributed most to improving student learning. The most common response made by teachers when asked to identify the factor contributing least to student learning related to the negative impact the "pull-out" procedure has on students. Typical comments related to this particular finding included: a poor student had to miss his regular class too often when receiving project assistance; students resented missing art and movies when attending a STAR class; and teachers used the fact that students are missing regular classes to award failing grades. This factor may also have contributed to teachers' reporting that many of their students lacked interest and motivation.

- As did their public school counterparts, nonpublic school parent respondents (N=229) appeared to possess extremely positive perceptions of Project STAR services. An overwhelming majority of the respondents (88%), for example, felt that their child was doing "much better" or "somewhat better" in reading this year than last year. Of the remaining respondents, 8 percent indicated an "about the same" rating, 1 percent a "somewhat worse" rating, and 3 percent failed to respond to the question. A slightly smaller percentage of parents (83%) indicated that the STAR class was doing a "very good" or "good" job in educating my child. A "fair" job rating was reported by 14 percent of the respondents, "poor job" by 2 percent, and 1 percent failed to respond.

- Nonpublic students responding to a survey questionnaire (N=456) appeared to reiterate the positive perceptions indicated by their parents with respect to project services. When asked, for example, if they believed that they were "reading better this year than last year," an overwhelming majority "strongly agreed" or "agreed more than disagreed." Remaining respondents indicated either a "disagree more than agree" or "strongly disagree" response (4%), a "not sure" response (11%) or failed to respond (1%). A similar response pattern was demonstrated when students were asked if they were "glad to be in a STAR class." A majority of students (70%) indicated a "strongly agree" or "agree more than disagree" response, 18 percent indicated a "strongly disagree" or "disagree more than agree" response 11 percent indicated a "not sure" response, and 1 percent failed to respond to the question.

CONCLUSIONS

A summary analysis of 1980-81 Project STAR results revealed the following outcomes. After a one-year setback all STAR groups again exceeded the attendance rate of their grade-level counterparts, but such rate differences were lower than previous years. Unlike most of the previous years, STAR student groups failed to demonstrate attainment of the proposed reading objective

criterion (except Grade 9 Learning Center students in vocabulary), with 1980-81 achievement data indicating limited or no progress in Comprehension and Vocabulary for most groups. Block Class students continued to attain the proposed EST Reading subtest criterion but failed to do so on the EST Study Skills subtest, which continued a pattern of decline observed over the past five years. Nonpublic student groups achieved the proposed criterion level on reading subtest objectives in five out of the eight comparisions, but all groups failed to do so in the mathematics computational area. Educational aides continued to make two or more contacts with the proposed percentage of parents specified in the proposal, while each school continued to maintain an active PAC throughout the school year.

Additional analyses presented in this report revealed a number of other outcomes. Included among these were the following. When 1980-81 student achievement results are compared with national norm groups, STAR public school students demonstrated extremely limited progress, while nonpublic school students generally demonstrated more substantial progress in reading, but limited progress in mathematics. Longitudinal findings raised the possibility that the organizational and instructional changes made during the last two years may have been among the factors contributing to the decline in achievement and attendance results. A five year comparison of project costs revealed that the project demonstrated a rapid increase in the number of pupils served and a decrease in the per pupil cost of delivering project services. Public school staff questionnaire results indicate a general dissatisfaction with the discontinuation of many aspects of the project's former organization. Nonpublic staff continue to find it difficult to serve students on a "pull-out" basis. Student and parent reaction to project instruction continues to be generally positive, although Block students appeared to be less positive than their Learning Center counterparts.

Based on an extensive review of current (1980-81) as well as past years (1976-80) project-related data, this evaluator provides the following recommendations for consideration when making future operational planning decisions.

- The previous STAR evaluation report (1979-80) prepared by this evaluator indicated that school administrators were contemplating the elimination of the Block Class format and replacing it with the Learning Center organization during 1981-82. This evaluator cautioned those making such decisions that nothing in the available data indicated that such Centers do a better job in promoting reading skill development and that, in fact, the available data suggested the reverse. The recommendation ended with the suggestion that permanent changes in STAR organization should be thoroughly reviewed. Those recommendations still stand. As noted in this report (1980-81), Block Class organization was virtually eliminated in February of 1981. Although many variables may have contributed to the general decline in student achievement and attendance outcomes, a review of longitudinal data suggests that project organization and instruction changes made in the past two years could be involved. If the project intends to remain a viable instructional entity, it is imperative that program management re-examine these changes to determine if they aid or hinder student achievement.

- The analysis of project costs presented in this report indicated that a steady increase in the number of students served by the project has occurred over a five year period, while the amount of project funds spent per pupil has declined. Although it is important to impact as many eligible students as possible with project services, spreading monetary resources too thinly may contribute to weakening instructional effectiveness. It is essential that future decisions regarding the number of pupils that the project should serve be examined with respect to providing the optimum level of instructional effectiveness.

- A number of Learning Center teachers (8 of 27, or 30%) responding to a questionnaire indicated that students generally appeared to "tire" or "get bored" with the Centers' instructional approach after the completion of the first semester. One teacher attributed this behavior to the fact that "there wasn't enough variety in the program, while another found it "necessary to do more activities outside the New Century program." The latter respondent indicated that providing "more relevance to other school work helps the students understand the significance of the lab work." In an effort to provide an environment which encourages students to perform at their maximum potential, program management should further investigate the basis of the above observations. A study designed to ascertain the optimum period of time a student should participate in the Learning Center may also provide information that can be used to increase the potential impact of Center services.

- As reported in past project evaluations, numerous public school STAR staff continue to recommend that the scheduling of project students be accomplished prior to the start of the each school year to insure that participants receive the maximum amount of instructional services. Many teacher respondents indicate that students resent being taken from scheduled classes to attend project classes. This resentment tends to produce uncooperative learning behaviors in students. Previous evaluation recommendations have urged that an automated scheduling procedure be introduced. This evaluator is aware that the project manager has diligently pursued accomplishing this goal for a number of years, but has been unsuccessful in obtaining programming status for the project. It is once again urged that such scheduling procedures be developed prior to the start of the 1981-82 school year.

- A number of public school staff (both teachers and aides) have provided unsolicited comments on their questionnaire surveys regarding the noticeable lack of parent involvement in the STAR project. As noted previously in this report, aides were no longer responsible for conducting monthly PAC meetings in their buildings due to the fact that Parent Liaison Services assumed responsibility in February of 1981. In addition, at the end of the 1977-78 school year, project management terminated the practice of requiring aides to conduct home visitations. Although supportive data

is unavailable, the loss of activities that brought parents and project personnel together on a number of occasions throughout the school year may have been one more factor contributing to the noted decline in student achievement. Program management, in cooperation with the project manager of Parent Liaison Services, should explore alternatives that will restore the close contact Project STAR personnel previously had with parents.

A review of nonpublic school staff questionnaire responses reveals that the "pull-out" procedure utilized to service project students may create friction with teaching colleagues. Furthermore, it is reported that students are oftentimes penalized for missing regular classwork as a result of having to participate in Project STAR activities. In efforts to insure the optimum cooperation of the entire school staff and obtain the interest of student participants, it is recommended that program management investigate possible alternatives to minimize such disruptions.

APPENDIX A

A Listing of 1980-81 Participating Public and Nonpublic STAR Schools and Information Related to Instructional Services

APPENDIX A-1

PROJECT STAR DEMOGRAPHICS
1980-81

Participating Public Schools and
No. of Components Within Schools

Component	Block Classes	Learning Center A New Century Read	Learning Center C Hoffman Learn. Cent.	Learning Center B Educ. Dev. Lab
Grade Partic.	7th Only	7th - 9th	7th - 9th	7th - 9th
A. B. Hart	1	1		
A. Hamilton	1		1	
Audubon	1	1	1	
Central	1	1	1	
C. Shuler	1		1	
C. Mooney	1		1	
C. Elliot	1		1	
C. Westropp	1		1	
Empire	1	1		
F. D. Roosevelt	1	1	1	
H. Davis	1	1		
J. Gallagher	1	1		
Lincoln	1	1	1	
M. Spellacy	1	1		
M. L. King	1	2		
M. Herrick	1	1		
N. Hale	1	1	1	
N. Baker	1			1
P. Henry	1	1	1	
R. Jamison	--	2		
T. Jefferson	1	1		
W. Young	--			1
W. Wright	1		1	
Willson	1	1		
TOTALS	22	18	12	2

APPENDIX A-2

PROJECT STAR DEMOGRAPHICS

1980-81

Participating Nonpublic Schools

Immaculate Conception
Our Lady of Good Counsel
Sacred Heart of Jesus
St. Adalbert
St. Benedict
St. Boniface
St. Catherine
St. Francis
St. Ignatius
St. Jerome
St. John Nepomucene
St. Joseph Franciscan
St. Leo
St. Phillip and James
St. Phillip Neri
St. Stephen
St. Vitus
Urban Community

APPENDIX B

Title I Project STAR Stanford Diagnostic Reading Test, Vocabulary Subtest Results For 1980-81

APPENDIX B-1

1980-81 Stanford Diagnostic Reading Test Results for Grade 5 Nonpublic Classes

VOCABULARY*

School	N	$\bar{X}$ Pre NCE (Fall Norms)	$\bar{X}$ Post (Spring norms)	Actual $\bar{X}$ NCE Gain#	Objective Attained
Immaculate Conception @	--	-	-	-	
Our Lady of Good Counsel	9	50.33	60.00	+ 9.57	**
Sacred Heart of Jesus	3	41.00	43.00	+ 2.00	
St. Adalbert	1	52.00	64.00	+12.00	**
St. Benedict @	--	-	-	-	
St. Boniface @	--	-	-	-	
St. Catherine @	--	-	-	-	
St. Francis	5	32.00	29.20	+ 2.80	
St. Ignatius @	--	-	-	-	
St. Jerome @	--	-	-	-	
St. John Nepomucene	6	35.00	50.83	+15.83	**
St. Joseph Franciscan @	--	-	-	-	
St. Leo @	--	-	-	-	
St. Phillip and James	8	41.37	44.00	+ 2.63	
St. Phillip Neri	11	36.54	53.18	+16.64	**
St. Stephen	6	37.16	58.16	+21.00	**
St. Vitus @	--	-	-	-	
Urban Community @	--	-	-	-	
Grand Total	49	39.87	50.40	+10.53	**

*The Stanford Diagnostic Reading Test, Brown Level, Form A, was administered to fifth grade participants during the weeks of September 8, 1980 and May 11, 1981.

#An NCE Standard Score Gain which is one-third of a Standard Deviation (i.e., a 7.00 NCE gain or more) is considered to be educationally significant.

**Objective criterion - at least a 4.00 NCE mean gain.

@Did not serve Grade 5 students.

APPENDIX B-2

1980-81 Stanford Diagnostic Reading Test Results for Grade 6 Nonpublic Classes

VOCABULARY*

School	N	$\bar{X}$ Pre NCE (Fall Norms)	$\bar{X}$ Post (Spring norms)	Actual $\bar{X}$ NCE Gain#	Objective Attained
Immaculate Conception	4	51.25	55.50	+ 4.25	**
Our Lady of Good Counsel	9	46.55	47.33	+ .78	
Sacred Heart of Jesus	2	54.00	55.00	+ 1.00	
St. Adalbert	8	39.00	36.50	- 2.50	
St. Benedict	3	48.33	59.66	+11.33	**
St. Boniface	12	40.50	44.58	+ 4.08	**
St. Catherine	8	36.87	39.87	+ 3.00	**
St. Francis	4	31.75	30.50	- 1.25	
St. Ignatius @	--	-	-	-	
St. Jerome	7	49.71	52.42	+ 2.71	
St. John Nepomucene	12	40.66	52.16	+11.50	**
St. Joseph Franciscan @	--	-	-	-	
St. Leo	14	49.78	68.85	+19.07	**
St. Phillip and James	7	46.57	43.00	- 3.57	
St. Phillip Neri	4	34.50	53.50	+19.10	**
St. Stephen	11	40.00	33.18	- 6.82	
St. Vitus	6	44.50	41.50	+ 3.00	
Urban Community @	--	-	-	-	
Grand Total	111	43.25	47.66	+ 4.41	**

*The Stanford Diagnostic Reading Test, Brown Level, Form A, was administered to sixth grade participants during the weeks of September 8, 1980 and May 11, 1981.

#An NCE Standard Score Gain which is one-third of a Standard Deviation (i.e., a 7.00 NCE gain or more) is considered to be educationally significant.

**Objective criterion - at least a 4.00 NCE mean gain.

@Did not serve Grade 6 students.

APPENDIX B-3

1980-81 Stanford Diagnostic Reading Test Results for Grade 7 Nonpublic Classes

VOCABULARY*

School	N	$\bar{X}$ Pre NCE (Fall Norms)	$\bar{X}$ Post (Spring norms)	Actual $\bar{X}$ NCE Gain#	Objective Attained
Immaculate Conception	6	35.83	37.16	+ 1.33	
Our Lady of Good Counsel	3	45.66	51.00	+ 5.34	**
Sacred Heart of Jesus	3	39.00	34.66	- 4.34	
St. Adalbert	8	40.50	44.50	+ 4.00	**
St. Benedict	6	52.50	58.50	+ 6.00	**
St. Boniface	7	32.42	37.14	+ 4.72	**
St. Catherine	9	38.44	40.11	+ 1.67	
St. Francis	4	32.00	33.00	+ 1.00	
St. Ignatius	12	51.83	50.25	- 1.58	
St. Jerome	8	39.25	44.37	+ 5.12	**
St. John Nepomucene	7	39.00	39.14	+ .14	
St. Joseph Franciscan(b)	12	33.50	37.25	+ 3.75	
St. Leo	4	61.25	51.25	-10.00	
St. Phillip and James	3	50.33	52.00	+ 1.67	
St. Phillip Neri	5	49.00	68.40	+19.40	**
St. Stephen	11	41.09	47.00	+ 5.91	**
St. Vitus	3	36.00	42.00	+ 6.00	**
Urban Community	4	44.50	48.00	+ 3.50	
Grand Total	115	41.73	44.81	+ 3.08	

*The Stanford Diagnostic Reading Test, Brown Level, Form A, was administered to seventh grade participants during the weeks of September 8, 1980 and May 11, 1981.

#An NCE Standard Score Gain which is one-third of a Standard Deviation (i.e., a 7.00 NCE gain or more) is considered to be educationally significant.

**Objective criterion - at least a 4.00 NCE mean gain.

(b) Did not receive the services of a project teacher. Instruction was provided by a full-time educational aide.

APPENDIX B-4

1980-81 Stanford Diagnostic Reading Test Results for Grade 8 Nonpublic Classes

VOCABULARY*

School	N	$\bar{X}$ Pre NCE (Fall Norms)	$\bar{X}$ Post (Fall Norms)##	Actual $\bar{X}$ NCE Gain#	Objective Attained
Immaculate Conception	8	34.00	38.87	+ 4.87	**
Our Lady of Good Counsel	16	58.62	64.18	+ 5.56	**
Sacred Heart of Jesus	7	33.57	33.42	- .15	
St. Adalbert @	--	-	-	-	
St. Benedict	12	42.58	48.91	+ 6.33	**
St. Boniface	2	38.50	37.00	- 1.50	
St. Catherine	11	42.09	45.81	+ 3.72	
St. Francis	3	38.66	32.66	- 6.00	
St. Ignatius	23	48.65	49.52	+ .87	
St. Jerome	19	46.00	48.94	+ 2.94	
St. John Nepomucene	7	49.14	54.85	+ 5.71	**
St. Joseph Franciscan(b)	15	36.20	36.20	- 0 -	
St. Leo	13	51.23	57.23	+ 6.00	**
St. Phillip and James	8	45.12	51.12	+ 6.00	**
St. Phillip Neri	3	39.33	36.66	- 2.67	
St. Stephen @	--	-	-	-	
St. Vitus	5	32.60	35.60	+ 3.00	
Urban Community	4	37.25	45.75	+ 8.50	**
Grand Total	156	44.54	47.78	+ 3.25	

*The Stanford Diagnostic Reading Test, Brown Level, Form A, was administered to eighth grade participants during the weeks of September 8, 1980 and May 11, 1981.

#An NCE Standard Score Gain which is one-third of a Standard Deviation (i.e., a 7.00 NCE gain or more) is considered to be educationally significant.

**Objective criterion - at least a 4.00 NCE mean gain.

@Did not serve Grade 8 students.

##Because Spring norms are not available at the eighth grade level, ninth grade Fall norms were used to interpret eighth grade post scores.

(b)Did not receive the services of a project teacher. Instruction was provided by a full-time aide.

APPENDIX B-5

1980-81 Stanford Diagnostic Reading Test Results
for Grade 7 Block/Skills Reinforcement Classes

AUDITORY VOCABULARY*

School	N (b)	$\overline{X}$ Pre NCE (Fall Norms)	$\overline{X}$ Post NCE (Spring Norms)	Actual $\overline{X}$ NCE Gain	Objective Attained
A.B. Hart	13	29.23	21.69	- 7.54	
A. Hamilton	15	35.26	32.73	- 2.53	
Audubon	12	25.41	33.91	+ 8.50	**
C. Shuler	11	31.54	35.27	+ 3,73	
Central	16	25.43	25.87	+ .44	
C. Eliot	12	40.41	37.33	- 3.08	
C. Mooney	8	31.00	26.87	- 4.13	
C. Westropp	15	29.00	31.00	+ 2.00	
Empire	9	29.88	31.88	+ 2.00	
F.D. Roosevelt	13	24.61	29.92	+ 5.31	**
H.E. Davis	9	31.11	33.66	+ 2.55	
J. Gallagher	11	31.63	38.09	+ 6.46	**
Lincoln	9	27.33	29.77	+ 2.44	
M. Spellacy	13	30.69	32.61	+ 1.92	
M.L. King	8	27.37	32.50	+ 5.13	**
M. T. Herrick	7	28.57	26.85	- 1.72	
N. Hale	6	39.00	39.00	---	
N. Baker	16	40.06	36.18	- 3.88	
P. Henry	15	30.40	33.13	+ 2.73	
R. Jamison @	---	---	---	---	
T. Jefferson	8	32.75	24.37	- 8.38	
W. Young @	--	---	---	---	
W. Wright	7	31.00	32.85	+ 1.85	
Willson	16	32.00	37.18	+ 5.18	**
GRAND TOTAL	249 (b)	31.08	32.04	+ .96	

*The Stanford Diagnostic Reading Test, Brown Level, Form A, was administered to seventh grade participants during the weeks of October 20, 1980 and June 1, 1981.

#An NCE Standard Score Gain which is one-third of a Standard Deviation (i.e., 7.00 NCE gain or more) is considered to be educationally significant.

**Objective criterion - at least a 4.00 mean gain.

@School not served by Block/Skills Reinforcement Class.

(b)Due to computer programming problems, the analysis was conducted on an approximate 35% random sample of those 705 students for whom both pre and post auditory vocabulary subtest scores were available.

APPENDIX B-6

1980-81 Stanford Diagnostic Reading Test Results
for Grade 7 Learning Center Classes

AUDITORY VOCABULARY*

School	N (b)	$\bar{X}$ Pre NCE (Fall Norms)	$\bar{X}$ Post NCE (Spring Norms)	Actual $\bar{X}$ NCE Gain	Objective Attained
A.B. Hart	20	28.10	34.75	+ 6.65	**
A. Hamilton	4	39.00	30.00	- 9.00	
Audubon	15	31.53	29.06	- 2.47	
C. Shuler	11	48.09	46.18	- 1.91	
Central	17	28.76	34.76	+ 6.00	**
C. Eliot	3	43.33	33.00	-10.33	
C. Mooney	10	29.00	32.30	+ 3.30	
C. Westropp	4	30.25	28.25	- 2.00	
Empire	12	36.33	30.41	- 5.92	
F.D. Roosevelt	4	36.75	39.50	+ 2.75	
H.E. Davis	2	37.00	32.00	- 5.00	
J. Gallagher ##	--	---	---	---	
Lincoln	11	40.72	46.09	+5.37	**
M. Spellacy	23	31.56	37.30	+ 5.74	**
M.L. King	8	37.37	33.75	- 3.62	
M. T. Herrick	3	36.00	31.00	- 5.00	
N. Hale	11	34.45	35.00	+ .55	
N. Baker @	--	---	---	---	
P. Henry	4	32.25	34.75	+ 2.50	
R. Jamison	9	34.88	28.66	- 6.22	
T. Jefferson	8	34.62	36.50	+ 1.88	
W. Young	3	55.00	67.33	+12.33	**
W. Wright	15	37.33	33.86	- 3.47	
Willson	2	38.50	34.50	- 4.00	
GRAND TOTAL	199(b)	34.61	35.41	+ .80	

*The Stanford Diagnostic Reading Test, Brown Level, Form A, was administered to seventh grade participants during the weeks of October 20, 1980 and June 1, 1981.

#An NCE Standard Score Gain which is one-third of a Standard Deviation (i.e., 7.00 NCE gain or more) is considered to be educationally significant.

**Objective criterion - at least a 4.00 mean gain.

@Did not serve grade 7 students.

##Auditory Vocabulary scores unavailable for students.

(b)Due to computer programming problems, the analysis was conducted on an approximate 50% random sample of the 394 grade 7 students for whom both pre and post auditory vocabulary subtest scores were available.

APPENDIX B-7

1980-81 Stanford Diagnostic Reading Test Results
for Grade 8 Learning Center Classes

AUDITORY VOCABULARY*

School	N (a)	$\bar{X}$ Pre NCE (Fall Norms)	$\bar{X}$ Post NCE (Spring Norms)	Actual $\bar{X}$ NCE Gain	Objective Attained
A.B. Hart	2	36.50	47.00	+10.50	**
A. Hamilton	8	40.75	40.75	---	
Audubon	19	31.36	35.57	+ 4.21	**
C. Shuler	3	36.66	33.00	- 3.66	
Central	11	35.90	32.63	- 3.27	
C. Eliot	11	43.81	41.18	- 2.63	
C. Mooney	4	25.50	20.50	- 5.00	
C. Westropp	4	34.25	31.50	- 2.75	
Empire	10	33.80	28.40	- 5.40	
F.D. Roosevelt	13	38.53	38.46	- .07	
H.E. Davis	10	44.10	41.90	- 2.20	
J. Gallagher	14	38.42	34.14	- 4.28	
Lincoln	14	36.00	34.64	- 1.36	
M. Spellacy	3	32.66	30.00	- 2.66	
M.L. King	10	34.10	27.50	- 6.60	
M. T. Herrick	10	32.10	27.70	- 4.40	
N. Hale	15	30.66	32.33	+ 1.67	
N. Baker	11	32.54	35.81	+ 3.27	
P. Henry	12	33.33	29.83	- 3.50	
R. Jamison	22	38.45	33.68	- 4.77	
T. Jefferson	15	33.00	29.93	- 3.07	
W. Young	6	51.33	54.83	+ 3.50	
W. Wright	8	48.62	38.25	-10.37	
Willson	8	37.00	34.00	- 3.00	
GRAND TOTAL	243 (a)	36.44	34.39	- 2.05	

*The Stanford Diagnostic Reading Test, Brown Level, Form A, was administered to eighth grade participants during the weeks of October 27, 1980 and June 1, 1981.

#Because Spring Norms are not available at the eighth grade level, ninth grade Fall Norms were used to interpret the eighth grade post scores.

##An NCE Standard Score Gain which is one-third of a Standard Deviation (i.e., 7.00 NCE gain or more) is considered to be educationally significant.

**Objective criterion - at least a 4.00 mean gain.

(a)Due to computer programming problems, the analysis was conducted on an approximate 37% random sample of the 661 grade 8 students for whom both pre and post auditory vocabulary subtest scores were available.

APPENDIX B-8

1980-81 Stanford Diagnostic Reading Test Results
for Grade 9 Learning Center Classes

AUDITORY VOCABULARY*

School	N	$\overline{X}$ Pre NCE (Fall Norms)	$\overline{X}$ Post NCE (Spring Norms)	Actual $\overline{X}$ NCE Gain	Objective Attained
A.B. Hart	1	56.00	62.00	+10.00	**
A. Hamilton (b)	--	---	---	---	
Audubon (b)	--	---	---	---	
C. Shuler	2	28.50	28.00	- .50	
Central	7	31.42	31.00	- .42	
C. Eliot	5	32.40	34.80	+ 2.40	
C. Mooney	3	31.33	39.66	+ 8.33	**
C. Westropp	17	26.11	33.29	+ 7.18	**
Empire @	--	---	---	---	
F.D. Roosevelt	7	30.57	38.28	+ 7.71	**
H.E. Davis	2	41.50	47.50	+ 6.00	**
J. Gallagher @	--	---	---	---	
Lincoln	15	35.80	42.53	+ 6.73	**
M. Spellacy (b)	--	---	---	---	
M.L. King	1	40.00	42.00	+ 2.00	
M. T. Herrick (b)	--	---	---	---	
N. Hale	8	28.25	30.75	+ 2.50	
N. Baker	3	34.66	34.33	- .33	
P. Henry	7	30.28	39.71	+ 9.43	**
R. Jamison	33	35.33	38.42	+ 3.09	
T. Jefferson	1	36.00	45.00	+ 9.00	**
W. Young (b)	--	---	---	---	
W. Wright	2	37.00	29.50	- 7.50	
Willson	4	35.00	39.50	+ 4.50	**
GRAND TOTAL	118	32.75	37.23	+ 4.48	**

*The Stanford Diagnostic Reading Test, Brown Level, Form A, was administered to ninth grade participants during the weeks of November 3, 1980 and June 1, 1981.

#Because Spring Norms are not available at the ninth grade level, ninth grade Fall Norms were used to interpret the ninth grade post scores.

##An NCE Standard Score Gain which is one-third of a Standard Deviation (i.e., 7.00 NCE gain or more) is considered to be educationally significant.

**Objective criterion - at least a 4.00 mean gain.

@Did not serve grade 9 students.

(b)Missing pretest or posttest data.

APPENDIX C

Title I Project STAR Stanford Diagnostic Reading Test, Reading Comprehension Subtest Results for 1980-81

APPENDIX C-1

1980-81 Stanford Diagnostic Reading Test Results
For Grade 5 Nonpublic Classes

READING COMPREHENSION*

School	N	$\bar{X}$ Pre NCE (Fall Norms)	$\bar{X}$ Post NCE (Spring Norms)	Actual $\bar{X}$ NCE Gain#	Objective Attained
Immaculate Conception@	--	-	-	-	
Our Lady of Good Counsel	9	30.88	38.77	+ 7.89	**
Sacred Heart of Jesus	3	28.33	44.66	+16.33	**
St. Adalbert	1	41.00	60.00	+19.00	**
St. Benedict@	--	-	-	-	
St. Boniface@	--	-	-	-	
St. Catherine@	--	-	-	-	
St. Francis	5	13.00	21.60	+ 8.60	**
St. Ignatius@	--	-	-	-	
St. Jerome@	--	-	-	-	
St. John Nepomucene	6	31.33	37.00	+ 5.67	**
St. Joseph Franciscan@	--	-	-	-	
St. Leo@	--	-	-	-	
St. Phillip and James	8	31.37	41.50	+10.13	**
St. Phillip Neri	10	30.40	36.00	+ 5.40	**
St. Stephen	6	13.33	29.83	+16.50	**
St. Vitus@	--	-	-	-	
Urban Community@	--	-	-	-	
GRAND TOTAL	48	26.92	36.33	+ 9.41	**

*The Stanford Diagnostic Reading Test, Brown Level, Form A, was administered to fifth grade participants during the weeks of September 8, 1980 and May 11, 1981.

#An NCE Standard Score Gain which is one-third of a Standard Deviation (i.e., 7.00 NCE gain or more) is considered to be educationally significant.

**Objective criterion - at least a 4.00 mean gain

@Did not serve Grade 5 students.

APPENDIX C-2

1980-81 Stanford Diagnostic Reading Test Results For Grade 6 Nonpublic Classes

READING COMPREHENSION*

School	N	$\overline{X}$ Pre NCE (Fall Norms)	$\overline{X}$ Post NCE (Spring Norms)	Actual $\overline{X}$ NCE Gain#	Objective Attained
Immaculate Conception	4	28.50	40.50	+12.00	**
Our Lady of Good Counsel	9	39.22	48.33	+ 9.11	**
Sacred Heart of Jesus	2	39.00	49.50	+10.50	**
St. Adalbert	8	35.12	41.75	+ 6.63	**
St. Benedict	3	53.33	63.00	+ 9.67	**
St. Boniface	12	36.08	51.83	+15.75	**
St. Catherine	8	27.50	33.62	+ 6.12	**
St. Francis	4	28.25	39.25	+11.00	**
St. Ignatius@	--	-	-	-	
St. Jerome	7	32.14	36.71	+ 4.57	**
St. John Nepomucene	12	37.16	52.33	+15.17	**
St. Joseph Franciscan@	--	-	-	-	
St. Leo	14	33.35	54.78	+21.43	**
St. Phillip and James	7	34.14	49.42	+15.28	**
St. Phillip Neri	4	40.50	49.00	+ 8.50	**
St. Stephen@	--	-	-	-	
St. Vitus	6	24.83	30.00	+ 5.17	**
Urban Community@	--	-	-	-	
GRAND TOTAL	100	34.40	44.61	+10.21	**

*The Stanford Diagnostic Reading Test, Brown Level, Form A, was administered to sixth grade participants during the weeks of September 8, 1980 and May 11, 1981.

#An NCE Standard Score Gain which is one-third of a Standard Deviation (i.e., 7.00 NCE gain or more) is considered to be educationally significant.

**Objective criterion - at least a 4.00 mean gain

@Did not serve Grade 6 students.

APPENDIX C-3

1980-81 Stanford Diagnostic Reading Test Results
For Grade 7 Nonpublic Classes

READING COMPREHENSION*

School	N	$\overline{X}$ Pre NCE (Fall Norms)	$\overline{X}$ Post NCE (Spring Norms)	Actual $\overline{X}$ NCE Gain#	Objective Attained
Immaculate Conception	6	32.66	34.50	+ 1.84	
Our Lady of Good Counsel	3	40.33	45.00	+ 4.67	**
Sacred Heart of Jesus	3	23.00	19.66	- 3.34	
St. Adalbert	9	40.88	43.22	+ 2.34	
St. Benedict	6	44.83	52.00	+ 7.17	**
St. Boniface	7	34.14	27.85	- 6.29	
St. Catherine	9	37.33	41.11	+ 3.78	
St. Francis	4	22.00	32.75	+10.75	**
St. Ignatius	11	43.09	44.00	+ .91	
St. Jerome	8	41.00	47.37	+ 6.37	**
St. John Nepomucene	7	34.42	30.14	- 4.28	
St. Joseph Franciscan(b)	11	27.54	35.90	+ 8.36	**
St. Leo	4	48.25	59.00	+10.75	**
St. Phillip and James	3	39.00	42.00	+ 3.00	
St. Phillip Neri	4	29.75	35.50	+ 5.75	**
St. Stephen	11	39.00	41.18	+ 2.18	
St. Vitus	3	36.00	36.33	+ .33	
Urban Community	4	43.25	56.75	+13.25	**
GRAND TOTAL	113	36.91	40.13	+ 3.22	

*The Stanford Diagnostic Reading Test, Brown Level, Form A, was administered to seventh grade participants during the weeks of September 8,1980 and May 11, 1981.

#An NCE Standard Score Gain which is one-third of a Standard Deviation (i.e., 7.00 NCE gain or more) is considered to be educationally significant.

**Objective criterion - at least a 4.00 mean gain

(b)Did not receive the services of a project teacher. Instruction was provided by a full-time educational aide.

APPENDIX C-4

1980-81 Stanford Diagnostic Reading Test Results For Grade 8 Nonpublic Classes

READING COMPREHENSION*

School	N	$\bar{X}$ Pre NCE (Fall Norms)	$\bar{X}$ Post NCE (Fall Norms)#	Actual $\bar{X}$ NCE Gain##	Objective Attained
Immaculate Conception	8	29.87	27.63	- 2.24	
Our Lady of Good Counsel	16	45.63	51.31	+ 5.68	**
Sacred Heart of Jesus	7	25.00	26.14	+ 1.14	
St. Adalbert@	--	-	-	-	
St. Benedict	12	40.33	42.75	+ 2.42	
St. Boniface	2	32.00	32.50	+ .50	
St. Catherine	10	37.80	39.90	+ 2.10	
St. Francis	3	28.33	29.33	+ 1.00	
St. Ignatius	23	38.61	42.43	+ 3.82	
St. Jerome	20	36.15	40.00	+ 3.85	
St. John Nepomucene	7	41.29	35.71	- 5.58	
St. Joseph Franciscan(b)	15	11.47	36.40	+24.93	**
St. Leo	13	49.38	48.77	- .61	
St. Phillip and James	8	45.38	42.63	- 2.75	
St. Phillip Neri	3	28.67	35.33	+ 6.66	**
St. Stephen@	--	-	-	-	
St. Vitus	5	17.40	25.40	+ 8.00	**
Urban Community	4	37.50	42.50	+ 5.00	**
GRAND TOTAL	156	35.61	40.01	+ 4.40	**

*The Stanford Diagnostic Reading Test, Brown Level, Form A, was administered to eighth grade participants during the Weeks of September 8, 1980 and May 11,1981.

#Because Spring Norms are not available at the eighth grade level, ninth grade Fall Norms were used to interpret the eighth grade post scores.

##An NCE Standard Score Gain which is one-third of a Standard Deviation (i.e., 7.00 NCE gain or more) is considered to be educationally significant.

**Objective criterion - at least a 4.00 mean gain

@Did not serve Grade 8 students.

(b)Did not receive the services of a project teacher. Instruction was provided by a full-time educational aide.

APPENDIX C-5

1980-81 Stanford Diagnostic Reading Test Results
For Grade 7 Block/Skills Reinforcement Classes

READING COMPREHENSION*

School	N	$\bar{X}$ Pre NCE (Fall Norms)	$\bar{X}$ Post NCE (Spring Norms)	Actual $\bar{X}$ NCE Gain#	Objective Attained
A.B. Hart	38	26.07	19.68	-6.39	
A. Hamilton	40	27.90	30.45	+2.55	
Audubon	36	29.44	32.52	+3.08	
C. Shuler	31	28.87	30.00	+1.13	
Central	46	25.76	25.83	+ .07	
C. Eliot	36	31.97	28.75	-3.22	
C. Mooney	22	29.81	23.63	-6.18	
C. Westropp	40	29.12	25.05	-4.07	
Empire	27	25.25	24.81	- .44	
F.D. Roosevelt	38	29.44	28.28	-1.16	
H.E. Davis	27	24.59	25.55	+ .96	
J. Gallagher	30	23.43	24.80	+1.37	
Lincoln	28	22.57	24.28	+1.71	
M. Spellacy	37	23.56	24.37	+ .81	
M.L. King	26	25.46	28.73	+3.27	
M. T. Herrick	20	27.45	26.80	- .65	
N. Hale	18	20.00	15.88	-4.12	
N. Baker	41	30.26	27.26	-3.00	
P. Henry	40	30.97	32.17	+1.20	
R. Jamison @	--	-	-	-	
T. Jefferson	22	23.59	22.86	- .73	
W. Young @	--	-	-	-	
W. Wright	21	28.14	29.38	+1.24	
Willson	41	29.97	30.75	- .78	
GRAND TOTAL	705	27.35	26.84	-.51	

*The Stanford Diagnostic Reading Test, Brown Level, Form A, was administered to seventh grade participants during the Weeks of October 27, 1980 and June 1, 1981.

#An NCE Standard Score Gain which is one-third of a Standard Deviation (i.e., 7.00 NCE gain or more) is considered to be educationally significant.

**Objective criterion - at least a 4.00 mean gain

@School not served by Block/Skills Reinforcement Class.

APPENDIX C-6

1980-81 Stanford Diagnostic Reading Test Results For Grade 7 Learning Center Classes

READING COMPREHENSION*

School	N	$\bar{X}$ Pre NCE (Fall Norms)	$\bar{X}$ Post NCE (Spring Norms)	Actual $\bar{X}$ NCE Gain#	Objective Attained**
A.B. Hart	39	30.92	29.25	-1.67	
A. Hamilton	7	34.14	38.42	+4.28	**
Audubon	30	28.86	27.40	-1.46	
C. Shuler	21	47.52	47.28	- .24	
Central	35	25.02	30.62	+3.60	
C. Eliot	5	32.40	34.20	+1.80	
C. Mooney	20	26.45	28.25	+1.80	
C. Westropp	8	28.50	21.87	-6.63	
Empire	23	29.69	34.00	+4.31	**
F.D. Roosevelt	8	37.62	38.62	+1.00	
H.E. Davis	5	33.60	37.20	+3.60	
J. Gallagher	2	25.50	29.00	+3.50	
Lincoln	21	33.90	41.00	+7.10	**
M. Spellacy	46	30.54	32.47	+1.93	
M.L. King	28	27.14	29.92	+2.78	
M. T. Herrick	6	25.83	26.66	+ .83	
N. Hale	22	33.00	32.77	- .23	
N. Baker@	--	-	-	-	
P. Henry	8	28.62	30.62	+2.00	
R. Jamison	18	27.66	30.16	+2.50	
T. Jefferson	15	38.53	42.93	+4.40	**
W. Young	3	64.00	65.33	+1.33	
W. Wright	30	34.80	37.13	+2.33	
Willson	4	35.50	31.00	-4.50	
GRAND TOTAL	404	31.72	35.37	+1.65	

*The Stanford Diagnostic Reading Test, Brown Level, Form A, was administered to seventh grade participants during the weeks of October 27, 1980 and June 1, 1981.

#An NCE Standard Score Gain which is one-third of a Standard Deviation (i.e., 7.00 NCE gain or more) is considered to be educationally significant.

**Objective criterion - at least a 4.00 mean gain

@Did not serve Grade 7 students.

APPENDIX C-7

1980-81 Stanford Diagnostic Reading Test Results for Grade 8 Learning Center Classes

READING COMPREHENSION*

School	N	$\overline{X}$ Pre NCE (Fall Norms)	$\overline{X}$ Post NCE (Fall Norms)#	Actual $\overline{X}$ NCE Gain##	Objective Attained
A.B. Hart	3	38.33	30.00	-8.33	
A. Hamilton	19	34.00	31.73	-2.27	
Audubon	53	31.90	29.83	-2.07	
C. Shuler	8	32.25	32.75	+ .50	
Central	29	30.82	29.44	-1.38	
C. Eliot	31	37.22	33.77	-3.45	
C. Mooney	10	31.90	28.90	-3.00	
C. Westropp	7	28.71	24.42	-4.29	
Empire	22	33.54	28.50	-5.04	
F.D. Roosevelt	36	35.37	31.54	-3.83	
H.E. Davis	27	31.33	30.14	-1.19	
J. Gallagher	39	29.82	31.05	+1.23	
Lincoln	41	32.19	30.00	-2.19	
M. Spellacy	3	22.33	24.33	+2.00	
M.L. King	29	32.86	31.17	-1.69	
M. T. Herrick	28	31.53	26.00	-5.53	
N. Hale	44	32.65	31.02	-1.63	
N. Baker	34	29.17	30.23	+1.06	
P. Henry	35	36.62	34.60	-2.02	
R. Jamison	60	36.21	31.03	-5.18	
T. Jefferson	43	32.81	32.86	+ .05	
W. Young	15	48.06	49.60	+1.54	
W. Wright	22	30.81	33.36	+2.55	
Willson	23	34.91	34.95	+ .04	
GRAND TOTAL	661	33.33	31.39	-1.94	

*The Stanford Diagnostic Reading Test, Brown Level, Form A, was administered to eighth grade participants during the weeks of October 27, 1980 and June 1, 1981.

#Because Spring Norms are not available at the eighth grade level, ninth grade Fall Norms were used to interpret the eighth grade post scores.

##An NCE Standard Score Gain which is one-third of a Standard Deviation (i.e., 7.00 NCE gain or more) is considered to be educationally significant.

**Objective criterion - at least a 4.00 mean gain

APPENDIX C-8

1980-81 Stanford Diagnostic Reading Test Results For Grade 9 Learning Center Classes

READING COMPREHENSION*

School	N	$\bar{X}$ Pre NCE (Fall Norms)	$\bar{X}$ Post NCE (Fall Norms)#	Actual $\bar{X}$ NCE Gain# #	Objective Attained**
A.B. Hart	1	15.00	26.00	+11.00	**
A. Hamilton (b)	--	-	-	-	
Audubon (b)	--	-	-	-	
C. Shuler	2	26.50	32.50	+ 6.00	**
Central	7	29.57	32.85	+ 3.28	
C. Eliot	6	28.66	33.66	+ 5.00	**
C. Mooney	4	31.50	25.50	- 6.00	
C. Westropp	16	26.25	29.37	+ 3.12	
Empire #	--	-	-	-	
F.D. Roosevelt	7	35.00	37.14	+ 2.14	
H.E. Davis	2	42.50	46.00	+ 4.50	**
J. Gallagher #	--	-	-	-	
Lincoln	15	30.00	32.66	+ 2.66	
M. Spellacy (b)	--	-	-	-	
M.L. King	1	10.00	10.00	-	
M. T. Herrick (b)	--	-	-	-	
N. Hale	8	31.25	32.62	+ 1.37	
N. Baker	3	25.66	17.00	- 8.66	
P. Henry	7	29.71	35.28	+ 5.57	**
R. Jamison	33	33.75	33.48	- .27	
T. Jefferson	1	30.00	26.00	- 4.00	
W. Young (b)	--	-	-	-	
W. Wright	2	33.50	32.00	- 1.50	
Willson	4	30.79	32.47	+ 6.75	**
GRAND TOTAL	119	30.79	32.47	+ 1.68	

*The Stanford Diagnostic Reading Test, Brown Level, Form A, was administered to ninth grade participants during the weeks of October 27, 1980 and June 1, 1981.

#Because Spring Norms are not available at the ninth grade level, ninth grade Fall Norms were used to interpret the ninth grade post scores.

##An NCE Standard Score Gain which is one-third of a Standard Deviation (i.e., 7.00 NCE gain or more) is considered to be educationally significant.

**Objective criterion - at least a 4.00 mean gain

#Did not serve Grade 9 students.

(b)Missing pretest or posttest data.

APPENDIX D

Title Project STAR Everyday Skills
Test Reading and Study Skills Subtest Results
For 1980-81

APPENDIX D-1

1980-81 Everyday Skills Test Results for Grade 7 Block/Skills Reinforcement Classes

READING*

School	N	$\bar{X}$ Pre Raw Score Gain	$\bar{X}$ Post Raw Score Gain	Actual $\bar{X}$ Raw Score Gain	Objective Attained
A.B. Hart	34	24.82	28.44	+ 3.62	**
A. Hamilton	38	24.92	28.45	+ 3.53	**
Audubon	31	25.74	29.23	+ 3.49	**
C. Shuler	40	26.23	31.08	+ 4.85	**
Central	39	24.77	25.64	+ .87	
C. Eliot	31	27.16	30.10	+ 2.94	**
C. Mooney	23	28.52	28.52	---	
C. Westropp	26	26.88	30.46	+ 3.58	**
Empire	27	20.41	25.89	+ 5.48	**
F.D. Roosevelt	41	27.54	29.63	+ 2.09	**
H.E. Davis	29	28.28	29.83	+ 1.55	
J. Gallagher	26	28.77	31.04	+ 2.27	
Lincoln	30	23.97	26.40	+ 2.43	**
MSO Spellacy	30	22.26	24.29	+ 2.03	
M.L. King	31	23.29	29.65	+ 6.36	**
M. T. Herrick	24	27.88	29.38	+ 1.50	
N. Hale	24	21.21	27.00	+ 5.79	**
N. Baker	50	28.62	31.16	+ 2.54	**
P. Henry	38	27.50	29.61	+ 2.11	
R. Jamison @	--	---	---	---	
T. Jefferson	35	25.60	26.83	+ 1.23	
W. Young	--	---	---	---	
W. Wright	26	20.27	31.27	+11.00	**
Willson	35	25.83	33.74	+ 7.91	**
Grade 7 Public School Total	708	25.48	28.98	+ 3.50	**
Cleveland Central Catholic Total (Grades 9, 10 and 12 represented)	28	34.82	35.96	+ 1.14	

* The Everyday Skills Test Reading Test A was administered to STAR participants during the weeks of November 10, 1980 and May 25, 1981. The reading test contains a total of 45 items.

@ School not served by Block/Skills Reinforcement Class.

** The actual mean raw score gain was demonstrated to be statistically significant ($p \leq .05$). All tests are two-tailed.

APPENDIX D-2

1980-81 Everyday Skills Test Results for Grade 7 Block/Skills Reinforcement Classes

STUDY SKILLS*

School	N	$\bar{X}$ Pre NCE (Fall Norms)	$\bar{X}$ Post NCE (Spring Norms)	Actual $\bar{X}$ NCE Gain#	Objective Attained
A.B. Hart	34	20.26	19.23	- 1.03	
A. Hamilton	38	19.73	22.63	+ 2.90	
Audubon	31	23.81	26.21	+ 2.40	
C. Shuler	34	20.82	25.11	+ 4.29	**
Central	39	18.97	17.48	- 1.49	
C. Eliot	31	18.70	27.35	+ 8.65	**
C. Mooney	18	16.44	23.94	+ 7.50	**
C. Nestropp	27	23.00	26.24	+ 3.24	
Empire	27	16.81	17.00	+ .19	
F.D. Roosevelt	41	28.58	26.75	- 1.83	
H.E. Davis	29	26.06	23.93	- 2.13	
J. Gallagher	13	24.23	27.46	+ 3.78	
Lincoln	25	23.68	23.04	- .64	
M. Spellacy	31	12.03	13.92	+ 1.89	
M.L. King	29	22.55	23.10	+ .55	
M. T. Herrick	20	21.95	25.65	+ 3.70	
N. Hale	24	21.83	20.27	- 1.56	
N. Baker	50	22.19	24.23	+ 2.04	
P. Henry	38	24.31	26.44	+ 2.13	
R. Jamison@	--	---	---	---	
T. Jefferson	33	22.54	19.72	- 2.82	
W. Young@	--	---	---	---	
W. Wright	21	25.95	28.04	+ 2.09	
Willson	35	22.25	26.34	+ 4.09	**
Grade 7 Public School Total	668	21.80	22.81	+ 1.01	
Cleveland Central Catholic Total ##	--	---	---	---	

Results are not included in the above analysis due to the unavailability of appropriate grade level norms. The study skill section of the EST has been adopted from the CTBS Form R, Level 3 for which Grade 6-8 norms are only available.

* The Everyday Skills Test Study Skills subtest was administered to Block students during the Weeks of November 17, 1980 and June 1, 1981. The study skill test contains a total of 50 items.

@ School not served by Block/Skills Reinforcement Class.

A NCE Standard Score Gain which is one-third of a Standard Deviation (i.e., a 7.00 NCE gain or more) is considered to be educationally significant.

** Objective Criterion - at least a 4.00 NCE mean gain.

APPENDIX E

Title I Project STAR Comprehensive Test of Basic Skills, Mathematics Computation Subtest Results for 1980-81

APPENDIX E-1

1980-81 Comprehensive Test of Basic Skills
Results for Grade 5 Nonpublic
Classes

MATHEMATICS COMPUTATION*

School	N	$\bar{X}$ Pre NCE (Fall Norms)	$\bar{X}$ Post NCE (Spring Norms)	Actual $\bar{X}$ NCE Gain#	Objective Attained
Immaculate Conception	--	---	---	---	
Our Lady of Good Counsel	4	46.25	39.00	- 7.25	
Sacred Heart of Jesus @	--	---	---	---	
St. Adalbert	5	37.60	35.20	- 2.40	
St. Benedict @	--	---	---	---	
St. Boniface @	--	---	---	---	
St. Catherine @	--	---	---	---	
St. Francis	4	43.50	39.25	- 4.25	
St. Ignatius @	--	---	---	---	
St. Jerome @	--	---	---	---	
St. John Nepomucene	--	---	---	---	
St. Joseph Franciscan @	--	---	---	---	
St. Leo @	--	---	---	---	
St. Phillip and James	4	38.25	50.50	+12.25	**
St. Phillip Neri @	--	---	---	---	
St. Stephen @	--	---	---	---	
St. Vitus @	--	---	---	---	
Urban Community @	--	---	---	---	
GRAND TOTAL	17	41.17	40.64	- .53	

@Did not conduct grade 5 mathematics skill instruction.

*The Comprehensive Test of Basic Skills, Form Q, Level 2 was administered to fifth grade participants during the weeks of October 13, 1980 and May 18, 1981.

#An NCE-Standard Score Gain which is one-third of a Standard Deviation (i.e., a 7.00 NCE gain or more) is considered to be educationally significant.

**Objective criterion - at least a 4.00 NCE mean gain.

APPENDIX E-2

1980-81 Comprehensive Test of Basic Skills
Results for Grade 6 Nonpublic
Classes

MATHEMATICS, COMPUTATION*

School	N	$\overline{X}$ Pre NCE (Fall Norms)	$\overline{X}$ Post NCE (Spring Norms)	Actual $\overline{X}$ NCE Gain#	Objective Attained
Immaculate Conception	3	30.00	30.66	+ .66	
Our Lady of Good Counsel	6	28.33	32.00	+ 3.67	
Sacred Heart of Jesus @	--	---	---	---	
St. Adalbert	4	49.75	46.75	- 3.00	
St. Benedict	5	33.40	41.60	+ 8.20	**
St. Boniface	4	38.25	45.00	+ 6.75	**
St. Catherine @	--	---	---	---	
St. Francis	4	43.50	32.50	-11.00	
St. Ignatius @	--	---	---	---	
St. Jerome @	--	---	---	---	
St. John Nepomucene	4	37.00	49.75	+12.75	**
St. Joseph Franciscan @	--	---	---	---	
St. Leo	1	34.00	23.00	-11.00	
St. Phillip and James	6	45.00	36.83	- 8.17	
St. Phillip Neri @	--	---	---	---	
St. Stephen	4	44.00	42.25	- 1.75	
St. Vitus	7	36.85	32.28	- 4.57	
Urban Community @	--	---	---	---	
GRAND TOTAL	48	39.68	38.50	- 1.18	

@Did not conduct grade 6 mathematics skill instruction.

*The Comprehensive Test of Basic Skills, Form Q, Level 2 was administered to sixth grade participants during the weeks of October 13, 1980 and May 18, 1981.

#An NCE Standard Score Gain which is one-third of a Standard Deviation (i.e., a 7.00 NCE gain or more) is considered to be educationally significant.

**Objective criterion - at least a 4.00 NCE mean gain.

APPENDIX E-3

1980-81 Comprehensive Test of Basic Skills
Results for Grade 7 Nonpublic
Classes

MATHEMATICS COMPUTATION*

School	N	$\overline{X}$ Pre NCE (Fall Norms)	$\overline{X}$ Post NCE (Spring Norms)	Actual $\overline{X}$ NCE Gain#	Objective Attained
Immaculate Conception	6	40.50	49.00	+ 9.50	**
Our Lady of Good Counsel	4	38.25	50.50	+12.25	**
Sacred Heart of Jesus	8	28.75	40.62	+11.87	**
St. Adalbert	8	43.25	53.50	+10.25	**
St. Benedict	6	58.50	68.66	+10.16	**
St. Boniface	6	40.66	43.33	+ 2.67	
St. Catherine @	--	---	---	---	
St. Francis	3	53.66	46.00	- 7.60	
St. Ignatius	12	47.41	46.66	- .75	
St. Jerome @	--	---	---	---	
St. John Nepomucene	6	50.50	34.50	-16.00	
St. Joseph Franciscan @	--	---	---	---	
St. Leo @	--	---	---	---	
St. Phillip and James	3	51.66	62.33	+10.67	**
St. Phillip Neri @	--	---	---	---	
St. Stephen	2	48.00	47.00	- 1.00	
St. Vitus @	--	---	---	---	
Urban Community	3	30.33	35.33	+ 5.00	**
GRAND TOTAL	67	43.87	47.95	+ 4.08	**

@Did not conduct grade 7 mathematics skill instruction.

*The Comprehensive Test of Basic Skills, Form T, Level 3 was administered to seventh grade participants during the weeks of October 13, 1980 and May 18, 1981.

#An NCE Standard Score Gain which is one-third of a Standard Deviation (i.e., a 7.00 NCE gain or more) is considered to be educationally significant.

**Objective criterion - at least a 4.00 NCE mean gain.

APPENDIX E-4

1980-81 Comprehensive Test of Basic Skills
Results for Grade 8 Nonpublic
Classes

MATHEMATICS COMPUTATION*

School	N	$\overline{X}$ Pre NCE (Fall Norms)	$\overline{X}$ Post NCE (Spring Norms)	Actual $\overline{X}$ NCE Gain#	Objective Attained
Immaculate Conception	8	40.25	49.50	+ 9.25	**
Our Lady of Good Counsel	14	50.64	49.84	- .80	
Sacred Heart of Jesus	6	36.33	35.33	- 1.00	
St. Adalbert @	--	---	---	---	
St. Benedict @	--	---	---	---	
St. Boniface	3	40.66	41.66	+ 1.00	
St. Catherine @	--	---	---	---	
St. Francis	2	37.50	38.50	+ 1.00	
St. Ignatius	23	49.60	52.00	+ 2.40	
St. Jerome @	--	---	---	---	
St. John Neposucene	2	64.00	56.00	+ 8.00	**
St. Joseph Franciscan @	--	---	---	---	
St. Leo	5	40.40	46.00	+ 5.60	**
St. Phillip and James	3	61.66	59.66	- 2.00	
St. Phillip Neri @	--	---	---	---	
St. Stephen @	--	---	---	---	
St. Vitus @	--	---	---	---	
Urban Community	7	25.57	38.28	+12.71	**
GRAND TOTAL	73	44.94	47.16	+ 2.22	

@Did not conduct grade 8 mathematics skill instruction.

*The Comprehensive Test of Basic Skills, Form T, Level 3 was administered to eighth grade participants during the weeks of October 13, 1980 and May 18, 1981.

#An NCE Standard Score Gain which is one-third of a Standard Deviation (i.e., a 7.00 NCE gain or more) is considered to be educationally significant.

**Objective criterion - at least a 4.00 NCE mean gain.

APPENDIX F

Title I Project STAR Attendance Percentage Rate Comparisons for the 1980-81 School Year

APPENDIX F-1

Comparison of School Attendance Percentage Rates for the 1980-81 School Year

BLOCK/SKILLS REINFORCEMENT CLASSES (GRADE 7) VS. TOTAL GRADE 7

School	N	Block/Skills Reinf. Students Grade 7	Total Grade 7 Students	Block/Skills Reinf. (Grade 7) Minus Total Grade Students
A. B. Hart	66	77.04%	71.21%	+5.83
A. Hamilton	58	82.40%	82.60%	- .20
Audubon	63	75.62%	73.79%	+1.83
C. Shuler	48	85.40%	83.82%	+1.58
Central	74	79.82%	75.51%	+4.31
C. Eliot	48	84.82%	83.41%	+1.41
C. Mooney	50	80.11%	79.92%	+1.90
C. Westropp	63	85.48%	79.37%	+6.11
Empire	50	78.61%	71.42%	+7.19
F. D. Roosevelt	45	85.85%	82.04%	+3.81
H. E. Davis	55	76.10%	74.03%	+2.07
J. Gallagher	53	68.50%	78.05%	+9.55
Lincoln	62	75.46%	77.58%	-2.12
M. Spellacy	*	*	*	*
M. L. King	49	65.97%	66.07%	- .10
M. T. Herrick	49	70.35%	67.70%	+2.65
N. Hale	54	76.49%	77.44%	- .95
N. Baker	62	82.76%	82.07%	+ .69
P. Henry	50	83.92%	80.09%	+3.83
R. Jamison	--	-----	-----	-----
T. Jefferson	57	78.47%	77.58%	+ .58
W. Young	--	-----	-----	-----
W. Wright	50	81.36%	80.02%	+1.34
Willson	55	82.93%	83.21%	+ .28
Grand Total	1161	79.33%	78.37%	+ .96

#Attendance rate comparisons are presented for public schools only. Nonpublic school attendance comparisons have not been made due to the unavailability of systemwide data.

*Attendance data unavailable

@School not served by Block/Skills Reinforcement Class.

APPENDIX F-2

Comparison of School Attendance Percentage Rates for the 1980-81 School Year

LEARNING CENTER CLASSES (GRADE 7) VS. TOTAL GRADE 7 STUDENTS*

School	N	Learning Center Students Grade 7	Total Grade Students	Learning Center Students Minus Total Grade 7 Students
A. B. Hart	61	75.38	71.21	+ 4.17
A. Hamilton	15	83.63	82.60	+ 1.03
Audubon	47	76.17	73.79	+ 2.38
C. Shuler	29	88.68	83.82	+ 4.86
Central	53	74.48	75.51	- 1.03
C. Eliot	16	74.83	83.41	- 8.58
C. Mooney	32	85.08	79.92	+ 5.16
C. Westropp	17	81.28	79.37	+ 1.91
Empire	39	74.85	71.42	+ 3.43
F. D. Roosevelt	23	77.26	82.04	- 4.78
H. E. Davis	5	70.47	74.03	- 3.56
J. Gallagher	8	68.37	78.05	- 9.68
Lincoln	31	73.53	77.58	- 4.05
M. Spollacy	61	86.13	86.71	- .58
M. L. King	47	75.68	66.07	+ 9.61
M. T. Herrick	14	72.26	67.70	+ 4.56
N. Hale	46	80.63	77.44	+ 3.19
N. Baker	3	60.67	82.07	-21.40
P. Henry	19	68.31	80.09	-11.78
R. Jamison	28	89.01	87.93	+ 1.08
T. Jefferson	21	82.19	77.58	+ 4.61
W. Young	7	73.00	91.42	-18.42
W. Wright	34	83.21	80.02	+ 3.19
Willson	11	84.66	83.21	+ 1.45
Grand Total	667	79.17	78.37	+ .80

*Attendance rate comparisons are presented for public schools only. Nonpublic school attendance comparisons have not been made due to the unavailability of systemwide data.

APPENDIX F-3

Comparison of School Attendance Percentage Rates for the 1980-81 School Year

LEARNING CENTER CLASSES(GRADE 8) VS. TOTAL GRADE 8 STUDENTS#

School	N	Learning Center Students Grade 8	Total Grade 8 Students	Learning Center Students Minus Total Grade 8 Students
A. B. Hart	8	51.65	71.46	-19.81
A. Hamilton	38	84.20	82.62	+ 1.58
Audubon	85	76.68	73.84	+ 2.84
C. Shuler	21	85.66	82.00	+ 3.66
Central	48	75.71	75.48	+ .23
C. Eliot	40	85.07	81.89	+ 3.18
C. Mooney	11	80.33	76.88	+ 3.45
C. Westropp	18	73.11	76.26	- 3.15
Empire	28	80.00	71.54	+ 8.46
F. D. Roosevelt	59	76.26	78.02	- 2.24
H. E. Davis	39	75.96	71.69	+ 4.27
J. Gallagher	60	78.93	75.00	+ 3.93
Lincoln	71	73.14	73.61	- .47
M. Spellacy	10	83.09	84.51	+ 1.42
M. L. King	50	68.96	62.54	+ 6.42
M. T. Herrick	50	73.93	67.70	+ 6.23
N. Hale	61	83.87	75.09	+ 8.78
N. Baker	43	87.05	82.80	+ 4.25
P. Henry	74	76.36	77.97	- 1.61
R. Jamison	73	90.06	87.72	+ 2.34
T. Jefferson	44	79.58	73.94	+ 5.64
W. Young	25	87.72	88.42	- .70
W. Wright	32	80.39	77.40	+ 2.99
Willson	40	79.40	78.56	+ .84
Grand Total	1028	79.03	76.77	+ 2.26

#Attendance rate comparisons are presented for public schools only. Nonpublic school attendance comparisons have not been made due to the unavailability of systemwide data.

APPENDIX F-4

Comparison of School Attendance Percentage Rates for the 1980-81 School Year

LEARNING CENTER CLASSES (GRADE 9) VS. TOTAL GRADE 9 STUDENTS*

School	N	Learning Center Students Grade 9	Total Grade 9 Students	Learning Center Students Minus Total Grade 9 Students
A. B. Hart	4	58.16	70.33	- 12.17
A. Hamilton	4	80.75	78.74	+ 2.01
Audubon	1	45.00	67.02	- 22.02
C. Shuler	12	70.70	79.43	- 8.73
Central	8	83.89	73.88	+ 10.01
C. Eliot	9	82.38	79.52	+ 2.86
C. Mooney	5	84.32	71.78	+ 12.54
C. Westropp	25	85.51	79.99	+ 5.60
Empire #				
F. D. Roosevelt	18	60.86	76.11	- 15.25
H. E. Davis	11	75.96	66.13	+ 9.83
J. Gallagher #				
Lincoln	36	76.62	74.52	+ 2.10
M. Spellacy	10	85.77	87.71	- 1.94
M. L. King	12	53.59	58.87	- 5.28
M. T. Herrick	1	58.00	64.10	- 6.10
N. Hale	19	72.28	70.19	+ 2.09
N. Baker	3	84.50	80.01	+ 4.49
P. Henry	21	83.66	75.39	+ 8.27
R. Jamison	42	89.12	84.07	+ 5.05
T. Jefferson	3	84.50	72.07	+ 12.43
W. Young	1	63.58	86.94	- 23.36
W. Wright	3	86.67	77.30	- 9.37
Wilson	7	87.86	80.37	- 7.49
Grand Total	225	76.78	74.03	+ 2.75

*Attendance rate comparisons are presented for public schools only. Nonpublic school attendance comparisons have not been made due to the unavailability of systemwide data.

#Did not serve Grade 9 students.

APPENDIX G

Title I Project STAR Achievement Test and Attendance Results for School Years 1976-77 through 1980-81

APPENDIX G-1

Achievement Test and Attendance Results for School Years 1976-77 through 1980-81

VOCABULARY

Year	Gr.	Description of Treatment	Test	N#	$\bar{X}$ Pre NCE (Fall Norms)	$\bar{X}$ Post NCE (Spring Norms)	Actual $\bar{X}$ NCE Gain @	ATTENDANCE RATE (STAR MINUS TOTAL STUDENTS)
1976-77	7	Block Classes - Students were provided with one period (approx. 45 min.) each of reading/English, social studies, mathematics, and skills reinforcement instruction daily. The first three subjects were always scheduled consecutively in a three period block. A certificated teacher (or Team Leader) acted as the student's homeroom teacher and coordinated instruction in each of the above mentioned subject areas. A mathematics teacher assumed major responsibility for mathematics instruction, while an educational aide provided support assistance during all Block Class activities.	CTBS Level 3 Form: T-Pre S-Post (40 items)	274	24.08	30.05	+5.97	+5.2%
1977-78	7	Block Classes - Treatment was identical to that offered during 1976-77. A description of the treatment appears above.	CTBS Level 3 Form: S-Pre and Post (40 items)	276	28.03	33.90	+5.87	+4.5%
1978-79	7	Block Classes - Treatment was identical to that offered during 1976-77 and 1977-78. Refer to the 1976-77 Description of Treatment.	CTBS Level 3 Form: S-Pre and Post (40 items)	211	30.33	33.63	+3.30	+4.3%

#The samples include only those public school students who received STAR instructional treatment for a full school year.

@Objective criterion-at least a 2.00 NCE mean gain (1976-77 & 77-78) and 4.00 NCE mean gain (1978-79, 79-80, & 80-81).

APPENDIX G-2 (Cont'd)

Achievement Test and Attendance Results for School Years 1976-77 through 1980-81

VOCABULARY

Year	Gr.	Description of Treatment	Test	N#	$\bar{X}$ Pre NCE (Fall Norms)	$\bar{X}$ Post NCE (Spring Norms)	Actual $\bar{X}$ NCE Gain@	ATTENDANCE RATE (STAR MINUS TOTAL STUDENTS)
1979-80	7	Block Classes - Both reading/English and social studies/skills reinforcement instruction were increased to two periods (approx. 90 min.). Each two-period subject was scheduled consecutively with the Team Leader only assuming instruction in his/her area of certification (i.e., either English or social studies). During social studies non-project teachers assisted the Team Leader daily, while programmed reading teachers daily offered assistance to small groups of students during English. Team leaders also provided support to students in their vocational education classrooms. Project aides continued to assist team leaders during all program activities.	SDRT Brown Level Form A (40 items)	354	28.29	36.09	+7.80	- .2%
	7	Learning Center - Students were provided with one period (45 minutes) of programmed reading assistance daily. Instruction is conducted by a project teacher who supervises one of five reading programs (i.e., New Century, Communication Skills, High Intensity, Hoffman, or Educational Development Lab).	SDRT Brown Level Form A (40 items)	244	32.66	32.65	- .01	-5.5%

#The samples include only those public school students who received STAR instructional treatment for a full school year.

@Objective criterion-at least a 2.00 NCE mean gain (1976-77 & 77-78) and 4.00 NCE mean gain (1978-79, 79-80, & 80-81).

APPENDIX G-3 (Cont'd)

Achievement Test and Attendance Results for School Years 1976-77 through 1980-81

VOCABULARY

Year	Gr.	Description of Treatment	Test	N#	$\bar{X}$ Pre NCE (Fall Norms)	$\bar{X}$ Post NCE (Spring Norms)	Actual $\bar{X}$ NCE Gain@	ATTENDANCE RATE STAR MINUS TOTAL STUDENTS
1979-80 (Cont'd)	8	Learning Center-Treatment was identical to that offered to Grade 7 Center participants. Refer to previous description.	SDRT Brown Level 1 Form A (40 items)	80	33.16	30.98*	-2.18	-9.9%
1980-81	7	Block Classes -Both reading/English and social studies skills reinforcement instruction was reduced to one period (or 45 min. per subject). The subjects continued to be scheduled consecutively in one room. Team Leaders no longer assumed primary responsibility for instruction in these subjects. These classes were taught by non-project teachers with team leaders and aides providing support assistance. Team leaders also provided selected students with reading skill tutorial assistance during their elective periods. Beginning with the second semester, Team Leaders and aides were removed from the English/social studies classrooms and provided project students with one period (45 min.) of reading and study skills instruction daily during the student's elective periods.	SDRT Brown Level Form A (40 items)	249	31.08	32.04	+ .96	+ .9%
	7	Learning Center - Treatment was identical to that offered to 1979-80 Grade 7 Center participants. Refer to 1979-80 description.	SDRT Brown Level Form A	199	34.61	35.41	+ .80	+ .8%

#The samples include only those public school students who received STAR instructional treatment for a full school year.
@Objective criterion-at least a 4.00 NCE mean gain.
*Because Spring norms are not available at the eigth grade level, ninth grade Fall norms were used to interpret the eighth grade post scores.

APPENDIX G-4 (Cont'd)

Achievement Test and Attendance Results for School Years 1976-77 through 1980-81

VOCABULARY

Year	Gr.	Description of Treatment	Test	N#	$\bar{X}$ Pre NCE (Fall Norms)	$\bar{X}$ Post NCE (Spring Norms)	Actual $\bar{X}$ NCE Gain@	ATTENDANCE RATE (STAR MINUS TOTAL STUDENTS)
1980-81 (Cont'd)	8	Learning Center - Treatment was identical to offered to 1979-80 Grade 7 Center participants. Refer to 1979-80 description.	SDRT Brown Level Form A (40 items)	249	36.44	34.39	-2.05	+2.3%
	9	Learning Center - Treatment was identical to that offered to 1979-80 Grade 7 Center participants. Refer to 1979-80 description.	SDRT Brown Level Form A (40 items)	118	32.75	37.23	+4.48	+2.8%

#The samples include only those public school students who received STAR instructional treatment for a full school year.
@Objective criterion-at least a 4.00 NCE mean gain.
*Because Spring norms are not available at the eigth grade level, ninth grade Fall norms were used to interpret the eighth grade post scores.
**Because Spring norms are not available at the ninth grade level, ninth grade Fall norms were used to interpret post ninth grade post scores.

APPENDIX G-5

Achievement Test and Attendance Results for School Years 1976-77 through 1980-81

READING COMPREHENSION

Year	Gr.	Description of Treatment	Test	N#	$\bar{X}$ Pre NCE (Fall Norms)	$\bar{X}$ Post NCE (Spring Norms)	Actual $\bar{X}$ NCE Gain@	ATTENDANCE RATE (STAR MINUS TOTAL STUDENTS)
1976-77	7	Block Classes - Students were provided with one period (approx. 45 min.) each of reading/English, social studies, mathematics, and skills reinforcement instruction daily. The first three subjects were always scheduled consecutively in a three period block. A certificated teacher (or Team Leader) acted as the student's homeroom teacher and coordinated instruction in each of the above mentioned subject areas. A mathematics teacher assumed major responsibility for mathematics instruction, while an educational aide provided support assistance during all Block Class activities.	CTBS Level 3 Form: T-Pre S-Post (45 items)	274	24.26	29.42	+5.16	+5.2%
1977-78	7	Block Classes - Treatment was identical to that offered during 1976-77. A description of the treatment appears above.	CTBS Level 3 Form: T-Pre and S-Post (45 items)	279	26.01	30.99	+4.98	+4.5%
1978-79	7	Block Classes - Treatment was identical to that offered during 1976-77 and 1977-78. Refer to the 1976-77 description of treatment.	CTBS Level 3 Form: T-Pre and S-Post (45 items)	211	27.56	30.89	+3.33	+4.3%

The samples include only those public school students who received STAR instructional treatment for a full school year.

@ Objective criterion-at least a 2.00 NCE mean gain(1976-77 & 1977-78) and 4.00 NCE mean gain(1978-79,79-80,& 80-81).

APPENDIX G-6 (Cont'd)

Achievement Test and Attendance Results for School Years 1976-77 through 1980-81

READING COMPREHENSION

Year	Gr.	Description of Treatment	Test	N#	$\bar{X}$ Pre NCE (Fall Norms)	$\bar{X}$ Post NCE (Spring Norms)	Actual $\bar{X}$ NCE Gain@	ATTENDANCE RATE (STAR MINUS TOTAL STUDENTS)
1979-80	7	Block Classes -Both reading/English and social studies/skills reinforcement instruction were increased to two periods (approx. 90 min.). Each two period subject was scheduled consecutively with the Team Leader only assuming instruction in his/her area of certification (i.e., either English or social studies). During social studies, non-project teachers assisted team leaders daily, while programmed reading teachers daily offered assistance to small groups of students during English. Team leaders also provided support to students in their vocational education classrooms. Project aides continued to assist team leaders during all program activities.	SDRT Brown Level Form A (60 items)	336	26.49	31.54	+5.05	- .2%
	7	Learning Center-Students were provided with one period (45 minutes) of programmed reading assistance daily. Instruction is conducted by a project teacher who supervises one of four reading programs (i.e., New Century, Communication Skills, High Intensity, Hoffman, or Educational Development Lab).	SDRT Brown Level Form A (60 items)	219	30.12	31.99	+1.87	-5.5%
	8	Learning Center - Treatment identical to that offered to Grade 7 Center participants. Refer to previous description.	SDRT Brown Level Form A (60 items)	66	27.54	25.00	-2.56*	-9.9%

#The sample includes only those public school students who received STAR instructional treatment for a full school year.

@Objective criterion-at least a 2.00 NCE mean gain (1976-77 & 77-78) and 4.00 NCE mean gain (1978-79, 79-80, & 80-81).

*Because Spring norms are not available at the the eighth grade level, ninth grade Fall norms were used to interpret the eighth grade post scores.

APPENDIX G-7 (Cont'd)

Achievement Test and Attendance Results for School Years 1976-77 through 1980-81

READING COMPREHENSION

Year	Gr.	Description of Treatment	Test	N#	$\bar{X}$ Pre NCE (Fall Norms)	$\bar{X}$ Post NCE (Spring Norms)	Actual $\bar{X}$ NCE Gain@	ATTENDANCE RATE (STAR MINUS TOTA STUDENTS)
1980-81	7	Block Classes -Both reading/English and social studies skills reinforcement instruction was reduced to one period (or 45 min. per subject). The subjects continued to be scheduled consecutively in one room. Team Leaders no longer assumed primary responsibility for instruction in these subjects. These classes were taught by non-project teachers with team leaders and aides providing support assistance. Team leaders also provided selected students with reading skill tutorial assistance during their elective periods. Beginning with the second semester, Team Leaders and aides were removed from the English/social studies classrooms and provided project students with one period (45 min.) of reading and study skills instruction daily during the student's elective periods.	SDRT Brown Level Form A (40 items)	704	27.39	26.89	- .50	+ .9%
	7	Learning Center - Treatment was identical to that offered to 1979-80 Grade 7 Center participants. Refer to 1979-80 description.	SDRT Brown Level Form A	394	31.75	33.45	+ 1.70	+ .8%

#The samples include only those public school students who received STAR instructional treatment for a full school year.
@Objective criterion-at least a 4.00 NCE mean gain.
*Because Spring norms are not available at the eigth grade level, ninth grade Fall norms were used to interpret the eighth grade post scores.
**Because Spring norms are not available at the ninth grade level, ninth grade Fall norms were used to interpret post ninth grade post scores.

APPENDIX G-8 (Cont'd)

Achievement Test and Attendance Results for School Years 1976-77 through 1980-81

READING COMPREHENSION

Year	Gr.	Description of Treatment	Test	N#	$\bar{X}$ Pre NCE (Fall Norms)	$\bar{X}$ Post NCE (Spring Norms)	Actual $\bar{X}$ NCE Gain@	ATTENDANCE RATE (STAR MINUS TOTA STUDENTS)
1980-81 (Cont'd)	8	Learning Center - Treatment was identical to offered to 1979-80 Grade 7 Center participants. Refer to 1979-80 description.	SDRT Brown Level, Form A (40 items)	661	33.33	31.39*	-1.94	+ 2.3%
	9	Learning Center - Treatment was identical to that offered to 1979-80 Grade 7 Center participants. Refer to 1979-80 description.	SDRT Brown Level Form A (40 items)	119	30.79	32.47**	+1.68	+ 2.8%

#The samples include only those public school students who received STAR instructional treatment for a full school year.
@Objective criterion-at least a 4.00 NCE mean gain.
*Because Spring norms are not available at the eigth grade level, ninth grade Fall norms were used to interpret the eighth grade post scores.
**Because Spring norms are not available at the ninth grade level, ninth grade Fall norms were used to interpret post ninth grade post scores.

APPENDIX G-9

Achievement Test and Attendance Results for School Years 1976-77 through 1980-81

MATHEMATICS COMPUTATION

Year	Gr.	Description of Treatment	Test	N#	$\bar{X}$ Pre NCE (Fall Norms)	$\bar{X}$ Post NCE (Spring Norms)	Actual $\bar{X}$ NCE Gain@	ATTENDANCE RATE (STAR MINUS TOTAL STUDENTS)
1976-77	7	Block Classes - Students were provided with one period (approx. 45 min.) each of reading/English, social studies, mathematics, and skills reinforcement instruction daily. The first three subjects were always scheduled consecutively in a three period block. A certificated teacher (or Team Leader) acted as the student's homeroom teacher and coordinated instruction in each of the above mentioned subject areas. A mathematics teacher assumed major responsibility for mathematics instruction, while an educational aide provided support assistance during all Block Class activities.	CTBS Level 3 Form: T-Pre S-Post (48 items)	274	32.30	40.74	+8.44	+5.2%
1977-78	7	Block Classes - Treatment was identical to that offered during 1976-77. A description of the treatment appears above.	CTBS Level 3 Form: S-Pre and Post (48 items)	271	34.93	42.38	+7.54	+4.5%
1978-79	7	Block Classes - Treatment was identical to that offered during 1976-77 and 1977-78. Refer to the 1976-77 Description of Treatment.	CTBS Level 3 Form: S-Pre and Post (48 items)	233	36.20	41.36	+5.16	+4.3%

The samples include only those public school students who received STAR instructional treatment for a full year.

@ Objective criterion-at least a 2.00 NCE mean gain (1976-77 & 1977-78) and 4.00 NCE mean gain (1978-79).

APPENDIX G-10 (Cont'd)

Achievement Test and Attendance Results for School Years 1976-77 through 1980-81

MATHEMATICS COMPUTATION

Year	Gr.	Description of Treatment	Test	N#	$\bar{X}$ Pre NCE (Fall Norms)	$\bar{X}$ Post NCE (Spring Norms)	Actual $\bar{X}$ NCE Gain@	ATTENDANCE RATE (STAR MINUS TOTAL STUDENTS
1979-80	7 & 8	Block Classes and Learning Center -Mathematics computation instruction was no longer a responsibility of STAR personnel. Project students obtained such instruction as a part of the general school program. Consequently, student achievement was not evaluated.	N/A	--	--	--	--	--
1980-81	7 & 8 & 9	Block Classes and Learning Center - Mathematics computation achievement was not evaluated. Refer to explanation appearing 1979-80.	N/A	--	--	--	--	--

The samples include only those public school students who received STAR instructional treatment for a full year.
@ Objective criterion-at least 2.00 NCE mean gain (1976-77 & 77-78) and 4.00 NCE mean gain (1978-79).

APPENDIX G-11

Achievement Test and Attendance Results for School Years 1976-77 through 1980-81

EVERYDAY SKILLS (READING)

Year	Gr.	Description of Treatment	Test	N#	$\bar{X}$ Pre Raw Score	$\bar{X}$ Post Raw Soore	Actual $\bar{X}$ NCE Gain θ	ATTENDANCE RATE (STAR MINUS TOTAL STUDENTS)
1976-77	7	Block Classes -Students were provided with one period (approx. 45 min.) each of reading/English, social studies, mathematics, and skills reinforcement instruction daily. The first three subjects were always scheduled consecutively in a three period block. A certificated teacher (or Team I Leader)acted as the student's homeroom teacher and co-ordinated instruction in each of the above mentioned subject areas. A mathematics teacher assumed major responsibility for mathematics instruction, while an educational aide provided support assistance during all Block Class activities.	EST Test A *	277	23.58	30.05	+6.47 t=11.53 p<.05	+5.2%
1977-78	7	Block Classes -Treatment was identical to that offered during 1976-77. A description of the treatment appears above.	EST Test A *	290	24.08	29.30	+5.55 t=7.46 p<.05	+4.5%
1978-79	7	Block Classes -Treatment was identical to that offered during 1976-77 and 1977-78. Refer to the 1976-77 description of treatment.	EST Test A*	199	25.91	29.89	+3.98 t=4.27 p<.05	+4.3%
1979-80	7	Block Classes--Both reading/English and social studies/skills reinforcement instruction were increased to two periods. (approx. 90 min.) Each two period subject was scheduled consecutively with the team leader only assuming instruction in his/her area of certification (i.e., either English or social studies). During social studies	EST Test A *	288	26.32	30.27	+3.95 t=11.62 p<.05	- .2%

* The Everyday Skills Test (EST) in reading contains a total of 45 items.

θ Objective criterion- significant increase ($p \leq .05$) in pre/post EST reading mean raw scores

\# The samples include only those students who received STAR skills reinforcement instruction for a full school year.

APPENDIX G-12 (Cont'd)

Achievement Test and Attendance Results for School Years 1976-77 through 1980-81

EVERYDAY SKILLS (READING)

Year	Gr.	Description of Treatment	Test	N#	$\bar{X}$ Pre Raw Score	$\bar{X}$ Post Raw Score	Actual $\bar{X}$ NCE Gain	ATTENDANCE RATE (STAR MINUS TOTAL STUDENTS)
1979-80 (Cont'd)		non-project teachers assisted Team Leaders daily, while programmed reading teachers daily offered assistance to small groups of students during English. Team Leaders also provided support to students in their vocational education classrooms. Project aides continued to assist team leaders during all program activities.						
1979-80	7 & 8	Learning Center-EST testing was not conducted because the STAR curriculum did not include skills reinforcement instruction for Grade 7 and 8 Learning Center participants.	N/A	--	--	--	--	--
1980-81	7	Block Classes -Both reading/English and social studies/skills reinforcement instruction was reduced to one period (or 45 min. per subject). The subjects continued to be scheduled consecutively in one room. Team Leaders no longer assumed primary responsibility for instruction in these subjects. These classes were taught by non-project teachers with Team Leaders and aides providing support assistance. Team Leaders also provided selected students with reading skill tutorial assistance during their elective periods. Beginning with the second semester, Team Leaders and aides were removed from the English/social studies classrooms and provided project students with one period(45 min) of reading and study skills instruction daily during the student's elective periods.	EST Test A*	708	25.48	28.98	+3.50 t=10.54 P<.05	+ .9%

* The Everyday Skills Test (EST) in reading contains a total of 45 items.
@ Objecitve criterion-significant ($p \leq .05$) in pre/post EST reading mean raw scores.
# The samples include only those students who received STAR skills reinforcement instruction for a full school year.

APPENDIX G-13

Achievement Test and Attendance Results for School Years 1976-77 through 1980-81

EVERYDAY SKILLS (STUDY SKILLS)

Year	Gr.	Description of Treatment	Test	N#	$\bar{X}$ Pre NCE (Fall Norms)	$\bar{X}$ Post NCE (Spring Norms)	Actual $\bar{X}$ NCE Gain	ATTENDANCE RATE (STAR MINUS TOTAL STUDENTS)
1976-77	7	Block Classes -Students were provided with one period (approx.45 min.) each of reading/English, social studies, mathematics, and skills reinforcement instruction daily. The first three subjects were always scheduled consecutively in a three period block. A certificated teacher (or Team Leader) acted as the student's homeroom teacher and coordinated instruction in each of the above mentioned subject areas. A mathematics teacher assumed major responsibility for mathematics instruction, while an educational aide provided support assistance during all Block Class activities.	EST Test B *	309	25.31	35.27	+9.76	+5.2%
1977-78	7	Block Classes -Treatment identical to that offered during 1976-77. A description of the treatment appears above.	EST Test B *	269	19.06	24.68	+5.62	+4.5%
1978-79	7	Block Classes -Treatment identical to that offered during 1976-77 and 1977-78. Refer to the 1976-77 description of treatment.	EST Test B *	197	19.09	21.88	+2.79	+4.3%
1979-80	7	Block Classes -Both reading/English and social studies/skills reinforcement instruction were increased to two periods. (Approx. 90 min.). Each two period subject was scheduled consecutively with the team leader only assuming instruction in his/her area of certification (i.e., either English or social studies). During social studies,	EST Test B*	274	20.99	22.01	+1.02	+4.3%

* The Everyday Skills Test (EST) in Study Skills contains a total of 50 items.

The samples include only those students who received STAR skills reinforcement instruction for a full school year. Objective criterion-at least a 4.00 NCE mean gain.

APPENDIX G-14

Achievement Test and Attendance Results for School Years 1976-77 through 1980-81

EVERYDAY SKILLS (STUDY SKILLS)

Year	Gr.	Description of Treatment	Test	N#	$\bar{X}$ Pre NCE (Fall Norms)	$\bar{X}$ Post NCE (Spring Norms)	Actual $\bar{X}$ NCE Gain θ	ATTENDANCE RATE (STAR MINUS TOTAL STUDENTS)
1979-80 (Cont'd)	7	non-project teachers assisted team leaders daily, while programmed reading teachers daily offered assistance to small groups of students during English. Team leaders also provided support to students in their vocational education classrooms. Project aides continued to assist team leaders during all program activities.						
	7 8 & 9	Learning Center-EST testing was not conducted because the STAR curriculum did not include skills reinforcement instruction for Grade 7 and 8 Learning Center participants.	N/A	--	--	--	--	--
1980-81	7	Block Classes - Both reading/English and social studies skills reinforcement instruction was reduced to one period (or 45 min. per subject). The subjects continued to be scheduled consecutively in one room. Team Leaders no longer assumed primary responsibility for instruction in these subjects. These classes were taught by non-project teachers with Team Leader and aides providing support assistance. Team Leader also provided selected students with reading skill tutorial assistance during their elective periods. Beginning with the second semester, team leaders and aides were removed from the English/social studies classrooms and provided project students with one period of reading and study skills instruction daily during the students electives.	EST Test B*	668	21.80	22.81	+1.01	

* The Everyday Skills Test (EST) in Study Skills contains a total of 50 items.

The samples include only those students who received STAR skills reinforcement instruction for a full school year.

θ Objective criterion-at least a 4.00 NCE mean gain.

APPENDIX H

Pupils Served and Per Pupil Cost in Project STAR from 1976-77 through 1980-81

PROJECT YEAR	TOTAL TITLE I EXPENDITURE	NUMBER PUPILS SERVED	PER PUPIL COST
1976-77	$ 867,728	864	$ 1,004
1977-78	$ 912,523	892	$ 1,023
1978-79	$ 1,134,284	1,256	$ 903
1979-80	$ 2,549,470	3,110	$ 820
1980-81	$ 3,043,089	4,123	$ 741

APPENDIX I

Title I Project STAR Survey Questionnaire Summaries for 1980-81

1. Public School Project Teachers
2. Non-Public School Project Teachers
3. Educational Aides
4. Public School Parents
5. Non-Public School Parents
6. Block Skills Reinforcement Students
7. Learning Center Students
8. Non-Public Students

183

APPENDIX I-1

CLEVELAND PUBLIC SCHOOLS
Division of Research and Development
June, 1981

1980-81 TITLE I PROJECT STAR CLASSES

Survey of Project Teachers

N=42

SCHOOL _____ DATE _____

1. TEACHING ASSIGNMENT

Please indicate your current teaching assignment by placing a "X" in front of the description which applies.

37% Block (Skills Reinforcement)

1% No Response

37% Learning Center A

1% Learning Center B

24% Learning Center C

2. PROJECT OPERATIONS

a. Did you encounter difficulty scheduling students into your Project STAR classes?

64% Yes 36% No

If "Yes", describe the difficulties you experienced. Students strongly objected to being arbitrarily removed from their elective classes...Students were not programmed into the Center when the master schedule was made... No help obtained from Guidance Dept., teacher had to schedule all students into center.

How were the difficulties listed above resolved? (If they were not resolved, please explain why).

Teacher and aide had to get permanent record card, review scores and schedule students...Student resentment lingered several weeks until they realized that they were not going back to their elective class..Everyone felt it was someone else's responsibility to fill the Center to capacity...

b. Did you find it necessary to make adjustments in your teaching as a result of the greater heterogeneous racial composition of students within your STAR classes?

7% Yes 93% No

If "Yes", briefly describe nature of the adjustments that were made in your teaching.

I had to use a wider range of material...Introduced games as a means of getting all students acquainted with each other...West Side students are difficult to motivate and their absentee rate from school is amazing.

FOR BLOCK (OR SKILLS REINFORCEMENT) TEACHERS ONLY

N=16

c. How would you rate the value of the following operational features of the project in terms of promoting student learning?

	Essential	Much Value	Some Value	Little or No Value	No Response
Block teacher's presence in the English classroom	25%	38%	25%	12%	---
Block teacher's presence in the social studies classroom	25%	38%	19%	12%	6%
Meetings held with your STAR team (i.e., involving the block teachers, resource teachers and aide)	19%	31%	31%	6%	3%

d. What effect did the second semester organizational change (i.e., from block to skills reinforcement classes) have on the quality of instructional assistance you could provide to your STAR students?

very positive	positive	no effect	negative	very negative	No Response
31%	31%	6%	13%	---	19%

- Briefly, describe how the change affected the instructional assistance you were able to provide to your STAR students.

Able to work with students in smaller groups and could concentrate on skills instead of subject areas...Change hindered student transfer of the learned skills to academic subjects.

e. What effect did the second semester organizational change (i.e., from block to skills reinforcement classes) have on your STAR students' learning?

very positive	positive	no effect	negative	very negative	No Response
37%	31%	6%	13%	---	13%

- Briefly, describe how the change influenced your STAR students' learning.

Able to provide more immediate feedback...Pace of instruction and content was more adapted to each student's need...Many students resented having to constantly work on worksheets

f. Indicate how many of your STAR students' parents communicated to you their feelings regarding the organizational change.

82 (or 2%) out of a total of 684 parents

- Of those who communicated their feelings to you, what percentage of of such parent communication could be classified in each of the categories listed below?

generally positive feelings	generally mixed feelings	generally negative feelings	No Response
50%	13%	6%	31%

FOR LEARNING CENTER TEACHERS ONLY
N=26

How appropriate was the amount of time students were required to attend the Learning Center (i.e., on a daily basis during the entire school year)?

4%	31%	61%	---	---
Much Too Much Time	A Little Too Much Time	About Right	Too Little Time	Much Too Little Time

No Response 1%

Please explain, if your response was other than "About Right".

It appeared necessary to do activities outside the New Century program, the same lab format became monotomous...More relevance to other school work so that the student understands the significanee of the lab work... Children lost enthusiasm after the first semester...

3. EDUCATIONAL AIDE N=42

How adequate were the supportive services provided by your aide? Indicate your response by placing a check in the column which most closely corresponds to your opinion.

	More Than Adequate	Adequate	Less Than Adequate	No Response
Ability to do assigned work	64%	24%	5%	7%
Willingness to do assigned work	69%	21%	2%	8%
Quality of actual job performance	60%	29%	5%	6%

Comments: Aides free the teacher to work individually with students... Aide did not respect the teacher as her boss...My aide was laid off at the end of the first semester...This had a very negative impact on the quality of services...

4. INSTRUCTIONAL AIDS

Instructional materials and supplies (books, work supplies, etc.) provided by the project are:

	Yes	NO	No Response
Appropriate to the learning levels of project students	93%	--	7%
Useful in achieving project objectives	90%	--	10%

4. INSTRUCTIONAL AIDS - continued

	Yes	No	No Response
Relevant to the interests of project students	90%	7%	3%
Adequate in quantity	83%	12%	5%

Comments: There seems to be more information of interest to girls than boys... With students attending Centers for five days there is a need for more materials in certain comprehension skill areas...It was very difficult to reproduce whole workbooks in the Center when additional copies were needed...Excellent variety.

5. ATTITUDES OF FACULTY

In your opinion, what value do the faculty members in your building place on Project STAR's efforts to improve student reading?

6%	Essential
43%	Much Value
40%	Some Value
7%	Little or No Value
4%	No Response

Comments: I often feel faculty members resent my class sizes...Many teachers have no idea what Learning Center does, we need to introduce what we do to the faculty...Outside of the department, a teacher knows little about what I am doing.. Some value the program highly, some do not...The faculty has been generally supportive.

6. PROJECT INSERVICE EFFECTIVENESS

a. Please indicate the total number of project sponsored inservice meetings which you attended this year.

Av. per teacher = 6.9 Average number of sessions attended by a typical public STAR teacher.

b. In terms of your own classroom instructional needs, how helpful did you find the information that was presented at Project STAR inservice sessions held throughout the year?

Very Helpful	Helpful	Somewhat Helpful	Not Helpful	No Response
57%	31%	10%	--	2%

c. To what extent did your classroom instructional approach change as a result of attending these project sponsored inservice sessions?

A Lot	Some	Not Much	None	No Response
7%	79%	12%	--	2%

6. PROJECT INSERVICE EFFECTIVENESS - continued

d. In planning for inservice next year, what recommendation would you make regarding each of the items listed below?

	Increase	Continue As Is	Decrease	No Response
Number of sessions offered	26%	62%	5%	7%
Variety of topics	40%	50%	----	10%
Time spent presenting each topic	17%	71%	5%	7%
Sessions that provide suggestive teaching strategies	62%	31%	----	7%

Please describe additional inservice recommendations you would like to see acted upon.

More discussion on reading strategies to help non-readers...Learning Center students should have more assistance learning to take standardized tests. More meetings designed to meet the needs of the very slow reader..More concrete information given on various activities to help motivate students..The meetings were very helpful.

7. PROJECT EFFECTIVENESS

a. In your opinion, what single feature of the project has contributed most to classroom effectiveness (in terms of improving pupils' learning)?

Small classes and educational aide assistance...Flexibility in format and structure which allows instruction to be adapted to individual needs... Sequential progression of skill building provided by the materials.

b. In your opinion, what single factor has been most detrimental (or contributed least) to pupils' learning?

Lack of parental contact on the part of the educational aide...Continual use of machines, there is a point of diminishing returns...Poor student attendance...Difficulty in motivating students if they know they are not getting a grade...Lack of variety in format of New Century.

c. What changes would you recommend be made in the project to improve the services offered to students?

Homeroom with lab teacher for better attendance..More connection to subject classroom...Lab services curtailed to only one semester. Second semester move students into another area of reading outside the lab...Give grades...The educational aide should be responsible for needed parental contact...Make sure students have STAR class written on their schedule when they receive it at the beginning of the semester.

7. PROJECT EFFECTIVENESS - continued

d. Record any additional comments you would like to make about the operations of the project.

Support and assistance always seems to be available in this project. I really appreciated the close contact with program management...I feel that changing the Block concept has destroyed to some extent the basis for the existence of the program. To me, changing this program has done a great injustice to the learning process of some of our youngsters. As Transition and STAR have changed in recent years we have lost many worthwhile aspects of the old program. The amount of involvement among team leader, aide, and students has been diluted. We are no longer able to follow-through on application of skills in the content area classroom...The programming of students into the centers would be a positive act. The student's attitude becomes negative when he is pulled from a class...I am most enthusiastic about this reading program. It works! It has great potential. It is efficient and well-run...More meetings with people in the same assignment as yourself to exchange ideas, successes and failures...Learning Centers have the "Dumb Kids" stigma. This should be changed with cooperation from faculty by "selling" the Center to students who have reading problems... There should be a way to schedule Project STAR classes in one uniform manner. A very excellent project in determining a child's level of reading...Problems were easy to identify because of the close contact with the students...I was given no training during the free two-week period before school began. This time could have been spent preparing for a program which I know absolutely nothing. Instead we were expected to attend make-shift "training sessions" on Saturdays...I am impressed by the interest the students have in the program. Despite the fact that by now many students are beginning to get bored and tired...they have been sufficiently motivated throughout the year.

APPENDIX I-2

CLEVELAND PUBLIC SCHOOLS
Division of Research and Development
June, 1981

1980-81 TITLE I PROJECT STAR CLASSES

Survey of Non-Public Project Teachers

N=15

SCHOOL _____ DATE _____

1. PROJECT OPERATIONS

Did you encounter difficulty scheduling students into your Project STAR classes?

53% Yes 47% No

- If "Yes", describe the difficulties you experienced. Some teachers resented the kids being taken out for Project STARhelp...The same children were also assigned to the van and were missing too many classes...6-7-8 are departmentalized - schedules conflicted.
- How were the difficulties listed above resolved? (If they were not resolved, please explain why.)

Reorganized my scheduling...The kids were taken out at different times during the 5 days thereby missing only one day for any particular subject

2. INSTRUCTIONAL AIDS

Instructional materials and supplies (books, work supplies, etc.) provided by the project are:

	Yes	No	No Response
Appropriate to the learning levels of project students	99%	--	1%
Useful in achieving project objectives	100%	--	--
Relevant to the interests of project students	100%	--	--
Adequate in quantity	100%	--	--

Comments: More material of high interest/easy reading that would interest the upper levels would be beneficial...The Hoffman materials were appropriate to the learning levels, but of low interest to the students...I believe the materials were more than adequate...Materials are good! I love the thinking reasoning workbooks such as Footsteps, Clouds, Drifting, etc.... The math materials were too simple and inadequate. It was necessary to purchase my own workbooks.

3. ATTITUDES OF FACULTY

In your opinion, what value do the faculty members in your building place on Project STAR's efforts to improve student reading?

27% Essential
33% Much Value
40% Some Value
___ Little or No Value

Comments: Most teachers were very receptive to the program... I feel classroom teachers often find taking children out of their class more of a distraction than an aid...The faculty opinions here run the gamut of "very useful" to "get rid of it".

4. PROJECT INSERVICE EFFECTIVENESS

a. Please indicate the total number of project sponsored inservice meetings which you attended this year.

7.5 Average number of sessions attended by a typical non-public STAR teacher

b. In terms of your own classroom instructional needs, how helpful did you find the information that was presented at Project STAR inservice sessions held throughout the year?

Very Helpful	Helpful	Somewhat Helpful	Not Helpful
60%	40%	---	---

c. To what extent did your classroom instructional approach change as a result of attending these project sponsored inservice sessions?

A Lot	Some	Not Much	None
53%	67%	---	---

d. In planning for inservice next year, what recommendation would you make regarding each of the items listed below?

	Increase	Continue As Is	Decrease
Number of sessions offered	13%	87%	---
Variety of topics	47%	53%	---
Time spent presenting each topic	13%	87%	---
Sessions that provide suggestive teaching strategies	47%	53%	---

Please describe additional inservice recommendations you would like to see acted upon.
The sessions were excellent. Most helpful were the discussions about individualized instruction...Have all-day meetings every other month instead of half day meetings every month...Allow teachers to pick-up and return meterials before and after inservice sessions...Interpretations of standarized test results...Better sessions on diagnosing math skills.

5. PROJECT EFFECTIVENESS

a. In your opinion, what single feature of the project has contributed most to classroom effectiveness (in terms of improving pupils' learning)?

Individualization of instruction...Working with students in small groups...The material provided by the project was very effective in aiding the pupils...Ability to adapt to non-public needs without being hampered by unnecessary regulations...Inservice meetings

b. In your opinion, what single factor has been most detrimental (or contributed least) to pupils' learning?

Meeting project students five times a week might be too many times a poor student has to miss his regular classes...Lack of motivation on behalf of the students...Teacher's and principal's attitudes...

c. What changes would you recommend be made in the project to improve the services offered to students?

Encourage schools to have STAR as a substitute for a subject rather than as an addition to their regular classes...A manadatory parent session to explain the program...Get a committee together to organize the math program

d. Record any additional comments you would like to make about the operations of the project.

Some parents have pulled their children out of the project in hopes that they won't fail, thinking that if the child is in his home-room all day he won't miss anything and therefore pass...The organization of the project is excellent...I enjoy working in Project STAR and I've written to Washington to have funding kept in the federally funded educational projects...More math materials are needed...Perhaps a more involved report card should be sent to the parents to inform them more adequately...Would rather have inservice meetings in the afternoon...Working in Project STAR was a very rewarding experience because I was able to individualize and had available to me a great deal of material with which to work...I have thouroughly enjoyed the program and have found individualizing instruction challenging.

CLEVELAND PUBLIC SCHOOLS
Division of Research and Development
1980-81

APPENDIX I-3

SURVEY OF EDUCATIONAL AIDES SERVING
TITLE I PROJECT STAR CLASSES

N=40

SCHOOL _____

YEARS OF SERVICE

Number of years (including the present year) for which you have served as an aide in this Project:

--- One Year
20% Two Years
12% Three Years
68% More Than Three Years

ACTIVITIES OF EDUCATIONAL AIDES

	In the column below, check the three activities which involve the greatest amount of your time.	In the column below check the three activities which involve the least amount of your time.
1. Clerical assistance (marking papers, duplicating materials, etc.)	17%	14%
2. Helping pupils on an individual basis.	27%	1%
3. Working with pupils in small groups.	20%	6%
4. Supervising class (during study sessions, lunch period, etc.)	4%	22%
5. Conferring with parents via telephone.	17%	7%
6. Conferring with parents via home visits.	3%	15%
7. Conferring with parents via school visits.	5%	13%
8. Conferring with teachers of pupils in project.	6%	15%
9. Other (please specify)	1%	7%

(Specify) Taking care of classroom equipment...keeping lab clean...

In a typical week, do any of your assignments include duties that are not related to Project STAR activities?

55% Yes 40% No 5% No Response

If "yes"

Nature of duties breakfast assistance...assist in cafeteria... e.g., working in office...staying with tardy students

Average number of periods per week <5 periods

IMPORTANCE OF ACTIVITIES

	In the column below, check the three activities which you consider of greatest benefit to the STAR students.
1. Clerical assistance (marking papers, duplicating materials, etc.)	7%
2. Helping pupils on an individual basis.	31%
3. Working with pupils in small groups.	26%
4. Supervising class (during study sessions, lunch period, etc.)	2%
5. Conferring with parents via telephone.	20%
6. Conferring with parents via home visits.	4%
7. Conferring with parents via school visits.	6%
8. Conferring with teachers of pupils in project.	4%
9. Other (Please specify).	---

SUPPORTIVE ASSISTANCE

To what extent have the services of the social workers been of help to you?

Extremely Helpful	Very Helpful	Of Some Help	Of Little Help	No Response
23%	45%	20%	10%	2%

What recommendations would you make that may improve upon the support assistance the social workers provide to STAR class students?

The social workers should visit the class more often so that the students can get to know them better...Social workers have done an outstanding job in meeting the needs of students outside the school environment...Working with more students at one time.

PROJECT EFFECTIVENESS

What types of additional training and/or information would be of service to you in your work as a educational aide in this project?

I would like to receive additional training in dealing with behavior/discipline problems...We have received enough training...Inservice training when new material is to be introduced in the classroon...Workshops aimed at helping us become more effective in teaching reading

What has been the greatest problem you have encountered in your duties as an educational aide?

Failure to be able to communicate with some parents when it is needed...Student absentisim...Working with students who are bored after being in the program awhile... Students who fail to work up to their potential especially after not being able to issue report card grades...I haven't encountered any real problems

What changes would you recommend to improve this project?

Methods should be devised to have parents take a greater interest in their child's progress...I would recommend that a grade be given on the student's report card to show their achievement and progress in reading...The Desegregation Community Coordinator should be more involved in our PAC meetings...All aides resume the responsibility of home visits again...Give students a little more variety because they complain about doing the same work after they have been in class a whole semester.

APPENDIX I-4

Public School Parent Response Summary

Dear Parent: N=505

We are currently developing plans for next year's Project STAR program. You can help us in this planning by responding to the questions appearing below. Your response to these questions should be based upon the kind of experiences your son or daughter has had during the current school year. Please answer the questions according to how you honestly feel about them.

WHEN YOU COMPLETE THIS QUESTIONNAIRE HAVE YOUR SON OR DAUGHTER RETURN IT TO HIS OR HER PROJECT STAR TEACHER.

Thank you for your cooperation

(INDICATE YOUR RESPONSE BY CIRCLING THE LETTER WHICH MOST CLOSELY CORRESPONDS TO YOUR HONEST FEELING)

1. Has you child talked to you about his/her STAR class this year?

a. Yes	67%
b. No	13%
c. No Response	--

2. How did your child seem to feel about his/her STAR class during the first school semester?

a. Seemed very satisfied.	55%
b. Seemed more or less satisfied.	23%
c. Undecided.	14%
d. Seemed more or less dissatisfied.	3%
e. Seemed very dissatisfied.	4%
f. No Response	1%

3. How did your child seem to feel about his/her STAR class during the second school semester?

a. Seemed very satisfied.	54%
b. Seemed more or less satisfied.	28%
c. Undecided.	11%
d. Seemed more or less dissatisfied.	4%
e. Seemed very dissatisfied.	1%
f. No Response	--

4. Comparing this year to last year, my child seems to:

a. be very interested in reading.	35%
b. be somewhat interested in reading.	33%
c. have about the same interest in reading.	25%
d. be somewhat less interested in reading.	3%
e. be very uninterested in reading.	3%
f. No Response	1%

5. Comparing this year to last year, I feel my child is doing:

a. much better in reading.	46%
b. somewhat better in reading.	35%
c. about the same in reading.	17%
d. somewhat worse in reading.	1%
e. much worse in reading.	1%
f. No Response	--

6. Because of the STAR class I feel my child is doing:

a. much better in school this year than last year.	39%
b. somewhat better in school this year than last year.	33%
c. about the same in school this year than last year.	23%
d. somewhat worse in school this year than last year.	1%
e. much worse in school this year than last year.	1%
f. No Response	3%

7. I feel the STAR class is doing a:

a. very good job in educating my child.	45%
b. good job in educating my child.	35%
c. fair job in educating my child.	17%
d. poor job in educating my child.	.1%
e. very poor job in educating my child.	1%
f. No Response	1%

ANY ADDITIONAL COMMENTS YOU MAY HAVE REGARDING THE STAR PROJECT WOULD BE HELPFUL!

APPENDIX I-4 (Cont'd)

Non-Public School Parent Response Summary

N=229

Dear Parent:

We are currently developing plans for next year's Project STAR program. You can help us in this planning by responding to the questions appearing below. Your response to these questions should be based upon the kind of experiences your son or daughter has had during the current school year. Please answer the questions according to how you honestly feel about them.

WHEN YOU COMPLETE THIS QUESTIONNAIRE HAVE YOUR SON OR DAUGHTER RETURN IT TO HIS OR HER PROJECT STAR TEACHER.

Thank you for your cooperation

(INDICATE YOUR RESPONSE BY CIRCLING THE LETTER WHICH MOST CLOSELY CORRESPONDS TO YOUR HONEST FEELING)

1. Has you child talked to you about his/her STAR class this year?

a. Yes	83%
b. No	7%
c. No Response	10%

2. How did your child seem to feel about his/her STAR class during the first school semester?

a. Seemed very satisfied.	38%
b. Seemed more or less satisfied	37%
c. Undecided.	14%
d. Seemed more or less dissatisfied.	7%
e. Seemed very dissatisfied.	4%
f. No Response	--

3. How did your child seem to feel about his/her STAR class during the second school semester?

a. Seemed very satisfied.	53%
b. Seemed more or less satisfied.	31%
c. Undecided.	9%
d. Seemed more or less dissatisfied.	5%
e. Seemed very dissatisfied.	2%
f. No Response.	--

4. Comparing this year to last year, my child seems to:

a. be very interested in reading.	36%
b. be somewhat interested in reading.	43%
c. have about the same interest in reading.	14%
d. be somewhat less interested in reading.	3%
e. be very uninterested in reading.	1%
f. No Response	3%

5. Comparing this year to last year, I feel my child is doing:

a. much better in reading.	52%
b. somewhat better in reading.	36%
c. about the same in reading.	8%
d. somewhat worse in reading.	1%
e. much worse in reading.	--
f. No Response	3%

6. Because of the STAR class I feel my child is doing:

a. much better in school this year than last year.	44%
b. somewhat better in school this year than last year.	41%
c. about the same in school this year than last year.	12%
d. somewhat worse in school this year than last year.	3%
e. much worse in school this year than last year.	--
f. No Response	--

7. I feel the STAR class is doing a:

a. very good job in educating my child.	49%
b. good job in educating my child.	34%
c. fair job in educating my child.	14%
d. poor job in educating my child.	2%
e. very poor job in educating my child.	-%
f. No Response	1%

ANY ADDITIONAL COMMENTS YOU MAY HAVE REGARDING THE STAR PROJECT COULD BE HELPFUL!

APPENDIX I-5

Survey of Student Opinion*

Block/Skills Reinforcement Classes
N=248

ITEM	Strongly Agree	Agree More Than Disagree	Not Sure	Disagree More Than Agree	Strongly Disagree	No Response
1. I'm reading better this year than I did last year.	43%	36%	12%	5%	3%	1%
2. Being in a STAR class has helped me do better in my regular classes.	29%	31%	21%	10%	8%	1%
3. Going to the STAR class helped me learn to read better.	37%	29%	20%	6%	7%	1%
4. I'm glad I'm in a STAR class.	21%	23%	23%	12%	20%	1%
5. I'd like to be in a STAR class next year.	12%	13%	25%	15%	33%	2%
6. During the first semester of this school year, I liked going to my STAR class.	24%	28%	20%	13%	11%	4%
7. Students who aren't in the STAR classes wish that they were in them.	10%	13%	39%	16%	20%	2%
8. I think the STAR classes should be in our school next year.	29%	18%	27%	10%	15%	1%
9. The teacher in my STAR class did a good job in teaching me how to read.	47%	25%	15%	5%	7%	1%
10. During the second semester of this school year, I liked going to my STAR class.	27%	26%	18%	8%	16%	5%

*Administered to students in June, 1981.

APPENDIX I-5 (Cont'd)

Survey of Student Opinion*

Learning Center Classes
N=338

ITEM	Strongly Agree	Agree More Than Disagree	Not Sure	Disagree More Than Agree	Strongly Disagree	No Response
1. I'm reading better this year than I did last year.	52%	30%	12%	3%	2%	1%
2. Being in a STAR class has helped me do better in my regular classes.	30%	40%	17%	6%	7%	--
3. Going to the STAR class helped me learn to read better.	41%	34%	15%	6%	3%	1%
4. I'm glad I'm in a STAR class.	32%	27%	17%	9%	14%	1%
5. I'd like to be in a STAR class next year.	22%	17%	24%	13%	23%	1%
6. During the first semester of this school year, I liked going to my STAR class.	33%	24%	16%	13%	11%	3%
7. Students who aren't in the STAR classes wish that they were in them.	15%	14%	40%	11%	19%	1%
8. I think the STAR classes should be in our school next year.	41%	26%	18%	5%	9%	1%
9. The teacher in my STAR class did a good job in teaching me how to read.	61%	21%	9%	4%	4%	1%
10. During the second semester of this school year, I liked going to my STAR class.	34%	28%	14%	8%	13%	3%

*Administered to students in June, 1981.

APPENDIX I-5 (Cont'd)

Survey of Student Opinion*

Nonpublic School Classes
N=456

ITEM	Strongly Agree	Agree More Than Disagree	Not Sure	Disagree More Than Agree	Strongly Disagree	No Response
1. I'm reading better this year than I did last year.	49%	35%	11%	2%	2%	1%
2. Being in a STAR class has helped me do better in my regular classes.	39%	28%	21%	7%	4%	1%
3. Going to the STAR class helped me learn to read better.	49%	25%	14%	7%	4%	1%
4. I'm glad I'm in a STAR class.	49%	21%	11%	5%	13%	1%
5. I'd like to be in a STAR class next year.	42%	14%	18%	6%	20%	--
6. During the first semester of this school year, I liked going to my STAR class.	41%	23%	12%	10%	13%	1%
7. Students who aren't in the STAR classes wish that they were in them.	32%	14%	31%	7%	15%	1%
8. I think the STAR classes should be in our school next year.	58%	19%	10%	4%	8%	1%
9. The teacher in my STAR class did a good job in teaching me how to read.	63%	19%	7%	3%	7%	1%
10. During the second semester of this school year, I liked going to my STAR class.	47%	23%	12%	5%	10%	3%

*Administered to students in May, 1981.

PUPIL ADJUSTMENT PROJECT

Prepared by

Reba Garvey
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1980-1981

PUPIL ADJUSTMENT PROJECT

1980-81 Title I Evaluation

PURPOSE AND OVERVIEW

The purpose of PAP (Pupil Adjustment Project) is to develop basic social and academic skills among kindergarten pupils exhibiting special needs (but not identified as LD or EMR). PAP features supplementary instruction based on pupils' unique needs and learning styles, interdisciplinary supportive services, and specialized staff development. The highly individualized instructional model involves extensive diagnosis and strong emphasis on language development, supplementing regular half-day kindergarten provided under the school system's general fund.

PAP services are provided in three formats/intensities. Children enrolled in a Comprehensive Center class of 10-12 children are transported from and to home daily; they spend the entire school day at this Center. Other children are transported from their home-schools to one of the Adjustment Centers where, in a group of 10-15 children from several schools, they receive approximately two hours of supplementary instruction in the morning or afternoon; they spend the remainder of the day with their home-school kindergarten class (of 32 children, on the average). Still other children are served at their home schools by a PAP Traveling Teacher, who works with them--individually or in a small group--on a "pull out" basis, for about an hour three times a week.

SERVICE SUMMARY

Pupils Served: 181 Grade Served: Kdg. Years in Operation: 13

Schools: '47 public

(See Appendix A.)

Staffing:

1 Consultant Teacher: Project Manager, FT	1 Social Worker, FT
2 Psychologists, PT	12 Teachers--7 FT, 5 PT
2 Speech Therapists, FT	11 Educational Aides, FT
	1 Clerk, FT
	6 Drivers--5 FT, 1 PT

Total Title I Expenditures: $624,613 Per Pupil Cost: $3,451*

SUMMARY OF FINDINGS

During 1980-81, the Pupil Adjustment Project successfully completed its thirteenth year in operation. Children's gains in language skills were greater than predicted. The same was true only for Comprehensive Center pupils in mathematics. Teachers' pre-post ratings of children's social competency reflected growth at expected levels in all areas: self-sufficiency, emotional maturity, social skills and self-concept.

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* The per-pupil cost represents only Title I expenditures, which were in addition to general fund support.

OBJECTIVES AND OUTCOMES

- Process Objective 1: For the self-contained Comprehensive Centers, placement of the majority of 4-to-6-year-old children will be made on or before November 1, 1980, but placement may occur later as children are identified and space is available.

  - Outcome: This objective was attained. Project records submitted to the evaluator indicated that 59 (90.8%) of 65 children served at Comprehensive Centers were enrolled by November 1, 1980, as proposed.

- Process Objective 2: Eligible children will be admitted to Adjustment Centers or assigned to a Traveling Teacher at any time during the year, as special identification procedures are completed and need arises.

  - Outcome: This objective was attained. Project records submitted to the evaluator reflected admission of children to Adjustment Centers from November through May and assignment of pupils to Traveling Teachers from November through April.

- Process Objective 3: Criteria for accepting pupils from regular Early Childhood Education classes into Adjustment Centers and for returning these same children to their respective regular classes--developed and piloted during the 1978-79 school year--will be re-evaluated.

  - Outcome: Literally, this objective was not attained (although the intended goal was reached).

    - The "criteria," strictly speaking, for any PAP placement are established according to Title I regulations and so stated in the proposal. Beyond these general requirements for eligibility, the prospective PAP child exhibits one or more of the following: lags in perceptual-motor development; language delays/communications problems; social/emotional immaturity; poor comprehension; retention problems. Referrals to PAP are most frequently initiated by the child's (pre-kindergarten) teacher. Placement priority is offered to children exhibiting the greatest need.

    - The procedures for referral of a child to PAP have been refined and clearly specified. Parents and all school personnel involved with the child (teacher, principal, nurse, social worker, speech therapist, psychologist) provided input, on the basis of which these school personnel, as a team, formulated the recommendation shared with the child's parents. Placement recommendations were made on the basis of each child's need (but were affected by the realities of geography, available space, transportation and parental consent).

    - The referral procedures (rather than established criteria) were re-evaluated on an ongoing basis by project staff and all others involved.

    - Teachers' records submitted to the evaluator indicated that at least six Adjustment Center pupils were reassigned by team recommendation/parental decision during the school year--four to

Process Objective 3 - (continued)

another Adjustment Center, one to a Comprehensive Center and another to regular kindergarten (with ongoing assistance from a Traveling Teacher).

Process Objective 4: Project and regular classroom teachers will be involved in planning and developing an instructional program which will respond to the needs of children in the following areas:

- communication skills adequate for listening to and expressing feelings, needs and ideas;
- sensory-motor skills for development of control of the body in the environment;
- development of self-esteem and self-confidence through successful experiences;
- sensory discrimination for development of awareness of and sensitivity to the environment.

Outcome: This objective was attained during 1980-81. The manager's reports and other project documents provided evidence that procedures were implemented to facilitate formal--as well as informal--contacts among project and regular teachers.

- Early in the school year, PAP staff made special efforts to insure that teachers receiving children who participated in PAP during 1979-80 were appropriately informed/advised of each child's needs. The manager reported that receiving teachers had indicated that having this information early in the school year had been very helpful.
- Regular teachers and other non-project school staff were involved on an ongoing basis with PAP Adjustment Center and Traveling Teachers, relevant to children's needs/progress and coordination of instruction.
- In November, February and May, arrangements for class coverage were made so that regular kindergarten teachers could participate in PAP Adjustment Center team meetings pertinent to their children.

Process Objective 5: In addition to regular inservice meetings held by the Division of Early Childhood Education, specialized staff development will be conducted in groups--and, as indicated, individually--to facilitate attainment of project goals. Sessions will deal with such topics as:

- individualizing the instructional plan based on assessed needs;
- systematically observing and recording child behavior;

. Process Objective 5 - (continued)

- cognitive mapping;

- developing curriculum appropriate to varied needs of pupils.

. Outcome: This objective was attained during 1980-81. The manager's reports and other project documents provided evidence that the proposed specialized staff development was carried out in a variety of ways.

. Specialized inservice for PAP staff was scheduled into the Early Childhood Education orientation sessions held on September 17, 18 and 19, 1980. Additional inservice meetings for PAP instructional staff were held on October 24; February 13; May 7 and 21, and June 1.

. The topics mentioned above were reemphasized through observation-workshops (stuctured visitations to another PAP center). Such a workshop was provided for Comprehensive Center teachers on April 9, for Adjustment Center teachers on April 15 and for all project educational aides on April 30.

. Throughout the year, individualized on-site inservice was provided for PAP teachers by the project manager and Early Childhood Education teacher consultants. The number of consultant visits per teacher ranged from 2 to 13, with an average (median) of 8.

. Application of inservice "topics" to instruction of individual children was further promoted during team meetings (i.e., case conferences), discussed below in relation to Process Objective 7.

. Process Objective 6: Special staff inservice will be conducted with the assistance of consultants from the University of Illinois relevant to utilization of PEEC (Precise Early Education for Children).

- Selected staff will attend sessions at the University.

- On-site staff development will be provided to PAP as a service of PEEC replication program.

- Techniques and findings will be shared in dissemination sessions with the total project staff.

. Outcome: This objective was not attained during 1980-81. It was not possible for PAP staff to travel to the University or for PEEC personnel to provide inservice in Cleveland this year. Staff did, however, continue to disseminate ideas and techniques developed by/with PEEC over the past several years.

. Process Objective 7: Staff case conferences will be scheduled regularly to discuss selected children among instructional staff and representatives of supportive services--social work, special services (parent involvement), psychology, speech therapy, nursing.

Process Objective 7 - (continued)

Outcome: This objective was attained. The manager's reports and other project records documented the regular scheduling of team meetings, i.e., case conferences.

At Comprehensive Centers, initial team meetings to develop instructional plans for each child were held on October 2, 3, 7 and 8, 1980. Comparable meetings at Adjustment Centers took place the first week of November, 1980. In late January and early February, team meetings at each center were devoted to establishing a current baseline reading on the functioning of each child. At the May, 1981 series of meetings, team members reassessed each pupil's progress and formulated for each a placement recommendation for the fall of 1981.

Process Objective 8: Involvement of parents with the learning experiences of their children will be continued through:

- scheduling periodic parent-group meetings and parent educational programs;
- dissemination of information through The Bridge (newsletter for parents of children in Early Childhood Education);
- encouragement of parent conferences and meetings with staff;
- promotion of parent visits to the Parent Resource Center as well as the classroom;
- integration of parents' opinions and suggestions into program operations, whenever possible.

Outcome: This objective was attained. Project reports and other documents indicated extensive efforts to increase/improve parent involvement.

The project manager reported a total of 56 presentations to parent groups. These included an opening parent-meeting at each Comprehensive Center in mid-October and at each Adjustment Center early in November. PAP staff, along with other Early Childhood program personnel, provided several citywide parent-education programs, such as the following.

- On November 13, 1980, 127 Early Childhood parents (four with children in PAP) representing 53 schools met to learn about the projects and to plan parent programs for the year.
- On January 29, 1981, project parents were among participants in an Early Childhood citywide program, "What [Cuyahoga County] Cooperative Extension Offers."
- With Family Health Association personnel serving as leaders, PAP parents participated in discussions of "Discipline: Love and Limits" at a workshop held in their cluster (elementary and

Process Objective 8 - (continued)

secondary schools grouped for desegregation) during February, 1981. Seven such workshops were held, one in each cluster.

- On April 8, 1981, Miss Earnestine Simmons, Head of Children's Services, East Cleveland Public Library, was featured at the fifth annual Early Childhood parent reading readiness workshop held at the (Main) Cleveland Public Library. Five project parents were among those learning "How to Help Your Child Bloom."

- In May, 1981 two workshops for parents, at schools, were held by the Cuyahoga County Cooperative Extension Service; some project parents learned more about feeding their families.

Three issues of The Bridge (newsletter for parents of children in Early Childhood Education programs) were sent home with pupils--in January, March and June, 1981. Through words and pictures, parents were informed about matters such as: volunteering in the classroom; parent meetings--past and forthcoming; services provided by community agencies (TOT-LINE, TEL-MED, Parenting Center at neighborhood branch of public library, etc.); promotion of children's learning through play, visits to parks, trips to museums; etc.

Parents were encouraged to visit centers and meet with staff throughout the year, following the opening parent-meetings mentioned above. Supportive staff (speech therapists, psychologists, social worker) reported 1,505 parent conferences (more than eight per child) plus 318 home visits (averaging almost two per pupil). Although no count of parent visits to centers to observe was reported, by June 1 a total of 633 hours of assistance at PAP centers had been logged by 52 volunteers. By June 12, teachers had conferred with the parent(s) of each PAP pupil about the recommended fall-of-1981 placement and suggested summer activities for parents to engage in with their children to promote learning.

Parents were encouraged to borrow from one of two Sharing--i.e., Parent Resource--Centers (at schools) materials for use with their children for home reinforcement of school learning. The Sharing Center located at a west-side school made available materials in Spanish as well as English. Records of utilization/circulation were not available.

Parent input was welcomed by project staff at all times. It was more formally sought through the Project Priorities Committee (a PAP-focused subcommittee of the District Advisory Council), three or four members of which met with the project manager on February 24 and April 1, 1981. PAP was represented in the District (formerly, Citywide Title I Parent) Advisory Council at meetings on November 18, January 12, February 17, March 9, April 6 and May 5.

Performance Objective 1: Project children served for a period of at least nine weeks will show a mean gain of at least four NCE units on the TOBE Language and Mathematics tests, administered on a pre-post-service basis.

Performance Objective 1 - (continued)

Outcome: This objective was attained in Language projectwide and in Mathematics at Comprehensive Centers only.

Teachers administered and scored the pre-tests in early November and the post-tests in mid-May. Raw scores were submitted to the evaluator for conversion to NCE's (on the basis of the publisher's only norms--November for Pre-K and K, used with pre- and post-scores, respectively) and analysis.

Both pre- and post-test results were available for 138 of the children served for at least nine weeks. For this total group, the mean gain in Language was 12.4 NCE units, in Mathematics .9 NCE unit.

Results were analyzed separately for pupils enrolled at Comprehensive Centers (N = 53), attending Adjustment Centers (N = 58) and served by a Traveling Teacher (N = 27). Findings in tabular form have been included as Appendix B.

- At Comprehensive Centers, the mean gain in Language was 14.6 NCE units; in Mathematics, the mean gain was 7.3 NCE units. These reflected movement from approximately 34 %-ile to 62 %-ile in Language, 31 %-ile to 44 %-ile in Mathematics--based on the norms mentioned above.

- At Adjustment Centers, the mean gain in Language was 13.3 NCE units--greater than in preceding years. (This may have been attributable to the fact that, during 1980-81, for the first time, Adjustment Center children were in school for the full-day--spending the other half-day with their home-school kindergartens.) This represented movement from approximately 36 %-ile to 59 %-ile, based on the norms indicated above. The Adjustment children's mean pre-post scores in Mathematics reflected no change--approximately 48 %-ile on both pre- and post-test.

- Children served at least nine weeks by a Traveling Teacher showed a mean gain of 6.5 NCE units in Language, moving from approximately 36 %-ile to 47 %-ile--based on the norms described earlier. Their relative standing in Mathematics declined from approximately 42 %-ile to 27 %-ile.

Performance Objective 2: Project children at a Comprehensive Center will show a significantly ($p < .05$) higher level of social competency skills at the end of the year, based on teachers' pre-post ratings on the Levine-Elzey Preschool Social Competency Scale.

Outcome: This objective was clearly attained, at a level of statistical significance ($p < .001$) exceeding that proposed.

Comprehensive Center teachers completed the Levine-Elzey for each pupil in early November and mid-May. These were submitted to the evaluator for calculation of mean ratings (maximum possible = 4)

on each of four factors: self-sufficiency, emotional maturity, social skills and self-concept. Both pre- and post-ratings were available for 59 children.

Mean ratings on the four factors over the past three years have been included as Appendix C. Although the average gains in social skills and self-concept were slightly lower for 1980-81 than for the preceding two years, the objective was still attained.

ADDITIONAL FINDINGS

- Supportive Services: The scope of the supportive services provided for PAP children far exceeded that reflected earlier in discussions of team meetings and parent conferences, the importance of neither of which should be minimized. Beyond health and other supportive service provided/obtained through general fund personnel, PAP children were assisted by a full-time social worker, two full-time speech therapists, and two psychologists assigned half-time to PAP.

  - These project staff, collectively, averaged approximately 140 conferences per week with regular school staff and 9.4 agency contacts per week--pertinent to PAP children.

  - All children in the project were screened for speech and/or hearing deficiencies. The speech therapists logged approximately 37 diagnostic testing/therapy sessions per week and, throughout the year, made about 25 referrals to A. G. Bell School for the Deaf or to community health resources.

  - The psychologists averaged 4.3 "formal assessments" and 7.4 classroom observations of children per week.

  - The social worker logged an average of 35.7 classroom observations of children per week.

  Through cooperative efforts and multiple contacts with regular school instructional and supportive staff, other project and Early Childhood personnel, as well as community agencies, PAP supportive personnel provided extensive assistance in meeting the special needs of children enrolled in this project.

- Fall, 1981 Placement: As noted earlier, the instructional/supportive team for each PAP center (or child served by a Traveling Teacher) formulated a Fall, 1981 placement recommendation for each child still enrolled by June, 1981 (N = 172).

  - The recommended placement for 85 children (49.4%) was first grade, a slightly larger percentage than the preceding year (40.3%). Although 70 of these children would not have been age-eligible to remain in PAP during 1981-82, the Metropolitan Readiness Tests Pre-reading

ADDITIONAL FINDINGS - (continued)

Composite results indicated that they were ready for first grade. Scores available for 65 of these pupils yielded a mean raw score of 47.6, approximately 46 %-ile on national norms.

- Slightly lower percentages than last year were recommended to remain with PAP for another year (22.7%) or were referred to Special Education (25.0%).

- Five children were recommended for regular kindergarten for 1981-82, as was one pupil the preceding year.

- Metropolitan Readiness Tests: The Metropolitan Readiness Tests, Level II (Form P) were administered citywide to all kindergarten children (including almost all PAP pupils) late in May, 1981.

  - On the Pre-reading Composite Score for 80 (of the 85) PAP children recommended for first-grade placement in the fall of 1981, the mean raw score was 46.8 (approximately 44 %-ile)--almost identical to the 1979-80 mean of 46.4 (for 37 children recommended for grade one and tested). The 1980-81 citywide mean score was not available as of this writing.

  - On the Quantitative Skill Area Score for these same groups of pupils the 1980-81 mean raw score was 12.7 (approximately 37 %-ile), a slight increase over 11.6 (approximately 27 %-ile) for 1979-80. The 1980-81 citywide mean was not available as of this writing.

CONCLUSIONS

The Pupil Adjustment Project completed its thirteenth year of successful operation during 1980-81. Six of eight process objectives were attained, and these were the objectives most directly affecting services to participating children and their families.

One performance objective was fully attained, the other partially. In the cognitive areas, PAP children's average gain exceeded that proposed in Language and--at Comprehensive Centers only--in Mathematics. The average gain in Language for Adjustment Center children was almost as great as for Comprehensive Center pupils, possibly because Adjustment children remained in school for the full day this year. In the affective areas, gains in all four factors of social competency were satistically significant at levels exceeding that proposed.

On the basis of the findings reported above and observations of project operations over the years, it is recommended that:

- the process objectives for PAP be simplified and restated in more measurable terms;

- the Metropolitan Readiness Tests, Level I be piloted as a pre-test--to

CONCLUSIONS - (continued)

be utilized with results of the MRT, Level II administered citywide as the post-test--for assessing children's gains in cognitive areas;

- possible reasons for absence of gains in quantitative areas except at Comprehensive Centers be explored;

- advantages and disadvantages of full-day Comprehensive Center service, as compared to half-day Adjustment Center plus half-day regular kindergarten service, be investigated further in relation to both educational and cost effectiveness.

APPENDIX A

PUPIL ADJUSTMENT PROJECT

Schools Served 1980-1981

Alfred A. Benesch
Anthony Wayne
Anton Grdina
Benjamin Franklin
Bolton

Buckeye-Woodland
Capt. Arthur Roth
Case
Charles H. Lake (C*)
Charles Orr

Chesterfield
Clark
Corlett
Daniel E. Morgan
Denison

Dike
East Clark
East Madison
Geo. W. Carver (C;A*)
Giddings

Harvey Rice
Hazeldell
Iowa-Maple (A)
Kenneth W. Clement
Kentucky

Louis Pasteur
Margaret A. Ireland (A)
Marion-Sterling
Mary B. Martin
Mary M. Bethune

Miles Standish
Mount Auburn
Mount Pleasant
Orchard (A)
Paul L. Dunbar (C)

Paul Revere (A)
Robert Fulton
Scranton
Stephen E. Howe
Tremont

Union (C)
Wade Park
Walton (C)
Watterson-Lake
Waverly

Willow
Woodland Hills

* C = Comprehensive Center; A = Adjustment Center

APPENDIX B

PUPIL ADJUSTMENT PROJECT: 1980-1981

PRE-POST RESULTS: TOBE LANGUAGE/MATHEMATICS

	PRE-TEST*		POST-TEST*		
	N	Mean NCE	Approx. %-ile	Mean NCE	Approx. %-ile	MEAN NCE CHANGE
LANGUAGE						
Comprehensive Centers	53	42.1	34	56.7	62	+14.6**
Adjustment Centers#	58	42.6	36	55.9	59	+13.3**
Traveling Teachers#	27	42.3	36	48.8	47	+ 6.5**
MATHEMATICS						
Comprehensive Centers	53	39.9	31	47.2	44	+ 7.3**
Adjustment Centers#	58	49.1	48	48.7	48	- .4
Traveling Teachers#	27	45.9	42	37.1	27	- 8.8

*National norms were utilized: Pre-K for pre-tests and K for post-tests.

**The proposed mean gain (at least 4 NCE's) was attained.

#Results were analyzed only for children enrolled for at least nine weeks (Performance Objective 1).

APPENDIX C

PUPIL ADJUSTMENT PROJECT: 1978-1981
COMPREHENSIVE CENTER

PRE-POST RESULTS: LEVINE-ELZEY PRESCHOOL SOCIAL COMPETENCY SCALE

FACTOR	N	PRE- Mean	SD	POST- Mean	SD	MEAN GAIN	t	SIGNIF. LEVEL
Self-Sufficiency(13)*								
1980-81	59	2.17	.63	3.01	.59	+ .84	12.42	p<.001
1979-80	43	2.01	.57	2.95	.51	+ .94	9.47	p<.001
1978-79	47	2.13	.70	2.98	.55	+ .85	6.41	p<.001
Emotional Maturity(9)								
1980-81	59	2.33	.67	3.13	.57	+ .80	11.42	p<.001
1979-80	43	2.11	.54	2.97	.52	+ .86	9.45	p<.001
1978-79	47	2.38	.86	3.17	.54	+ .79	5.22	p<.001
Social Skills(10)								
1980-81	59	2.32	.59	3.09	.58	+ .77	11.35	p<.001
1979-80	43	1.93	.58	3.02	.63	+1.09	11.36	p<.001
1978-79	47	2.19	.73	3.24	.49	+1.05	8.01	p<.001
Self-concept(1)								
1980-81	59	2.24	.70	2.83	.65	+ .59	6.31	p<.001
1979-80	43	2.14	.67	2.91	.56	+ .77	7.01	p<.001
1978-79	47	2.04	.81	2.80	.65	+ .76	4.88	p<.001

*Number in parentheses indicates the number of items scored in the factor.

READING INSTRUCTION: READING IMPROVEMENT PROJECT

Prepared by

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1980-1981

READING IMPROVEMENT PROJECT

1980-81 Title I Evaluation

PURPOSE AND OVERVIEW

The Reading Improvement Program is one of two instructional strategies of the Reading Instruction Project for pupils with reading problems. The Reading Improvement Program component provides individualized instruction to primary pupils (Grades 1-3) who are functioning at the 33rd percentile or below on standardized tests of Reading or Readiness. Program instruction supplements regular reading instruction with program services provided to small group of 6 or less for 45 minutes daily in the school reading center. Individualized program instruction is supplemented by the following: coordination of program instruction with those of the regular classroom teacher and related reading programs, e.g. DPPF Reading Impact Program), supportive work with parents and diagnosis of pupils' reading weaknesses and strengths. Each Reading Instruction consultant serves approximately seven groups representing a maximum total of 42 students per day.

SERVICE SUMMARY

Pupils Served: 2,615 Grades Served: 1-3 Years in Operation: 15.5

Schools: 51 Public
7 Non-public
58 Total

(For complete listing see Appendix)

Staffing: 1 Educational Program Manager, P.T.
3 Assistant Program Managers, F.T.
49 Consultant Teachers, F.T.
1 Clerk, F.T.
2 Teacher Assistants, F.T.

Total Title I Expenditures: $1,645,630 Per Pupil Cost: $629

SUMMARY OF FINDINGS

The Reading Improvement Project was effective in helping pupils with reading problems at grades 1-3. Product objectives were attained. Program participants at grades 2-3 exceeded the pre-post criterion gain of four NCE units on CTBS Reading Vocabulary and Comprehension subtests. Participants at these grades demonstrated growth beyond expectancy over time as initial reading performance (15th - 20th percentile ranks) improved (24th - 32nd percentile ranks). First grade participants were functioning at 41-46 NCE units at year end. Reports of school staff and parents indicated favorable opinions about the project, and regular classroom teachers consistently rated highly the usefulness of its service information. Despite the observed improved reading performance of participants and positive reports, pupil performance continues to fall below expectancy, indicative of the need for continuing participation in this program.

OBJECTIVES AND OUTCOMES

Objective 1: The reading skills of participating pupils (Grades 2-3) will improve as evidenced by an increase of four NCE units in mean scores based on pre-post performance of participants on standardized reading tests.

Outcome: Objective 1 was attained. Pre-post performance of a sample of Grade 2 (N=103) and Grade 3 (N=155) participants revealed a significant gain ($p < .001$), exceeding the criterion of 4 NCE units on CTBS Vocabulary and Comprehensive subtests (Table 1).

TABLE 1

PRE-POST MEAN NCE SCORES ON CTBS READING

CTBS Reading	Grade 2				Grade 3			
	Pre-*	Post*	Gain	t	Pre-*	Post*	Gain	t
Vocabulary	29.50 (17)	39.62 (32)	10.12	7.08+	31.91 (20)	37.08 (27)	5.17	4.02+
Comprehension	28.75 (16)	37.12 (26)	8.37	4.10+	28.19 (15)	35.38 (24)	7.19	5.21+

* No. inside parenthesis under the mean scores represent corresponding percentile ranks

\+ $p < .001$

For Grade 2, participants, observed pre-post gains for Reading Vocabulary and Comprehension subtests were estimated to be at 10.12 and 8.37 NCE units. Observed pre-post gain for Grade 3 participants for the same measures were slightly lower: 5.17 and 7.12 NCE units for Reading Vocabulary and Comprehension Subtests.

Marked improvement in reading performance of program participants were evident when pre-post performance was compared to the norm group. Level of function at entry at the 15th to the 20th percentile improved over time as performance at 24th to 37th percentile was noted at the end of the school year.

Performance of a sample of Grade 1 participants on CTBS Reading (C) Letter Sounds, Word Recognition 1, Comprehensive Passages, and Word Recognition II, indicated average mean NCE scores of 41-46. Table 2 presents the observed mean score(s) with associated standard deviation (s.d.) score and related percentile ranks.

TABLE 2

MEAN SCORES IN NCE UNITS OF FIRST GRADE PARTICIPANTS BY SUBTEST

CTBS Reading Subtest	N	Mean	s.d.	Percentile Rank	Range in NCE units
Letter Sounds	73	40.67	19.52	31	1-68
Word Recognition I	72	44.39	17.84	39	1-80
Comprehension Passages	65	43.65	17.38	39	1-81
Word Recognition II	66	46.09	16.20	42	7-81

Objective 2: Classroom teachers will report observable improvement in the reading performance of 50% of a sample of participants.

Outcome: Objective 2 was attained. Questionnaire responses of 84 classroom teachers indicated that almost all of the participants demonstrated observable improvement in reading performance:

- 97% improved in group work
- 74% completed reading assignments
- 88% showed more independence in reading study skills
- 96% showed more confidence in his ability to read
- 70% demonstrated the ability to handle reading materials for his/her grade level 50% of the time.

Furthermore, approximately 50% - 68% of the sample were reportedly functioning at middle-fifth (top 3/5) of the class or better in specific reading skills appropriate for their grade level, based on ratings of classroom teachers (Table 3).

TABLE 3

PERCENT DISTRIBUTION OF PARTICIPANTS FUNCTIONING

Reading Skill	Class Rank	
	Top 60%	Lower 40%
Recognizing consonant sounds	50%	50%
Recognizing vowel sounds	58%	42%
Identifying sight words	50%	50%
Pronouncing words at grade level	54%	46%
Finding main ideas	53%	47%
Following sequence	68%	32%
Understanding of words from context	60%	40%
Recognizing stated details	66%	34%
Drawing Conclusions	68%	32%

Objective 3: Fifty percent of classroom teachers will provide a positive rating of usefulness of the project Service Information designed to maintain/create communication between the regular classroom teachers and project reading consultants.

Outcome: Objective 3 was attained. Approximately 94% of 84 classroom teacher respondents rated the Service Information provided by this project to be useful or better on a five-point rating scale of degree of usefulness. Majority of respondents called for the continuity and maintenance of this valuable service, with a few teachers calling for provision of more conferences and more classroom observations of consultants. Per cent distribution of teacher responses are noted in the following page.

Rating	N	%
Extremely Useful	27	32
Very Useful	44	52
Useful	9	12
Somewhat Useful	2	2
Of Little Use	2	2

Objective 4: Fifty percent of parents will report through responses to the parent opinionnaire that they have actively supported their child's involvement with the project through project-instituted activities such as individual conferences.

Outcome: Objective 4 was attained. Questionnaire responses of 69 parent respondents indicated that over 50% supported children's involvement with the program as noted below:

Approximately 57% (N=39) had talked with the project teacher-consultant and a comparable 58% (N=40) talked with the classroom teacher about reading skills of their children. However, only 38% (N=26) had actually observed their child in his/her classroom during the school year, with number of observations ranging from one to three.

Approximately 75% (N=52) reported that the project has been very helpful in improving reading skills of participants.

Approximately 87% (N=60) reported that their children were reading more books at home while 61% (N=42) reported that their children (youngsters) borrowed more books from the library this year.

Information regarding the program participation of children came from a variety of sources:

Letters	46%
Children	36%
Teacher's Calls	12%

ADDITIONAL FINDINGS

- Principals' (N=25) impressions about the program effect on participants were very positive. Overall rating of program effect on participants in the following areas was estimated at 4.00, based on a five point scale (5 as Extensive Impact to 1 as Minimum Impact):

  - improvement in pupil activity 4.12
  - improvement in pupil work habits 3.89
  - parent involvement 3.24
  - team work among teachers 4.23
  - improvement in pupil school attitudes 4.00

- School staff including school principals and regular classroom teachers pointed out that the individualized instruction and the resulting improved coordination efforts of project consultant and regular classroom teachers represented the two outstanding benefits from Reading Improvement Program.

- Analysis of pre-post test performance of participants at Grades 2-3 revealed marked variability in change scores for Vocabulary and Comprehension subtests.

  - At Grade 2, Vocabulary change scores ranged from 61 to -21 NCE units. Mean Vocabulary gain was estimated at 10.12 with a standard deviation of 14.51. Comprehension gains ranged from 53 to -44 NCE units. Mean comprehension gain was estimated at 8.37 NCE units with a standard deviation of 20.5.

  - At Grade 3, Vocabulary change scores ranged from 55 to -35 NCE units. Mean Vocabulary gain was estimated at 5.17 with a standard deviation of 15.20. Comprehension gain scores were equally variable, as they ranged from 64 to -36 NCE units. Mean Comprehension gain was estimated at 7.20 with a standard deviation of 17.13.

- Degrees of association between pre and post performance on Vocabulary and Comprehension subtests were low at each grade level. Similarly correlations between change scores of Reading Vocabulary and Comprehension subtests were low.

CONCLUSIONS

The 1980-1981 Reading Improvement Program was successful based on attainment of its four objectives. Coordination of project efforts with classroom teachers and with staff of other similar reading projects is worthy of note and should be continued. The observed 8-10 NCE gains of participants at Grades 2-3, present reading status of Grade 1 participants and other reported positive findings from the school staff and parents reflect the effectiveness of Reading Improvement Program in helping primary pupils with reading difficulties.

Based on questionnaire responses and other objective data, the following recommendations are suggested for the future:

1. Evaluation of pupil reading performance must consider other variables such as duration of project participation, attendance, consultant, etc. Global assessment or project participants' performance without considering these variables seems incomplete.

2. Classroom observation of consultants should be re-instituted to determine if differences in delivery of services (if any) have any measurable impact on performance. The marked variability of performance and gains raises questions as to whether this is a function of project effect, initial reading differences, consultant effect, etc. that needs further investigation.

3. Parent involvement efforts should be continued and strengthened.

4. Classroom teachers' recommendation for creation of opportunities to observe the consultants' teaching techniques, and for more interaction between classroom teachers and project consultants should be considered.

APPENDIX

READING IMPROVEMENT PROJECT 1980-81

1. Alfred A. Benesch
2. Almira
3. Anton Grdina
4. Bolton
5. Brooklawn
6. Buckeye-Woodland
7. Captain A. Roth
8. Case
9. Charles Dickens
10. Charles H. Lake
11. Charles Orr
12. Chesterfield
13. Corlett
14. Denison
15. Dike
16. Douglas MacArthur
17. East Clark
18. East Madison
19. Euclid Park
20. Giddings
21. Harvey Rice
22. Hazeldell
23. Henry W. Longfellow
24. Iowa-Maple
25. John W. Raper
26. Joseph Landis
27. Kenneth Clement
28. Louis Agassiz
29. Louis Pasteur
30. Marion-Sterling
31. Miles
32. Miles Park
33. Miles Standish
34. Moses Cleaveland
35. Mound
36. Mt. Auburn
37. Paul Dunbar
38. Riverside
39. Robert Fulton
40. R. G. Jones
41. Marion Seltzer
42. Scranton
43. Tremont
44. Valley View
45. Verda Brobst
46. Wade Park
47. Waverly
48. William C. Bryant
49. William R. Harper
50. Willow
51. Woodland Hills

NON-PUBLIC

1. Our Lady of Peace
2. St. Aloysius
3. St. Catherine
4. St. Joseph Collinwood
5. St. Joseph Franciscan
6. St. Stanislaus
7. Urban Community

READING STRATEGY PROJECT

Prepared by

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and
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1980-1981

READING STRATEGY PROJECT

1980 Title I Evaluation

PURPOSE AND OVERVIEW

The Reading Strategy Project is designed to assist upper elementary pupils in the mastery of basic reading skills. This service is for students who need correction. Supportive teachers, working daily with small groups within the regular classroom, implement and extend the skill instruction initiated by the classroom teacher.

SERVICE SUMMARY

Pupils Served:
5,880 public
396 non-public
6,276 total

Schools: 51 public
10 non-public
61 total

(List of schools in Appendix A)

Grades Served: 4-6 public
4-8 non-public

Years in Operation: 7½

Staffing:
1 Project Manager, FT
1 Assistant Project Manager, PT
9 Consultant Teachers, FT
88 Reading Strategy Teachers, FT
1 Psychologist, PT
2 Clerks, FT
1 Parent Education Counselor, FT
1 Educational Aide
1 Staff Aide

Total Title I Expenditures: $2,339,434

Per Pupil Cost: $373

SUMMARY OF FINDINGS

On a program wide basis (grades 4 to 6) the available data showed that the Title I treatment group of students enhanced their average reading comprehension score significantly more than would have been expected under non-Title I treatment, and that this gain exceeded the project objective. However, there remain questions to be answered concerning: A. the advisability of having two distinct and alternate criteria for program admission, B. the large number of pupils whose scores were either not available or necessarily excluded from these analyses, and C. the question of what effect the above have on generalizing the data based conclusions to the program as a whole. Randomly selected participating pupils showed significant improvement in two out of five reading attitude subscales. Eighty-three percent (133 of 161) of the teachers responding to a survey reported changes had occurred in their instructional procedures through the use of the Reading Strategy diagnostic - prescriptive approach. Ninety-two percent of a 239 parent sample which was surveyed reported satisfaction with their child's reading improvement. Recommendations include changes in the program selection criterion, an addition of a comparison group for assessment of attitude change, a re-examing of policies which result in unanticipated outcomes consequent to sole program emphasis on reading comprehension, and continuing reassessment of the relative effectiveness of the Multi-Modality component when compared to the regular Reading Strategy program.

OBJECTIVES AND OUTCOMES

- Process Objective 1: The Reading Strategy Project will be implemented in public and non-public Title I elementary schools serving pupils with greatest need.

  - Outcome: This objective was achieved. Fifty public and ten non-public schools were selected for Reading Strategy services based on greatest need. All but one of the Cleveland City Schools elementary schools met the poverty index criterion for 1980-81, and so all of these qualifying schools were included in the project. The 10 non-public schools were those which met Title I criteria and in which the principal requested the program.

- Process Objective 2: Nine Reading Consultants will be assigned to public and non-public schools, each one to serve a cluster of schools, to assist Reading Strategy Teachers and Parents.

  - Outcome: This objective was largely achieved. Seven Reading Consultants were assigned to public schools and one to non-public schools. The assignment of schools to consultants was based on the total number of schools to be served, the total number of teachers to be served, the number of new teachers, the distance to be traveled, and so forth. The eight consultants assisted Reading Strategy Teachers (materials, supplies, teaching techniques, etc.) and gave assistance in making arrangements for consultation services to parents, as well as participated in parent programs when requested.

- Process Objective 3: Pupils with reading deficiencies in upper elementary grades will be identified by use of program selection criteria.

  - Outcome: This objective was achieved. City-wide test data was used to identify those students scoring at or below the thirty-third percentile on either the CTBS or SDRT. In some cases, court ordered racial balance required that some students be placed in Title I programs who achieved above thirty-third percentile on the pre-test. However, the students placed for racial balance were not included in the data analyses.

- Process Objective 4: A diagnostic - prescriptive plan will be generated for each pupil eligible for service.

  - Outcome: This objective was achieved. Each identified participant's results of all subtests in the SDRT were reviewed. A plan was generated for each pupil on their need(s) from each subtest of the SDRT. In addition to the SDRT subtests, a pretest and item analysis from the Diagnostic Reading Probes are used to plan lessons for pupils in grades 4, 5. Pretest from the Curriculum for Improving Student Study Skills (CISSS) and item analysis are used to plan lessons for pupils in grade 6. For each student, as a result, an individual reading strategy plan was devised and each pupil was reinforced in comprehension as well as the other areas of identified student weakness.

Product Objective 1: Participating pupils in grades four, five, and six will evidence an average post treatment score that is at least four NCE units above expectancy. Data for each grade will be based on regression analyses of the Comprehensive Tests of Basic Skills (CTBS) comprehension section, Test 1 administered in April of 1980 and Test 2 in April of 1981.

Outcome: Objective 1 was obtained. On a program-wide basis, this objective was obtained. However, there were distinct differences between grades.

To assess progress toward the attainment of the objective, the test performance of students served by the project was compared with an estimate of what their test performance would have been if they had not participated. This "expected" level of performance was obtained by conducting a regression analysis on the test scores of a comparison group of students who scored above 42 NCE units on the CTBS pre-test who were not served by the project, and Reading Strategy students who scored less than 42 NCE units on the pre-test. This analysis made it possible to predict Reading Strategy students' performance on the Spring, 1981 administration of the CTBS from their performances on the Spring, 1980 administration of CTBS. Their actual scores on the Spring, 1981 CTBS were then compared with their expected scores to determine if participation in the project had raised their performance above the level that would have been expected if they had not participated.

Outcome: Grade 4

Matched scores (NCE units) available for a sample of grade four participants in the Title I Reading Strategy project and a comparison group (using CTBS Spring, 1980/CTBS Spring, 1981) yielded the following data.

Grade 4

1980 - 1981

Group	N	Mean Score (NCE) Test 1 CTBS-80*	Test 2 CTBS-81**
Served	1077	29.67	31.96
Comparison	2685	58.20	51.73

*Level 1, Form S, administered in grade 3.
**Level 2, Form S, administered in grade 4.

- The application of regression analysis (Model C) to these data gave the following results in NCE units for the served group.

Grade	Predicted $\bar{X}$	Observed $\bar{X}$	Effect of Program	t	Total N	N With Min. Gain of 4 NCE
4	27.05	31.96	+4.91	10.81**	1077	535

**p < .01

The results show that the participants scored significantly higher than it was predicted they would have scored without participation in the project. The difference of 4.91 NCE units between the observed and predicted scores exceeded the criterion set in the objective. Since a positive difference of at least 4 NCE units was obtained, the objective was attained at grade 4. (See Appendix B, for state-form-based summary of grade 4 regression analysis.)

- Outcome: Grade 5

- Matched scores (NCE units) available for a sample of grade five participants in the Title I Reading Strategy project and a comparison group (using CTBS/CTBS) yielded the following data.

Grade 5

1980 - 1981

Group	N	Mean Score (NCE) Test 1 CTBS-80*	Test 2 CTBS-81**
Served	1100	28.26	34.22
Comparison	2371	56.99	64.44

*Level 2, Form S, administered in grade 4.
**Level 2, Form T, administered in grade 5.

- The application of regression analysis (Model C) to these data gave the following results in NCE units for the served group.

Grade	Predicted $\bar{X}$	Observed $\bar{X}$	Effect of Program	t	Total N	N With Min. Gain of 4 NCE
5	28.13	34.22	+6.09	13.70**	1100	614

**p < .01

The results show that the participants scored significantly higher than it was predicted they would have scored without participation in the project. The difference of 6.09 NCE units between the observed and the predicted score exceeded the criterion set by the objective. Since a difference of at least 4 NCE units was obtained, the objective was attained at grade 5. (See Appendix B, for a state-form-based summary of grade 5 regression analysis.)

- A Reading Strategy subcomponent of multiple teaching/learning modules existed in the Title I Reading Strategy program at grade 5 only. Matched scores (NCE units) available for these Multi-Modality participants and a comparison group yielded the following data.

Multi-Modality
(Existed Only in Grade 5)

1980 - 1981

Group	N	Mean Score (NCE) Test 1 CTBS-80*	Test 2 CTBS-81**
Served	89	28.33	32.65
Comparison	2371	56.99	54.44

*Level 2, Form S, administered in grade 4.
**Level 2, Form T, administered in grade 5.

The application of regression analysis (Model C) to these data gave the following results in NCE units for the served group.

Grade	Predicted $\bar{X}$	Observed $\bar{X}$	Effect of Program	t	Total N	N With Min. Gain of 4 NCE
5 (Multi-Modality)	28.19	32.65	+4.46	2.70**	89	44

**p < .01

The results show that the participants scored significantly higher than it was predicted they would have scored without participation in the project. The difference of 4.46 NCE units between the observed and the predicted score exceeded the criterion set by the objective. Since a difference of at least 4 NCE units was obtained, the objective was attained for the Title I Multi-Modality group. However, when these results are compared with those for the regular Title I program for grade 5, it is apparent that the regular Title I students do better than the Multi-Modality students by more than an extra one third of the average NCE gain score (4.46 compared to 6.09, for a net difference of 1.63 NCE in favor of the regular Title I students).

Outcome: Grade 6

Matched scores (NCE units) available for a sample of grade six participants in the Title I Reading Strategy project, and a comparison group (using CTBS/CTBS) yielded the following data.

Grade 6

1980 - 1981

Group	N	Mean Score (NCE) Test 1 CTBS-80*	Test 2 CTBS-81**
Served	447	27.73	35.38
Comparison	2443	54.15	55.08

*Level 2, Form T, administered in grade 5.
**Level 2, Form S, administered in grade 6.

The application of regression analysis (Model C) to these data gave the following results in NCE units for the served group.

Grade	Predicted $\bar{X}$	Observed $\bar{X}$	Effect of Program	t	Total N	N With Min. Gain of 4 NCE
6	33.42	35.38	+1.96	3.40**	447	195

**p < .01

The results show the participants scored significantly higher than it was predicted they would have scored without participation in the project. However, the difference of 1.96 NCE units between the observed and predicted scores did not meet the criterion set by the objective. Since, a positive difference of at least 4 NCE units was not achieved, the objective was not considered attained at grade 6. (See Appendix B, page 15 for a state-form-based summary of grade 6 regression analysis.)

Product Objective 2: Randomly selected participating pupils in identified grades will demonstrate significantly improved attitudes towards reading, as reflected in the comparison of mean pre/post test responses on a locally constructed Pupil Attitude Survey.

Outcome: Objective 2 was probably attained in part. An established instrument for measuring reading attitudes ('A Survey of Reading Attitudes', by Walbrown, Brown and Engin, 1977) was adapted to meet local program needs (See Appendix C). This condensed and adapted attitude scale is comprised of 35 Likert-type attitude items which can be summated into total and five (factor analysis based) subscale scores.

A randomly selected group of participating pupils in grades 4-6 were administered this attitude scale both at the beginning and at the end of the 1980-81 school year. The total attitude scale score did not yield a significant difference from pre-test to post-test. However, the factor analysis based subscales clearly indicate change.

Each item in each subscale, as well as in the total scale of reading attitude, was converted so that the least positive attitude response on a five point scale had a value of one and the most positive attitude response had a value of five. For each pupil, the values of all individual item responses were averaged for each subscale and for the total scale, to give individual subscale and total scale scores in terms of this same one to five scale score range. Pre- and post-test scores for each of the subscales as well as the total are presented in the following table.

Reading Attitude Scores
1980-81

Scale/Subscale	Pre-Test		Post-Test		t-value
	Mean	s.d.	Mean	s.d.	
Reading Anxiety	3.40	.85	3.57	.88	2.69*
Expressed Reading Difficulty	3.10	1.02	3.28	1.07	2.43**
Reading As Direct Reinforcement	3.97	.85	3.80	.95	-2.54**
Reading as Enjoyment	3.44	.97	3.21	1.04	-3.29*
Reading Group	4.20	.75	4.05	.85	-2.77*
Total Scale	3.60	.60	3.56	.67	.68

*$p < .01$
**$p < .05$

Significant improvements ($p < .05$) in both Reading Anxiety and Expressed Reading Difficulty subscales occurred between pre- and post-tests. It might reasonably be argued that these are direct positive program effects. Increased comfort with reading seems to have occurred.

Each of the three remaining subscales (Reading as Direct Reinforcement, Reading as Enjoyment, and the Reading Group Subscales) indicate a significant attitude change in a negative direction. This might be attributable as much to the second semester, end-of-year 'blues' as anything else. Fall to late spring attitudes typically decline. However, it could be argued that it is shakey to attribute one set of changes but not the other to the treatment.

It would be desirable if a comparison group of otherwise comparable non-Title I pupils could take this attitude scale, also. Comparing the post-test attitude scores of the comparison group with those of the Title I treatment group (while computationally controlling for the effects of differing pre-test scores, if that is the case) would assist in more confidently concluding whether the changes in treatment group attitudes are due to the unique program treatment or are simply due to the passage of the school year, or other such extraneous causes.

- Product Objective 3: As evidenced by their opinionnaire responses, teachers will become sensitized to instructional techniques utilizing the diagnostic-prescriptive approach.

  - Outcome: Objective 3 was considered attained. In June, 1981, a survey was distributed to teachers whose classrooms were served by the project. Eighty-three percent of the classroom teachers (N=161) responding to the survey reported the use of the diagnostic-prescriptive approach was effective to very effective, as evidenced by:

    - improved diagnosis of students individual needs for instruction of specific reading skills.
    - increased flexibility in grouping of students for reading skills reinforcement.
    - improved selection of pupils for the reading skills reinforcement.

  (See Appendix D for the summary of Classroom Teachers Survey.)

- Product Objective 4: Eighty percent of the parents of the project participants will report satisfactory feelings about their child's reading improvement.

  - Outcome: Objective 4 was attained. In June, 1981, surveys were sent to parents of project participants in 37 schools. Ninety-two percent of the sampled parents (N=239) reported satisfaction with their child's reading improvement.

  (See Appendix E for summary of Parents Survey.)

ADDITIONAL FINDINGS

There were several noteworthy additional findings regarding objective 1, which pertain to program success as measured by standardized reading test scores. First, Model C (regression model) results were compared to results obtained using Model A (pre- to post-test t-test model). Both analyses used the same restricted Model C group of students, and both used the normal curve equivalent (NCE) measuring unit as the unit of analysis. Model A yielded a slightly lower average CTBS Comprehension score gain for the project than did Model C. (See Appendix B for statistical detail). Second, the criterion for admitting students into the Title I Reading Strategy program was that each admitted pupil's pretest score be at or below the 33rd percentile on either the Stanford Diagnostic Reading Test or the Comprehensive Test of Basic Skills. This procedure was the major factor causing nearly one-fourth of all Title I CTBS pretest scores to be above the 33rd percentile (See Appendix G for greater statistical detail). Third, the same Model C regression analysis done using the CTBS vocabulary subtest yielded very different results than it did with the CTBS comprehension subtest scores. (See Appendix B for greater statistical detail). For the 1980-81 program year, Model A yields much more favorable results than Model C when the vocabulary subtest is the unit of analysis. A somewhat more thorough and technical presentation of these three additional findings is contained in Appendix I, as well as in Appendices B and G.

A survey was sent to principals (See Appendix F) who had the Reading Strategy program in their schools. Of the thirty-five who responded, 97 percent said that the Reading Strategy program contributed to meeting the reading needs of the participating students. Ninety-four percent of these principals responded that this program was either effective or very effective in improving reading skills of the participating students.

A series of fourteen inservice - staff development sessions or activities were held during the 1980-81 school year for the Reading Strategy project teachers and staff (See Appendix H).

The Reading Strategy project director has presented other findings and assessments, including the following:

- The CTBS test seems to give an inflated score, and so the SDRT has been used as the second of these alternate selectors to give pupils an additional chance at meeting selection criteria and thereby receiving the service they need.

- The comprehension score is not uniformly reflective of program emphasis. For example, in grade four and in the Multi-Modality component, there is a heavy emphasis on vocabulary.

- Throughout the past several years involving court ordered desegregation, the Reading Strategy program has been subjected to numerous and unexpected staff changes, frequently resulting in personnel being placed into the Reading Strategy program regardless of the appropriateness of their previous assignments, expertise, or teaching performance record.

- If there are a number of teacher absences in a given building, the Strategy teacher is pressed into service for the day.

- The reorganization of classes as late as November and December, which in recent years has become commonplace in the elementary schools, results in disruptive midyear rescheduling, with the attendant shifting, dropping and adding of pupils within Reading Strategy serviced classrooms.

CONCLUSIONS

On a program wide basis (grades 4 to 6) the available data showed that the Title I treatment group of students enhanced their average CTBS comprehension NCE score significantly ($p < .01$) more than would have been expected under non-Title I treatment, and that this gain exceeded the project objective of 4 NCE points. However, there remain questions to be answered concerning: A. the advisability of having two distinct and alternate criteria for program admission, B. the large number of pupils whose scores were either not available or necessarily excluded from these analyses, and C. the question of what effect the above have on generalizing the data based conclusions to the program as a whole. Randomly selected participating pupils showed significant improvement ($p < .05$) in both Reading Anxiety and Expressed Reading Difficulty subscales between pre- and post-testing; while a significant attitude change in a negative direction was found for the Reading as Direct Reinforcement, Reading as Enjoyment, and the Reading Group subscales. Eighty-three percent (133 of 161) of the classroom teachers responding to a survey reported changes had occurred in their instructional procedures through the use of the Reading Strategy diagnostic - prescriptive approach. Ninety-two percent of a 239 parent sample which was surveyed reported satisfaction with their child's reading improvement.

Recommendations are as follows:

- It is recommended that in the future one consistent measure or operational definition be used as the criterion for program qualification (such as one identical type of test score, or an average of two types of test scores for all Reading Strategy students), if at all possible.

- Seriously consider excluding from admission into the Reading Strategy program any student who has pre-tested out at above the 33rd percentile -- and more compellingly be excluded if pretesting out as 'above average' -- on either of the standardized reading comprehension tests used (CTBS and SDRT). An illustration: If a student had a CTBS reading comprehension pretest score of 75 percentile and a SDRT reading comprehension score of 30 percentile, it is highly probable that the CTBS score is more reflective than the SDRT of the pupil's real reading comprehension achievement, which is likely well above average. It is much more likely that the pupil had an unreliable SDRT testing than by chance alone guessed his/her way to the much higher CTBS score. Having a significant number of treatment

pupils in the pre-test data base who have scores above the established cutpoint compromises the integrety of the related data analyses and the conclusions drawn therefrom.

- Attention should be given to the supplemental finding that Reading Strategy students score approximately as much lower than expected on the vocabulary subtest as they do higher than expected on the comprehension subtest when compared against the performance of non-treatment students at the same grade in the Cleveland Public Schools. It should be determined if the net reading achievement gain which remains after this apparent (time-on-task based) trade-off is the maximum possible with the available resources. It should be determined if there is a significant net gain, qualitatively speaking. Efforts should be made to determine how the gains in comprehension can be retained or even enhanced while concurrently preserving the average vocabulary score-based percentile rank. These inter-related issues need to be examined in depth, followed by related plans and subsequent action.

- With the Multi-Modality component showing a satisfactory but less dramatic increase in average CTBS comprehension NCE gain that the regular Title I program did during its first year, continuing assessment of the relative effectiveness of this component when compared to the regular Reading Strategy program should be done.

- A comparison group for the attitude survey would be highly desirable in order to sort out unique program effect from ordinary fall to spring attitudes changes. Refinement of the existing attitude scale, including setting it in larger type and revising several items to refer specifically to the Reading Strategy program, would be desirable.

APPENDIX A
READING STRATEGY
ELIGIBLE TITLE I ELEMENTARY SCHOOLS
1980-81 School Year

Public

1. A. J. Rickoff
2. Anthony Wayne
3. Artemus Ward
4. Benjamin Franklin
5. Brooklawn
6. Buhrer
7. Case
8. Charles Lake
9. Chesterfield
10. Clark
11. Cranwood
12. Daniel E. Morgan
13. East Madison
14. Emile B. deSauze
15. Euclid Park
16. Forest Hill Parkway
17. Fullerton
18. Garfield
19. George W. Carver
20. Gordon
21. Gracemount
22. H. W. Longfellow
23. Halle
24. Kenneth Clement
25. Kentucky
26. Lafayette
27. Margaret Ireland
28. Marion Sterling
29. Mary B. Martin
30. Mary Bethune
31. Memphis
32. McKinley
33. Miles Park
34. Milford
35. Mt. Pleasant
36. Nathaniel Hawthorne
37. Oliver H. Perry
38. Orchard
39. Paul Revere
40. Robert Fulton
41. Stephen E. Howe
42. Sunbeam
43. Tremont
44. Union
45. Verda Brobst
46. Wade Park
47. Walton
48. Warner
49. Watterson-Lake
50. William R. Harper
51. Willow

Non-Public

1. Blessed Sacrament
2. Holy Name
3. Holy Rosary
4. Lutheran Memorial
5. Mt. Pleasant Catholic
6. Our Lady of Peace
7. St. Paul Croatian
8. St. Rocco
9. St. Timothy
10. Urban Community

Comparison of Reading Comprehension Achievement Results in the 1980-81 Title I Reading Strategy Project Using Title I Evaluation Models A and C on Indentical Data Sets

Grade	N	Model A (Pre-Post Norm Referenced) Pretest NCE $\bar{X}$*	Post Test NCE $\bar{X}$*	$\bar{X}$ NCE Difference	Model C (Special Regression) Expected Post test NCE $\bar{X}$	Observed Post test NCE $\bar{X}$*	$\bar{X}$ NCE Difference	Number Who Gained +7 (+4) NCE pts. or More	Comparison Group Based Regression Line Pre/Post r (with N)	Slope	Y Intercept
4	1077	29.67	31.96	+2.29	27.05	31.96	+4.91	455 (535)	.50 (2478)	.88454	.80478
5	1100	28.26	34.22	+5.96	28.13	34.22	+6.09	518 (614)	.50 (2250)	.92598	1.96342
6	447	27.73	35.38	+7.65	33.42	35.38	+1.96	145 (195)	.50 (2345)	.74268	12.82754
All Grades	2624	28.75	33.49	4.74	28.59	33.49	4.90	1118 (1344)			

Number of Participants Omitted from Growth Data Because of:

. Missing pretest or post test (Includes entire group of 396 nonpublic students)	979
. Insufficient time in project	1836
. Pretest score used for regression was above 42 NCE	837
Total Number of Participants Omitted from growth Data	3652

*The nationally normed NCE scoring units for the Comprehensive Test of Basic Skills were used.

Comparison of Reading Vocabulary Achievement Results in the 1980-81 Title I Reading Strategy Project Using Title I Evaluation Models A and C on Indentical Data Sets

Grade	N	Model A (Pre-Post Norm Referenced) Pretest NCE $\bar{X}$*	Post Test NCE $\bar{X}$*	$\bar{X}$ NCE Difference	Model C (Special Regression) Expected Post test NCE $\bar{X}$	Observed Post test NCE $\bar{X}$*	$\bar{X}$ NCE Difference	Number Who Gained +7 (+4) NCE pts. or More	Comparison Group Based Regression Line Pre/Post r (with N)	Slope	Y Intercept
4	914	30.03	37.36	+7.33	38.58	37.36	-1.22	467 (548)	.43 (2436)	.67148	18.40942
5	796	30.40	32.91	+2.51	36.26	32.91	-3.35	270 (463)	.53 (2601)	.85428	2.36491
6	430	29.05	34.69	+5.64	42.86	34.69	-8.17	214 (277)	.45 (2034)	.62329	21.52155
All Grades	2156	29.75	34.91	+5.16	38.29	34.91	-3.38	951 (1288)			

Number of Participants Omitted from Growth Data Because of:

. Missing pretest or post test (Includes entire group of 396 nonpublic students)	934
. Insufficient time in project	1836
. Pretest score used for regression was above 42 NCE	1350
Total Number of Participants Omitted from growth Data	4120

*The nationally normed NCE scoring units for the Comprehensive Test of Basic Skills were used.

APPENDIX C

Condensed, Revised and Adapted Version of
A SURVEY OF READING ATTITUDES
Intermediate Level: Form A
(Third Experimental Edition, 1977)
by
Wallbrown, Brown and Engin

DO NOT MAKE ANY MARKS ON THIS SIDE OR THE BACK
UNTIL THE DIRECTIONS ARE COMPLETED

DIRECTIONS

Fill in your name in the spaces provided below. Do not make any marks in the box below it. Your teacher will complete the items in the box. Now we will read the directions aloud for you.

The statements in this booklet are concerned with the way you feel about reading. There are no right or wrong answers because students have different opinions and feelings about their school work. For example, if I say "Reading is more fun than math." I'm sure the students in this room would not all agree. Some people would disagree because they enjoy math more than reading. Probably some other students would not be sure about how to answer because they like both reading and math. So, you can see there are no right or wrong answers. The important thing is to mark the answer that shows how you really feel or what your opinion is.

I will read each statement aloud while you read it silently from the page. After each statement has been read, you are to decide how you feel about it and then circle the choice which tells how you feel. Circle A to show that you agree with a statement. Circle B if you are not sure how you feel about a statement. Circle C to show that you disagree with a statement. Do not use a pen. Use a soft-lead pencil (#2½ or less). Erase completely any answer you wish to change.

Please be sure that you mark the answers which show how you really feel rather than the way I want you to mark them. The letters and what they stand for are written at the top of the question page (reverse side of this page).

LAST NAME (36-45) FIRST NAME (47-55) M.I. (57)

DO NOT MARK IN BOX BELOW

STUDENT I.D. NO. 0 0 (59-67) RACE (69) SEX (71) GRADE (73) SCHOOL (75-78)

DATE ATTITUDE SURVEY GIVEN: MONTH (10-11) DAY (13-14) YEAR (16-17)

STUDENT'S BIRTHDATE: (19-20) (22-23) (25-26)

1980-81 TOTAL DAYS ABSENT (Excused and Unexcused) BY QUARTER:

1ST (28-29) 2ND (31-32) 3RD (34-35) 4TH (37-38)

	VOCABULARY	COMPREHENSION
FALL 1980 SD NCE:	(40-41)	(43-44)
SPRING 1980 CTBS NCE:	(46-47)	(49-50)

SJ2 (12/1/80)

A - agree B - not sure C - disagree

EXAMPLES	Agree	Not Sure	Disagree
a. Reading is more fun than math.	A	B	C
b. I often read comic books.	A	B	C
1. I need a lot of help in reading.	A	B	C
2. I would like to help someone else who can't read as well as I.	A	B	C
3. I get upset when I think about having to read.	A	B	C
4. I can read but I don't understand what I've read.	A	B	C
5. Most of the stories in our reading books are interesting.	A	B	C
6. I am a slow reader.	A	B	B
7. I enjoy helping other students with their reading.	A	B	C
8. When I am at home, I read a lot.	A	B	C
9. I often feel sick when I try to read a long assignment.	A	B	C
10. We learn lots of interesting things in our reading group.	A	B	C
11. I enjoy looking up information in the encyclopedia.	A	B	C
12. When I have free time in class, I read a book.	A	B	C
13. I get upset when we take a reading test.	A	B	C
14. I get a lot of enjoyment from my reading.	A	B	C
15. Our reading group is usually enjoyable.	A	B	C
16. No matter how hard I try, I just can't learn to read well.	A	B	C
17. I get nervous when I have to read a lot.	A	B	C
18. When I read an interesting story, I like to tell my friends about it.	A	B	C
19. My parents think I need to try to improve my reading.	A	B	C
20. Sometimes I miss a question on a test because I read poorly.	A	B	C
21. My friends and I often discuss what we have read.	A	B	C
22. I enjoy telling my family about the things we read in school.	A	B	C
23. Sometimes I have nightmares about reading.	A	B	C
24. I learn a lot in our reading group.	A	B	C
25. I like to listen to other people tell about the books they have read	A	B	C
26. I worry a lot about my reading.	A	B	C
27. Reading is one of the most interesting things which I do at home.	A	B	C
28. I get a sick feeling in my stomach when I think about reading.	A	B	C
29. When I try to read, I usually get tired and sleepy.	A	B	C
30. Our reading group is one of the best parts of school.	A	B	C
31. I'm the kind of person who really enjoys a good book.	A	B	C
32. The teacher has to help me a lot when we are in reading group.	A	B	C
33. I usually read several books during summer vacation.	A	B	C
34. A book would make a good present for me.	A	B	C
35. I listen carefully when other students are telling about what they have read.	A	B	C

APPENDIX D

READING STRATEGY
1980-1981

CLASSROOM TEACHER SURVEY

Frequency and Percentage of Classroom Teacher Responses
In Each Rating Category
(N=161)

Selected students in your classroom have participated in the Reading Strategy project. We would like your viewpoint of the services provided the students through the Reading Strategy project.

Please circle the answer you select.

1. Has the use of the diagnostic-prescriptive approach had any effect on your awareness of individual student's reading needs? This approach was

Very Effective	Effective	Undecided	Ineffective	Very Ineffective	No Response
52 (32%)	81 (51%)	20 (12%)	1 (.17%)	4 (2%)	3 (2%)

Comments:

- Very helpful in diagnosing individual needs.
- Students became more interested in reading.
- Discovered exactly where help was needed.
- The children perform better in reading due to the individual attention.
- Excellent as a supplement to classroom instruction.
- The diagnostic-prescriptive approach assisted the teacher in planning and organizing skill groups.
- I have a better idea of what each child can do.
- Gave a specific area for indepth work needs.
- Provided guidelines for skill level work.

2. Have you observed changes in the Reading Strategy student's reading habits? YES 117 (73%) NO 34 (21%) NO RESPONSE 10 (67%)

   . What did you observe:

   - Students were willing and ready to do the skills.
   - The children utilized skills in their basal texts.
   - Improved attitude and skills mastery.
   - Students took more interests in reading assignments.
   - Willingness to contribute in reading group discussions, improved reading skills in both oral and independent work.

3. In your opinion, what is Reading Strategy's unique contribution to the student's progress in reading?

   - The student is made more aware of where his weak areas are in reading and is encouraged to improve.
   - The students seems to enjoy reading as they are applying the skills.
   - An increased awareness of the rules and purpose of each skills.
   - The teacher (Reading Strategy) is able to work on a more individual basis.
   - Reinforces skills which teacher has taught.
   - Reading Strategy brings the slower reader to a point so that he/she can benefit more from regular classroom work in Language.
   - The opportunity to work in a small setting contributes to the students progress.
   - The unique worksheets games etc. for follow up of skill lessons.

4. If changes were implemented, what would you recommend?

   - Servicing a wider range of children with reading difficulty.
   - If present classroom number continue-Reading Strategy will have to be done in a separate room since the children are now wall to wall with NO corner available.

- See to it teachers have reinforcement worksheets of skills taught be the reading consultant, also a set of masters for the classroom teachers.
- More time if possible.
- Individualized instructions were very beneficial to students. The one to one relationship tended to build confidence and students performed better than they would have in a large group settings.
- The program is excellent.
- Strategist should use another room available other than the classroom.

APPENDIX E

READING STRATEGY
1980-1981

PARENT SURVEY

Frequency and Percentage of Parent Responses
In Each Rating Category
(N=239)

Your child _____ has received reading help through the Reading Strategy project. Please tell us what you think about the Reading Strategy project.

*Circle the answer you select.

1. Are you satisfied with your child's reading improvement this school year?

YES 222 (92%) NO 13 (6%) NO RESPONSE 4 (2%)

. How satisfied are you with your child's reading?

69 (29%)	142 (59%)	16 (7%)	0	6 (2.5%)	6 (2.5%)
Very Satisfied 5	Satisfied 4	Undecided 3	Dis-satisfied 2	Very Dissatisfied 1	No Response

Comments about their child's reading improvement.

. "She has improved greatly, still needs reading assistance."

. "Melinda has really improved. I am very proud of her progress."

. "I was satisfied because when she started the program she was a poor reader."

. "She enjoys reading and understands much better."

. "Yolanda enjoyed the classes because the teacher provided individual/small group attention."

2. Would you like your child to continue in the Reading Strategy program?

YES 225 (94%) NO 10 (4%) NO RESPONSE 4 (2%)

Comments to why you would like your child to continue in Reading Strategy.

- "Kelly is slow in reading, the reading strategy project has built his confidence."
- Have meetings at the beginning of the year to explain goals the children hope to accomplish. Have other meetings to report progress.
- A guide for parents to follow the reading skills for mastery during the school year.

3. Did you attend any of the Reading Strategy meetings held for parents this school year at your child's school?

YES 76 (32%) NO 163 (68%)

Table

Parent Attendance

N	Times Attended
6	3
11	2
59	1(at least)

Replies to "how were the materials at parent meetings helpful?"

- Presented ways to help your child e.g,

  -reading newspaper and magazine ads.

  -making the grocery list.

  -reinforcing lessons that are sent home.

  -making games that encourage reading to be fun.

  -providing a handbook for parents in reading skills.

- It provided the materials and ideas for me to help my child at home.

4. What reading information would you recommend be presented at the parent meetings?

Continue to make available reading materials for home use e.g.,

-Construction of reading games.

-Circulation of pamphlet with activities for parents to help their child with reading skills.

-Present ideas on how to use magazines and newspapers to reinforce reading at home.

-Worksheets that can be studied by the child with the parent.

APPENDIX F

READING STRATEGY
1980-1981

PRINCIPAL SURVEY

Frequency and Percentage of Principal Responses
In Each Rating Category
(N = 35)

Selected students in your school have participated in the Reading Strategy program. We would appreciate your view point of the services provided the students through Reading Strategy.

*Circle the answer you select.

1. Does the Reading Strategy program contribute to meeting the reading needs of the participating students?

YES 34(97%) NO 1(3%)

2. How effective is the Reading Strategy program in improving reading skills of the participating students?

18 (51%)	15 (43%)	1 (3%)	1 (3%)	0%
Very Effective 5	Effective 4	Undecided 3	Ineffective 2	Very Ineffective 1

Comments:

- The program is effective when staffed with a competent strategist.
- This is an extension of what the classroom teacher does and what the child needs.
- Teachers comments indicate that the program is effective.
- Teachers specifically requested that the program remain the same.
- Small group instruction is the key.
- Builds self-esteem through mastery.

3. If changes were implemented, what would you recommend?

Responses:

- Assignments of students based on teacher judgement and test scores.
- Selecting children who need the service most, regardless of racial balance.
- Strategists be allowed to work with students outside the school's classroom (to provide student's greater concentration).
- Reassign effective strategist to the same building.
- Assign experienced teachers to the program, to warrant the time the student is released for reinforcement.

Frequency Table of Title I Reading Strategy Grade 4
CTBS Reading Comprehension Pre-Test NCE Values

NCE VALUE	FREQ	ADJ PCT	CUM PCT	NCE VALUE	FREQ	ADJ PCT	CUM PCT	NCE VALUE	FREQ	ADJ PCT	CUM PCT
1	23	1	1	40	90	6	67	55	23	1	95
7	11	1	2	41	62	4	71	56	22	1	97
13	27	2	4	43	44	3	74	58	6	0	97
15	41	3	6	44	50	3	77	59	8	1	98
19	52	3	10	46	39	2	79	61	11	1	98
22	78	5	15	47	33	2	81	63	11	1	99
25	100	6	21	48	31	2	83	66	4	0	99
27	107	7	23	49	34	2	85	68	4	0	100
30	102	6	34	50	33	2	88	71	2	0	100
32	121	8	42	51	27	2	89	76	2	0	100
34	106	7	49	52	25	2	91	80	1	0	100
36	103	7	55	53	22	1	92	99	2	0	100
38	89	6	61	54	25	2	94				

Number (%) of Title I Group Pre Test NCE Values Above 42: 459 (29.2%)

MEAN NCE	35.742	STD. ERR.	0.318	MEDIAN	35.670
MODE	32.000	STD. DEV.	12.603	VARIANCE	158.827
KURTOSIS	0.805	SKEWNESS	0.078	RANGE	98.000
MINIMUM	1.000	MAXIMUM	99.000		
VALID CASES	1571	MISSING CASES	227		

Frequency Table of Title I Reading Strategy Grade 5
Reading Comprehension Pre-Test NCE Values

NCE VALUE	FREQ	ADJ PCT	CUM PCT	NCE VALUE	FREQ	ADJ PCT	CUM PCT	NCE VALUE	FREQ	ADJ PCT	CUM PCT
1	18	1	1	37	136	9	71	57	11	1	98
7	19	1	2	40	95	6	78	59	9	1	99
10	35	2	5	42	60	4	82	60	6	0	99
13	58	4	9	44	45	3	85	62	3	0	99
15	56	4	13	46	47	3	88	63	4	0	99
19	87	6	18	48	40	3	91	64	2	0	100
23	118	8	26	49	27	2	92	66	2	0	100
26	105	7	33	51	24	2	94	68	2	0	100
29	144	10	43	53	22	1	96	70	1	0	100
32	140	9	53	54	15	1	97	83	2	0	100
34	139	9	62	56	9	1	97				

Number (%) of Title I Reading Strategy Group Pretest NCE Values Above 42: 271 (18.3%)

MEAN NCE	32.142	STD. ERR.	0.325	MEDIAN	32.218
MODE	29.000	STD. DEV.	12.504	VARIANCE	156.354
KURTOSIS	0.129	SKEWNESS	0.083	RANGE	82.000
MINIMUM	1.000	MAXIMUM	83.000		
VALID CASES	1481	MISSING CASES	102		

Frequency Tables of Title I Reading Strategy Grade 6
CTBS Reading Comprehension Pre-Test NCE Values

NCE VALUE	FREQ	ADJ PCT	CUM PCT	NCE VALUE	FREQ	ADJ PCT	CUM PCT	NCE VALUE	FREQ	ADJ PCT	CUM PCT
1	11	2	2	33	33	5	58	51	10	2	95
7	26	4	6	35	44	7	65	52	8	1	96
13	30	5	11	38	43	7	72	54	5	1	97
15	28	5	16	40	47	8	79	55	7	1	98
19	27	4	20	42	19	3	83	56	4	1	99
22	43	7	27	44	22	4	86	58	7	1	100
25	43	7	34	46	18	3	89	68	1	0	100
28	54	9	43	47	15	2	92	75	1	0	100
31	57	9	52	49	9	1	93				

Number (%) of Title I Group Pre-Test NCE Values Above 42: 107 (17.5%)

MEAN NCE	31.132	STD. ERR.	0.517	MEDIAN	31.272
MODE	31.000	STD. DEV.	12.783	VARIANCE	163.410
KURTOSIS	-0.203	SKEWNESS	-0.099	RANGE	74.000
MINIMUM	1.000	MAXIMUM	75.000		

VALID CASES 612 MISSING CASES 51

APPENDIX G (cont'd)

APPENDIX H

READING STRATEGY

Inservice - Staff Development

1980 - 1981

September 17, 18, 19	Cluster Inservice - Project Staff.
October 16	A.M. Non Public Teachers in service. P.M. Modalities Center teachers in-service.
November 3	Inservice - New teachers
November 17	Inservice - Teachers servicing #6 "Curriculum for Improving Student Study Skill."
December 18	Staff Development "Mastery Learning" Patricia Bowman
January 11	"Evaluation, 1979-81 - Results & Interpretation," Gwendolyn Morton-Watts Division of Research and Development
January 21	In-Service, selected teachers - "Developing Reading Activities for Newspaper Publication"
January 27	Staff Development "Black English/ Educational and Social Implication" Dr. Howard Mims, Cleveland State U.
February 25	Skills Share Fair
February 27, 28, 29	Inservice - New Teachers
March 13	Cancelled
March 16	Inservice - Modalities Center Teachers
March 20	Staff Development - (Staff and 10 project teachers) Schools Vision Forum. Holiday Inn, Warrensvill Hts.
April 24	Project Meeting
May 19	Staff Development - "Title I Projections for 1981-82" Dr. John P. Nairus.

APPENDIX I

ADDITIONAL FINDINGS SUPPLEMENT

There were several noteworthy additional findings regarding objective one, which pertained to program success as measured by standardized reading test scores.

First, the data were reanalyzed using the Model A design instead of the Model C design, which was pre-selected and used as the primary analytic method. For comparability with the Model C analysis treatment group, those Title I treatment group pupils scoring above 42 NCE on the pre-test were also excluded during the Model A based analysis. On a program-wide basis, using the CTBS comprehension subtest score and the same restricted set of students used with Model C (regression model), Model A (nationally normed NCE score based pre- to post-test t-test model) does not yield as great an NCE gain as Model C does. Model A yielded a 4.7 NCE average gain; Model C yielded a 4.9 NCE average gain (See Appendix B for more data detail). This Model A result would be even less favorable (as well as would the Model C result) if those "too high" (and thus excluded) pre-test score students had been included in the analysis. This is deducible both inferentially (regression towards the -- treatment group -- mean) and directly/empirically from the collected test scores data.

Second, the criterion for admitting students into the Title I Reading Strategy program is that each pupil score less than 33rd percentile (approximately equal to a 41 NCE) on either the Stanford Diagnostic Reading Test (SDRT) or the comprehensive Test of Basic Skills (CTBS). As a result of this procedure, many students who score above the 33rd percentile on one test will score below on the other. Many students who score below the 33rd percentile on the CTBS will score noticeably above that on the SDRT. For many of these students, that CTBS score is not a typical performance, and it can be expected that a retesting on that or equivalent form of the CTBS will result in a higher CTBS score. Thus, many who score misleadingly low on one test will be included in Title I, and their inclusion consequently has to artificially inflate average end-of-treatment CTBS post-test score. Similarly, some may have scored higher on the CTBS than on the SDRT or could have been otherwise expected; due, perhaps, to such things as lucky guessing. Thus the average percentile rank of these types of CTBS pre-test scores can be expected to drift backwards (regress towards the treatment group mean) if retested immediately or prior to treatment. Both of these two types of cases represent measurement errors which, if pervasive, can invalidate the data set and conclusions drawn from it. Since they act in opposite directions, their effect on related group statistics might be partially or nearly cancelled out by the effects of the other. Exactly to what extent is typically not directly determined. The cause of present concern is that:

- . . In Model C as contrasted to Model A, treatment group pre-test scores above the pre-determined 'cut' score are omitted from the analyses, thus eliminating the possibility of the erroneously 'too high' scores offsetting the erroneously 'too low' scores.

- A very large percentage (24.2%) of all otherwise available scores, grades 4-6, are lost from the Model C analyses. This is in addition to scores lost for other reasons.

- Of those Title I students who have CTBS pre-test scores above 33 percentile, a surprisingly large number scored in the top two quartiles, with a couple of scores even being at the 99th percentile level. (See Appendix G for grade by grade 'normalized' percentile score, i.e. NCE distributions)

Third, the same regression analysis done using the CTBS vocabulary subtest yields very different results than it does using the comprehension subtest (See Appendix B). Although Reading Strategy students compare favorably with the comparison group with respect to the comprehension score, this did not hold true with respect to the vocabulary score! This suggests a differing program emphasis between Reading Strategy and comparison group students. If we were using the vocabulary score as the program criterion this year instead of the comprehension score, Model A would give us better results than Model C.

This comparative result could (and probably would) vary from year to year. There are important differences between Model A and Model C and what they do—both in terms of analytic procedures and the constructs and criteria they assess. Model A compares the treatment group to a national norm. Model C compares the treatment group to the non-treatment (comparison) group in the same school district. This has the effect (for Model C) of fairly validly determining whether the treatment group has done better, worse or the same as it would have done had it been left in a non-treatment situation within the same school district. In general, if non-treatment group achievement history has shown that children in the school district typically slip in their nationally normed (NCE) percentile rank, Model C probably will yield more favorable and valid results for assessing the merit of the treatment group's special program effect in the school district. However, if the educational dynamics of the system for a given year are such that the average non-treatment (comparison) group pupil enhances his/her comparative nationally normed standing, assessment of the treatment group's special program effect would to that extent be more favorable if Model A was used.

RESIDENT TUTOR PROJECT

Prepared by

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1980-1981

RESIDENT TUTOR PROJECT

1980-81 Title I Evaluation

PURPOSE AND OVERVIEW

The Resident Tutor Project offers Grade 1-8 students remedial reinforcement of specified reading and/or mathematics skills. Priority service is given to those students who are eligible to participate in another Title I project, but who cannot be served due to enrollment limitations. Pupils identified by classroom teachers as needing assistance and who meet project eligibility criteria are tutored on a regular weekly schedule by a full-time educational aide (Resident Tutor). Tutors assist students on an individual or small group basis outside of the regular classroom for approximately thirty minutes per day, up to five-days per week. All tutors receive orientation and inservice training throughout the school year. Selected schools are also served by a Parent Resource Center established to provide a variety of tutoring activities than can be used at home.

SERVICE SUMMARY

Pupils Served: 1,916 Grades Served: 1-8 Years in Operation: 13

Schools: 35 public
13 nonpublic
48 total
(See list in Appendix A)

Staffing:
1 Project Manager, FT
3 Consultant Teachers, FT
48 Educational Aides, FT
1 Clerk, FT

Total Title I Expenditures: $470,090 Per Pupil Cost: $245

SUMMARY OF FINDINGS

In its 13th year of operation, project activities were directed by a newly appointed manager. Project consultants, who were responsibile for developing monthly tutor training sessions, were required to develop specific objectives and evaluation procedures for each session. A total of 15 Parent Resource Centers were in operation to provide parents with constructive ways of supporting student skill development in the home.

Project records indicated that approximately three of every four assignments completed by tutors were in the reading skill area. Project students demonstrated performance levels that easily exceeded the criteria prescribed in both the reading and mathematics objectives. Standardized reading test performance not only exceeded the criteria prescribed, but demonstrated a noted improvement when comparisons were made with the previous year's results.

Data suggested that careful planning should be accomplished to insure that tutors are assigned to schools with the greatest number of eligible students, efforts should be made to investigate the revision of the project's manual and tests, policy regarding the number of sessions offered to individual students should be reviewed, and continued emphasis should be placed on parent involvement.

OBJECTIVES AND OUTCOMES

NOTE: As a preface to this review of project activities, the reader should be aware of various events which affected project operations during the 1980-81 school year.

- As requested by the Director of Government Programs of the Catholic Diocese of Cleveland, permission was granted by the Division of Federal Assistance of Ohio's Department of Education to offer Resident Tutor services to Grade 7 and 8 nonpublic school students. Two of the thirteen nonpublic schools obtaining project services in 1980-81 extended service to students in Grades 7 and 8.

- Due to the continued financial problems encountered by the Cleveland Public School System, 4 of the project's 48 educational aides were either transferred to other non-Title I positions or were laid-off during December, 1980 and February, 1981. A restriction on hiring new personnel prevented project management from obtaining replacements for these individuals.

- Desegregation implementation preparations necessitated the granting of an extension in the number of days all Cleveland Public School employees were to be in pay status. Budgeted Title I monies were insufficient to support project operations during this additional school time. Approval was granted by the Office of Urban Programs, State of Ohio, Department of Education to co-fund approximately 35 percent of Resident Tutor project operations from April 21, 1981 to June 30, 1981 through use of Disadvantaged Pupil Program Funds. The instructional focus of the project as described in the 1980-81 proposal remained intact.

The following presentation represents a composite of major findings obtained from an assessment of a variety of evaluation data. These findings have been organized according to the various process objectives (objectives which prescribed the major operational tasks) and product objectives (objectives which specified observable changes in student knowledge) guiding project activities during the 1980-81 funding year.

- Process Objective #1: Forty-eight full-time educational aides and up to 10 part-time college students will be hired as tutors to be assigned to up to 48 public and 20 nonpublic Title I elementary schools.

  Outcomes: This objective was partially attained. With the initiation of the school year in September, 1980, a full complement of educational aides (48) were assigned to 35 public and 13 nonpublic participating project schools. (Note: Due to reductions in 1980-81 Title I funding, the total number of schools served by the project declined by 35 percent from the previous funding year - from 73 to 48 schools). All aides with the exception of one assigned to nonpublic school duties served 1980-81 participating schools on a full-time five day schedule. Budget limitations necessitated assigning this nonpublic aide to part-time (or half-day) tutorial duties in two schools. As previously noted, an unexpected extension in the 1980-81 school year mandated that further reductions be made in project services. The subsequent

transfer and lay-off of aides during December of 1980 and February of 1981 caused tutorial services to be discontinued in four project schools. Beginning March 16, 1981, four project aides who had previously been servicing one school on a full-time basis were asked to divide their time between two schools (i.e., two days per week in a school affected by project aide cutbacks and three days per week in their original school assignment). In effect, from March 16, 1981 to the close of the school year (June 30, 1981), an additional eight schools were being serviced on a part-time basis. Finally, these same monetary restrictions prevented project management from obtaining the services of part-time college students. (Refer to Appendix A for a list of the schools serviced on a part-time basis)

Process Objective #2: All project assigned tutors will attend at least one pre-service and monthly in-service training workshops, conducted by project staff and/or consultants.

Outcome: This objective was attained. A general orientation session was held for three full days on September 17, 18, and 19 1980. These sessions familiarized tutors with the project's operational procedures and the report forms that were to be completed during the school year. Tutors were also presented with an introductory overview related to establishing rapport with various individuals who would be encountered while pursuing tutorial responsibilities (i.e., principal, teachers, students and parents) and were introduced to initial mathematics and reading instructional techniques. The three project consultant teachers were responsible for the planning and presentation of these various orientation session topics. A project developed reaction sheet was administered after each session in efforts to provide project management with feed-back related to the strengths and weakness of each presentation. Subsequent to these orientation sessions, inservice meetings were held on a monthly basis with the exception of the months of February and April. Due to the semester break, February's meeting was rescheduled in March and the project consultants conducted on-site visitations to each tutor's school as an alternative to the April meeting. A total of eleven meetings were held during the school year. These full-day sessions were primarily used to up-grade the tutor's instructional capabilities. Project management developed specific, training objectives and procedures as well as evaluation instrumentation for each meeting to ascertain whether participants attained expected session outcomes. Details of these outcomes can be obtained in the project office. (A complete listing of inservice dates and topics appears in Appendix B.)

On a questionnaire responded to by 27 public and 9 nonpublic tutors in June of 1981, the inservice workshops were given overall ratings of Effective or Very Effective by 97 percent of the public school tutor respondents and 100 percent of the nonpublic respondents. One of every four respondents (public and nonpublic combined) indicated that it would be profitable to introduce additional topics in future inservice sessions in an effort to increase their instructional effectiveness. The following typify the kind of topics that were suggested: provide interpersonal relationship training, suggest methods of

teaching mathematics problem solving, provide more opportunity for tutors to share instructional ideas among themselves, and introduce methods of dealing with the disruptive child. (Complete questionnaire responses can be found by referring to Appendices H and I of this report).

Process Objective #3: Tutors will work with groups of 1-2 children at a time, providing reinforcement instruction in specified concepts and/or skills which are the instructional emphasis of the Project, and which have been identified as high priority needs of children in priority schools.

Outcome: This objective was achieved. A review of Pupil Data Cards indicated that a total of 2,720 tutoring assignments were made within the 11 mathematics and reading skill areas taught by the tutors. Of that total, 2,434 (or 89%) of the assignments had complete pre and post test information available and were conducted for the prescribed length of time (i.e., 20 to 30 minutes of instruction on a minimum of 30 occasions). The majority of the tutoring assignments that were conducted in the prescribed manner were for reading skills (1,649 or 68%) with the remainder of these assignments being for mathematics (32% or 785). Within the reading skill area the majority of assignments (42%) were made in vocabulary while the second most frequent skill tutored was spelling (22%). The most frequently assigned mathematics skill was multiplication/division computation (32%) with the related skill of multiplication/division facts being the next most frequent (24%) assignment area.

When 1979-80 and 1980-81 tutoring assignment data are compared, it becomes evident that a complete reversal has occurred in the skill area receiving prime attention of project tutors. During 1979-80, 62 percent of such assignments were made in the mathematics skill area with 38 percent in the reading area. The opposite occurred in 1980-81 with 68 percent of those assignments being made in reading and 32 percent in mathematics. This shift in emphasis was ordered by project management as a response to a systemwide mandate which identified reading as a prime instructional need in all Cleveland Public Schools. Table 1 presents the number and percentage of tutoring assignments that were made in each mathematics and reading skill area during the 1980-81 school year.

TABLE 1
1980-81 Resident Tutor Project Tutoring Assignments
By Skill Area

Math Skill/Code	N	Percent	Reading Skill/Code	N	Percent
Add/Sub Facts	119	6%	Alphabet	91	4%
Mult/Div Facts	193	10%	Vocabulary	702	29%
Add/Sub Computation	144	7%	Aud-Visual Percep.	60	2%
Mult/Div Computation	259	13%	Long/Short Vowels	196	8%
Problem Solving	70	3%	Syllabication	233	10%
			Spelling	367	15%
Totals	785	32%		1,649	68%

Tutors were asked to record the number of students they had assisted at the same time during each tutoring assignment. An analysis of the data for those assignments conducted in the prescribed manner (N=2,434) indicate that the majority of such sessions (1,639 or 67%) were conducted with two students, 470 sessions (or 19%) were taught with one student present, and the remaining sessions (325 or 14%) had three or more students in attendance during the instruction.

Further analysis of tutoring assignment data reveal that of the 1,916 students who received tutorial service, 1,112 (or 58%) of these students obtained tutorial assistance in only one skill area, while 804 (or 42%) of the remaining students received such assistance in more than one skill. Among this latter group, 577 students (or 30%) obtained assistance in two skills, 157 students (or 8%) were tutored in a total of three skills, and 70 students (or 4%) obtained help in four skills.

In a questionnaire distributed to all tutors at the end of June 1981, respondents were to indicate how frequently classroom teachers within their respective buildings clearly identified the specific skill the referred student should be taught. A total of 27 public and 9 nonpublic tutors responded to the question. The majority of respondents from both groups (i.e., 76% public and 68% nonpublic) indicated that teachers within their building "always" identified the specific skill, a "usually" response was recorded by 11 percent and 16 percent of the two respondent groups, a "sometimes" response was indicated by 13 percent and 16 percent of the two groups, and a "sometimes" response was indicated by 13 percent and 16 percent of the two groups. One respondent in the public school group did indicate a "seldom"response.*

When asked how often conferences were held with classroom teachers to "review the work done and the progress made by the pupils", none of the responding tutors in either the public (N=25) or nonpublic (N=9) schools indicated that they "never" conducted such conferences. Nonpublic respondents however, indicated that they conducted the conferences on a more frequent basis than did their public school counterparts (i.e., 78% of the nonpublic respondents indicated holding such meetings "about once a day" or "several times a week" versus 37% of the public school respondents, while 11% nonpublic versus 55% of the public school respondents indicated a "about once a week" or "less frequently" response).*

A noted difference was indicated in how often the public and nonpublic tutor respondent groups used the Resident Tutor Manual. The project manual provides tutors with an explanation of the procedures that should be followed when tutoring, exemplary tutoring activities, and tests. A greater percentage of the 26 public school tutor respondents indicated that they "very frequently" or "somewhat frequently" used the manual than did their nonpublic school colleagues, (i.e., 92% versus 77%). When the "infrequently" response was compared, 4 percent of the public tutors versus 23 percent of the nonpublic tutors indicated

*Refer to Appendices H and I for further details regarding questionnaire findings.

such a response. Neither group, however, indicated that they "never" used the manual. When the tutors were asked if they felt the manual should be "improved", a greater percentage of the nonpublic respondents (89%) recorded a "yes" response than did the public school respondent group (48%). Typical suggestions made by tutors that were aimed at improving the manual related almost exclusively to the locally constructed tests. Included among these were: tests should correspond more closely to a student's current grade level, tests should be more difficult, and tests should meet the needs of the in-between student instead of being too hard or too easy.*

Process Objective #4: Fifteen of the full-time educational aides will be assigned to Parent Resource Centers in 15 Title I schools and will develop parent involvement activities in addition to tutoring. At least 50 percent of the parents of pupils tutored by these aides will visit the Parent Resource Center at least once to receive explanations of the tutoring procedures and materials, be apprised of the progress being made by their child, and/or learn tutoring techniques to be used at home with the pupil.

Outcome: This objective was achieved. Examination of project records showed that Parent Resource Centers operated by full-time tutors were established in 15 of the 35 public schools served by the project. (Refer to Appendix A for a complete listing of Center schools). Of the 619 students served by these 15 tutors, the parents of 367 (or 59%) visited the Centers at least once. This outcome represents a slight increase in the percentage of total parents who visited the Center during 1980-81 (i.e., 59% versus 54%). When visitation data were examined for each Center separately, it was found that the percentage of visiting parents ranged from 27% to 100%. Eleven of the 15 Centers met the criterion prescribed in the objective. This outcome represents an improvement from the previous year when nine of the 15 Centers met the identical criterion. The records further reveal that from one to 23 parent meetings were held at the Centers. A total of 80 such meetings were held with the median number per Center being 5.5. The total number of meetings held in the Centers decreased by 28% from the previous year (i.e., from 111 meetings in 1979-80 to 80 meetings in 1980-81). At least one meeting was held in each Center during 1980-81.

Tutors who had managed Parent Resource Centers were asked in June of 1981 how much they "agreed" or "disagreed" with nine statements related to Center operations. A review of the responses made by the 13 tutors who returned questionnaires revealed that seven of the nine statements received a "strongly agree" or "agree" response by 92 percent to 100 percent of the respondents. One respondent did indicate a "not sure" response on three of these seven statements. Among these seven questions were the following: "Classroom teachers in my building believe that the Resource Center is needed in this school", Parents like the Resource Center's instructional materials", and "I have been adequately trained in how to manage the Resource Center". The two questions that obtained the least agreement among tutors were the following: It is very difficult to get parents to use the Resource Center (55% of the respondents indicating a "strongly agree"/"agree"

*Refer to Appendices H and I for further details regarding questionnaire findings.

response, 30% indicating a "disagree/"strongly disagree" response, and 15% responding "not sure") and "The Resource Center has an adequate number of instructional materials" (86% of the respondents indicating a "strongly agree/"agree" responses and 16% responding "disagree/ "strongly disagree"). (Refer to Appendix J for complete details regarding the Center questionnaire findings).

In an effort to obtain school principal feedback regarding project operations, program management designed a questionnaire which was distributed in June, 1981. All principals (N=15) whose building housed a Parent Resource Center were asked to rate the Center's "worth" to parents, staff and pupils. Of the 14 principals who responded, ten (or 71%) rated the Center's value as "excellent" while the remaining four respondents (or 29%) indicated a "good" rating. (Refer to Appendix M for a complete review of questionnaire outcomes).

Process Objective #5: Priority will be given to serving students who are eligible for but not served by one of the following Title I projects: Reading Improvement Program, Reading Strategy Program, and Mathematics Skills Improvement Program.

Outcome: This objective was achieved. In an effort to insure that Title I eligible pupils in Cleveland's elementary schools participate in a support program that most efficiently meets the need(s) of each student, a comprehensive assignment procedure was developed by the Department of Compensatory Education. The following briefly outlines the procedure used during 1980-81. All persons employed with Compensatory Funds in each Cleveland elementary school formed a team whose major responsibility was to identify pupils eligible for compensatory reading and mathematics services. To accomplish this task, team members surveyed available standardized test data to confirm student eligibility. Complete information pertaining to each eligible student was placed on a standardized Pupil Enrollment Form. The completed forms were organized according to subject area eligibility. Program placement of students was made according to a project priority list established for each of three elementary school types existing in Cleveland (i.e., schools with Grades 1-3 only, Grades 4-6 only, and Grades 1-6). The forms for pupils not immediately selected for service by the projects were filed in a waiting list section. Students from Grades 4-6 who had been placed on the waiting list were serviced by the Resident Tutor Project with priority being given to those most in need of reading assistance. The procedure appears to have eliminated the possibility of providing unnecessary duplication of service to eligible students. (Refer to Appendix F for a copy of the Pupil Enrollment Form and a detailed description of the eligibility procedure).

Product Objective #1: After a minimum of 30 tutoring sessions of 20 to 30 minutes on a specified reading concept and/or skill, 50 percent of a sample of participating pupils will show a gain of 15 percent or more on a project constructed test measuring mastery of that concept and/or skill.

- Outcome: This objective was achieved. A total of six reading skill tests developed by project staff were administered to referred students on a pre and post basis. Pupils were administered only those tests appropriate for the skill(s) in which they were being tutored. Separate versions of each skill test were developed for use with students in Grades 1-3 and Grades 4-8. The total number of items contained on each test varied from 10 items (vocabulary tests) to 25 items alphabet and syllabication tests). The median number of questions per test being 20 items. Scores were reported according to the percent of total item correct. (Refer to Appendix G for an example of a reading skill test).

  Examination of the test scores available for 1,649 completed tutoring assignments showed that students who were involved in 96 percent of assignments achieved a pre-post gain of at least 15 percent. When the results were analyzed separately for each skill area, the percentage of achieving a gain of 15 percent or greater was found to range from 94 percent to 100 percent. The size of the gains achieved by the students averaged 41 percent from pre to post testing. These outcomes were almost identical to the previous year's when the percentage achieving a gain of 15 percent or more ranged from 94 percent to 100 percent and averaged 43 percent. (Appendix C contains complete details regarding student pre-post reading test performance).

- Product Objective #2: After a minimum of 30 tutoring sessions of 20 to 30 minutes on a specified mathematics concept and/or skill, 50 percent of a sample of participating pupils will show a gain of 15 percent or more on a project constructed test measuring mastery of that concept and/or skill.

  - Outcome: This objective was achieved. A total of five mathematics skill tests developed by project staff were administered to referred students on a pre and post basis. As in the reading test area, pupils were administered only those tests appropriate for the skill(s) in which they were being tutored. Separate versions of each skill test were developed for use with the primary (Grade 1-3) and upper elementary (Grade 4-8) students. The total number of items contained on each test varied from 10 to 20 items with the median number of items per test being 20 items. Scores were also reported according to the percent of total items correct. (Refer to Appendix G for an example of mathematics skill test).

    A review of test score outcomes available for 785 completed tutoring assignments indicated that students who were involved in 96 percent of the assignments achieved a pre-post gain of at least 15 percent. When the results were analyzed separately for each skill area, the percentage achieving a gain of 15 percent or greater ranged from 85 percent to 100 percent. The size of the gains achieved by the students averaged 51 percent from pre to post testing. These outcomes demonstrated that during 1980-81 students demonstrated a slight improvement in their mathematics achievement when compared to the previous year (i.e.,

the percentage achieving a gain of 15 percent or more ranged from 94 to 100 percent and averaged 43 percent during 1979-80). (Appendix D contains complete details regarding student pre-post mathematics test performance).

Product Objective #3: After a minimum of 30 tutoring sessions of 20 to 30 minutes each on specified reading skills, the mean posttest NCE score will be 7 units higher than the mean pre-test score for a sample of pupils in Grades 4 through 6 using the appropriate subtests of the Stanford Diagnostic Reading Test appropriate to the reading skill being tutored.

Outcome: This objective was achieved. The Stanford Diagnostic Reading Test (SDRT) was administered in October, 1980 to all public school students in Grades 4-6 as part of the city-wide testing program. This administration served as the pre-test for project students in the participating public schools. Following the completion of tutoring in a specified reading skill, each student was again administered the test by his/her tutor, but only in the subtest that corresponded to the skill tutored. This evaluator conducted two inservice sessions during the beginning of each semester in 1980-81 to insure that all tutors adhered to the proper procedures when administering the SDRT. Although nonpublic school tutors conducted reading instruction, students were not administered the SDRT due to the absence of a city-wide test program.

Pre and post SDRT scores were converted to NCE scores using fall and spring norms respectively. Appendix E provides a grade level summary of the SDRT scores for each of the four administered subtests. More than half (64% or 272) of the 425 referral assignments made in the four reading areas requiring SDRT administrations pertained to the assistance given in the auditory vocabulary skill area. Examination of the pre and post NCE means showed that gain scores ranged from a low of 12.00 (Grade 6 - phonetic analysis) to a high of 27.86 (Grade 5-Structural Analysis). All grades (4-6) exceeded the criterion of a gain of 7 points set in the objective on each subtest. The current year (1980-81) mean gains exceeded those attained by students during the previous year (1979-80) in each of the subtest areas with the exception of Grade 5 students on the phonetic analysis subtest.

A further review of the SDRT outcomes indicate that in 78 percent of the assignments conducted by the tutors, students attained a pre-post gain of at least 7 points. When these results were analyzed separately for each skill area, the percentage of students achieving the proposed criterion gain ranged from 61 percent to 100 percent. The size of the gains achieved by the students averaged 21.25 NCE points.

The request is frequently made to relate project achievement to the national norm group. Such a comparison can be made through the use of a percentile norm group. A percentile rank for a given test score

indicates the percent of pupils at a particular grade placement in the national norm group who received scores equal to or lower than the given score. Table 2 presents the percentile rank of the mean pre/post NCE scores attained by the project students who were administered the SDRT.

TABLE 2

Percentile Rank on National Norms of Mean Pre and Post Scores on Subtests of the Stanford Diagnostic Reading Test

Grade	Subtest	N	Percentile Rank of Mean Pre Score	Percentile Rank of Mean Post Score
4	Auditory Vocabulary	75	17	48
	Phonetic Analysis	2	14	47
	Structural Analysis	24	20	45
	Auditory Discrimination	1	24	49
5	Auditory Vocabulary	127	15	58
	Phonetic Analysis	40	13	47
	Structural Analysis	44	14	60
6	Auditory Analysis	70	21	43
	Phonetic Analysis	5	29	50
	Structural Analysis	37	16	41

Table 2 shows that on the pre-tests the average scores of project students were mostly in the lowest 20 percent of children nationally. A similar outcome was demonstrated during the previous year. The expectation is that without project services, their scores would remain the same relative to children nationally. Post-test results, however, show that in each subtest area Grade 4, 5 and 6 students achieved substantial growth beyond what would be expected. All group average post subtest scores approached or exceeded the average score (50%) nationally. The small numbers of students for whom test scores are available (particularly in the phonetic analysis and auditory discrimination subtest area) suggest that caution be excerised in interpreting results. When the 1979-80 and 1980-81 post-test scores are compared, the growth pattern recorded by Grade 4, 5 and 6 students demonstrated further improvement in all subtest areas with the exception of the Grade 4 analysis outcomes. Improvement was particularly striking at Grade 6. During 1979-80 Grade 6 student post scores on two of the three subtests' indicated that they fell further behind in achievement despite project assistance. Current Grade 6 results demonstrated a complete reversal of this pattern in that students have evidenced substantial growth in each subtest area. (Refer to the 1979-80 project evaluation for complete percentile results).

ADDITIONAL FINDINGS

Efforts were made to ascertain how various groups viewed their involvement in 1980-81 project activities. To accomplish this, a variety of questionnaires were developed to obtain the perceptions of those who had direct contact with project services. Those questionnaires were distributed to project and non-project staff, school principals, and students in June of 1981. The following highlights the major findings obtained from the responses of 27 public school tutors, 9 nonpublic school tutors, 21 nonproject teachers from public schools, 10 nonproject teachers from nonpublic schools, 32 principals, and 55 students.

- When asked to indicate what had been the "greatest problem" tutors encountered as they assisted students during the school year, the problem most often cited by the 22 responding public school tutors related to their attempts to maintain the proper racial balance among the students they assisted (6 of the 22 respondents or 27% indicated such a response). Additional problems cited by more than one respondent included: the inappropriateness of adhering to a 30 session instructional period for each student (i.e., 3 of the 22 respondents indicated that various students needed less or additional time to master a (particular skill) and the difficulty in obtaining an adequate number of eligible students to tutor (i.e., 3 of the 22 respondents indicated that this problem was especially bothersome in those buildings with more than one Title I reading project). Nonpublic teacher respondents (N=9) did not reach a consensus when asked the same question. Included among their varied responses were the following: "the amount of children available for our program", "disciplining the students" and "record keeping". (Refer to Appendices H and I for complete results).

- A total of 16 of the 27 public school tutors who returned questionnaires provided recommendations that they believed would improve the project next year. Those recommendations made by more than one respondent included: developing a more equitable plan with other Title I projects to obtain a greater number of eligible students for tutoring (four respondents made this recommendation) and revise the project reading tests making them more challenging (two respondents made this recommendation). Three of the nine nonpublic tutors indicated that the tutor manual and tests should be revised. (Refer to Appendices H and I).

- Three types of responses were obtained from nonproject public school teachers when asked to indicate what changes they would make to improve project operations. Although 21 teachers returned questionnaires, only eight provided such recommendations. The three types of suggestions that were provided included: find ways to service more students (five respondents), increase the involvement of classroom teachers in developing tutorial objectives for each student (two respondents) and permit students who need additional assistance to master a skill to remain with the tutor for more than 30 sessions (one respondent). The most often cited recommendation

made by nonpublic teachers related to developing a closer relationship between tutor and teacher when defining the tutorial instructional approach for each student (three of the four respondents who provided recommendations responded in this manner). (Refer to Appendices K and L for complete nonproject teacher survey results).

Principals were also asked to indicate what "features" of the project they felt needed "modification and/or deletion". More than half (53%) of the 32 principals who returned questionnaires provided responses to the question. The most common contribution made by (6 of the 17 respondents) related to relaxing the student eligibility requirements in order that a greater number of pupils could be served by the project. Principals making this recommendation urged that classroom teacher judgement be emphasized when selecting students. Other recommendations included: reducing the amount of paperwork required of tutors, conducting fewer inservice sessions for tutors during the year, and re-instituting the involvement of students in Grades 1-3. (Refer to Appendix M).

A review of the student questionnaire responses obtained from a random sample of public and nonpublic students revealed that 96 percent of the group "liked getting help from my tutor" with the remaining students (4%) indicating a "not sure" response. A smaller percentage of respondents, however, indicated that they would like to "get help" from a tutor next year (i.e., 76% responded "yes", 7% responded "no", and 17% indicated a "not sure" response). An overwhelming majority of these same students (95%) indicated that they felt their tutor did help them "do better in school" with a 5 percent indicating a "not sure" response (Refer to Appendix N for complete student survey results).

CONCLUSIONS

A summary analysis of 1980-81 Resident Tutor Project results revealed the following outcomes. Due to budgetary reductions, the project served fewer schools than previously and some schools obtained only part-time services of a tutor during the second semester. The newly appointed program manager required that project consultant teachers develop objectives as well as evaluation procedures for each staff orientation/inservice training session conducted. Parent Resource Centers were in selected schools to provide parents with suggestions of how they could assist their child's skill development at home.

The majority of tutoring assignments completed by project staff were in the reading rather than mathematics skill area. More than half of the students obtained instruction in one reading or mathematics skill area only. Tutors conducted most of their assignments with two students being present during the instruction. When student achievement results were analyzed, project students demonstrated performance levels that easily exceeded the criteria prescribed in both the reading and mathematics subtest objectives.

The standardized reading test performance (SDRT) of 1980-81 student participants not only exceeded the criteria prescribed in the proposed objective, but demonstrated a noted improvement when comparisons were made with the previous year's results.

Based on an extensive review of current (1980-81) project related data, this evaluator provides the following recommendations for consideration when making future operational planning decisions.

- With the prospect of continuing budget reductions and the fact that program management was forced to reduce project services on a part-time basis in nine schools during 1980-81, it is critical that future tutor assignments be made in those schools which possess the greatest number of eligible students who cannot be serviced by other Title I projects. To accomplish this task, staffing decisions for all elementary Title I projects must be made early enough to allow for the proper placement of tutors prior to the start of the new school year. As presented in the Additional Findings section of this report, at least 3 of 22 tutor respondents in unsolicited comments alluded to experiencing difficulty in obtaining enough student participants. This appeared to be particularly true in those schools which possessed at least two additional Title I projects. In addition, further investigation should be made to ascertain how successful part-time assignments have been before such a practice is continued or discarded. It is not recommended, however, that teacher judgements replace standardized test data as the primary method of identifying potential eligible students as principals have suggested.

- As presented, a great number of tutors have recommended that the project's instructional manual and skill tests be revised. Cited as reasons for such a recommendation were that students tended to get bored with the activities suggested in the manual and the skill tests were oftentimes not suited to the grade level placement of the student with some finding them too difficult or easy. With respect to the last recommendation, one must be reminded that such tests were originally constructed to determine whether a student had mastered a specific skill after receiving tutorial assistance. Consequently, it should not be surprising to find an overwhelming majority of students routinely scoring well on the post administration of such tests. It is therefore recommended that prior to enacting any revision process, program management investigate the specifics of such recommendations thoroughly.

- As cited in this report, a common recommendation made by public and nonpublic tutors involve questioning the benefits of adhering to 30 instructional sessions per student. It was indicated that some students mastered the specific skill prior to 30 sessions, while others needed additional time to do the same. This evaluator is unaware of any data which suggests that it is more or less beneficial to adhere to a fixed number of sessions when tutoring individual students. A more complete study of this issue may provide insight that will contribute to insuring effective use of tutor time.

- More than half (55%) of the responding tutors who were responsible for Parent Resource Centers indicated that it was difficult to obtain parent involvement. Program management has recognized the importance of bringing project personnel and parents together often to discuss how instructional support can be provided in the home. The special activities scheduled in the Centers during April and May attested to this concern and appeared to be relatively successful. It is crucial that efforts continue to be made to provide more parents the opportunity to obtain practical teaching suggestions and aids that can be easily used with their children.

APPENDIX A

Schools Serviced by the Resident Tutor Project During the 1980-81 School Year

Public Schools

Andrew J. Rickoff @
Anthony Wayne @
Buhrer #
Case
Charles Lake @
Chesterfield @
Clark #
Cranwood @
Daniel Morgan @
East Madison
Forest Hill Parkway
Fullerton
Garfield
George W. Carver
Gordon #
Henry W. Longfellow
Kenneth Clement
Margaret Ireland @
Marion-Sterling @
Mary B. Martin
Mary Bethune @
Miles Park*
Milford
Mount Pleasant #
Oliver H. Perry @
Orchard @
Paul Revere @
Robert Fulton @
Stephen B. Howe
Tremont
Union
Verda Brobst #
Wade Park @
Walton @
Waterson-Lake @ *
Willow

Non Public Schools

Immaculate Conception
Our Lady of Peace
St. Adalbert
St. Benedict
St. Francis
St. Joseph Franciscan
St. Michael
St. Philip Neri
St. Stephen #
St. Thomas Aquinas
St. Timothy #
St. Wendelin *
Urban Community *

*Schools serviced by a part-time aide between September 8, 1980 to June 5, 1981
#Schools serviced by a part-time aide between March 16, 1981 to June 30, 1981
@Schools containing a Resident Tutor Parent Resource Center.

APPENDIX B

Description of Resident Tutor Training Sessions Held During 1980-81

Date (s)	Type of Session(s)	Topics Featured at Session(s)
September 17, 18 and 19, 1980	Orientation	. Review project operational procedures and forms . Provide training in the creation of tutor lesson plans . Introduce an overview of how to teach reading . Prepare for teaching math in a tutoring session . Introduce methods that can establish rapport with principal, teacher, tutee, and parent
October 15, 1980	Inservice	. Introduce ways to provide students with practice in multiplication and division skills . Introduce ways to provide students with basic phonics skill practice . Learn to develop vocabulary lessons
November 26, 1980	Inservice	. Review procedures related to good lesson plan construction . Review new mathematics and reading instructional material . Discuss special concerns held by tutors . Obtain training in the administration of the Stanford Diagnostic Reading Test
December 17, 1980	Inservice	. Learn to construct games which reinforce mathematics and reading skills . Introduce the game of Tea Kettle (a game of homonyms) . Introduce methods designed to teach spelling . Provide techniques found effective in preventing problems to occur when reading addition
January 22, 1981	Inservice	. Hear a presentation by the Supervisor of Elementary Mathematics related to new teaching techniques . Introduce techniques which contribute to legible cursive handwriting
February 26, 1981	Inservice	. Invite one parent from each school to attend presentation made by Supervisor of Elementary Reading Language Arts regarding parent involvement
March 24 and 26, 1981	Inservice	. Review project goals for the 1980-81 school year . Review standardized testing procedures . Obtain instruction in how to teach syllabication . Develop lesson plans related to syllabication . Hear a presentation regarding the 1979-80 project evaluation
April, 1981	--	No workshop scheduled. Project consultants conduct on-site visits to each tutor's school as follow-up to March inservice session activities
May 13, 28 and June 29, 1981	Inservice	. Collect all project related records and evaluation data

APPENDIX C

Resident Tutor Project Reading Skill Test Results

Subtest/Code	Grade	N	Pre Mean Percent Correct	Post Mean Percent Correct	Mean Percentage Gain	N/% Gain ≥+15.00	Obj. Attain.
Alphabet (Skill Code 210)	1	41	32.07	92.43	+60.36	41/100%	*
	2	--	--	--	--	--	-
	3	6	32.00	90.66	+58.66	6/100%	*
	4	23	34.56	82.52	+47.96	23/100%	*
	5	12	29.16	66.83	+37.67	12/100%	*
	6	9	41.55	82.33	+40.78	9/100%	*
	7	-	--	--	--	--	-
	8	-	--	--	--	--	-
Vocabulary (Skill Code 220)	1	12	32.50	71.66	+39.16	11/91%	*
	2	24	39.58	83.87	+44.29	23/95%	*
	3	25	40.00	80.40	+40.40	24/96%	*
	4	253	36.49	77.13	+40.64	243/96%	*
	5	277	40.82	84.45	+43.63	267/96%	*
	6	108	43.24	82.52	+39.28	102/94%	*
	7	1	20.00	80.00	+80.00	1/100%	*
	8	2	20.00	100.00	+80.00	2/100%	*
Aud-Visual Percep. (Skill Code 230)	1	23	41.30	82.60	+41.30	23/100%	*
	2	12	45.00	84.58	+39.58	12/100%	*
	3	-	--	--	--	--	-
	4	9	38.22	81.66	+43.44	9/100%	*
	5	14	56.42	80.35	+23.93	14/100%	*
	6	2	52.50	87.50	+35.00	2/100%	*
	7	-	--	--	--	--	-
	8	-	--	--	--	--	-
Long/Short Vowels (Skill Code 240)	1	43	31.97	72.90	+40.93	43/100%	*
	2	47	38.29	78.51	+40.22	47/100%	*
	3	18	40.00	91.66	+61.66	18/100%	*
	4	27	42.96	74.25	+31.29	24/88%	*
	5	55	40.52	85.10	+44.58	54/98%	*
	6	6	42.66	90.50	+47.84	6/100%	*
	7	-	--	--	--	--	-
	8	-	--	--	--	--	-
Syllabication (Skill Code 250)	1	-	--	--	--	--	-
	2	9	41.11	83.33	+42.22	9/100%	*
	3	10	43.00	77.00	+34.00	10/100%	*
	4	71	43.12	80.18	+37.06	64/90%	*
	5	87	49.24	83.47	+34.23	83/95%	*
	6	56	43.44	80.07	+36.63	54/96%	*
	7	-	--	--	--	--	-
	8	-	--	--	--	--	-
Spelling (Skill Code 260)	1	-	--	--	--	--	-
	2	14	44.28	84.28	+40.00	14/100%	*
	3	16	38.12	77.81	+39.69	16/100%	*
	4	129	40.36	80.54	+40.18	125/96%	*
	5	148	38.58	76.33	+37.75	140/94%	*
	6	59	41.52	79.40	+37.90	56/94%	*
	7	1	34.00	30.00	- 4.00	0	-
	8	-	--	--	--	--	-

*Objective-criterion attained (i.e., 50 percent of a sample of participating students will show a gain of 15 percent or more).

APPENDIX D

Resident Tutor Project Mathematics Skill Test Results

Subtest/Code	Grade	N	Pre Mean Percent Correct	Post Mean Percent Correct	Mean Percentage Gain	N/%Gain +15.00	Obj. Attain.
Add/Sub Facts (Skill Code 111)	1	26	29.38	77.76	+48.38	24/92%	*
	2	44	33.27	88.22	+54.95	43/97%	*
	3	18	41.55	91.88	+50.33	18/100%	*
	4	14	52.07	90.64	+38.57	13/92%	*
	5	13	46.30	74.07	+27.77	13/100%	*
	6	4	48.50	74.00	+25.50	4/100%	*
	7	-	--	--	--	--	-
	8	-	--	--	--	--	-
Mult/Div Facts (Skill Code 112)	1	-	--	--	--	--	-
	2	1	40.00	60.00	+20.00	1/100%	*
	3	7	36.57	75.42	+38.85	6/85%	*
	4	90	33.98	84.47	+50.69	88/97%	*
	5	61	39.78	84.03	+44.25	56/91%	*
	6	34	38.35	80.11	+41.75	34/100%	*
	7	-	--	--	--	--	-
	8	-	--	--	--	--	-
Add/Sub Computation (Skill Code 121)	1	-	--	--	--	--	-
	2	11	36.36	67.72	+31.36	11/100%	*
	3	18	43.88	80.83	+36.95	18/100%	*
	4	71	42.38	83.94	+41.56	69/97%	*
	5	24	44.29	86.25	+41.96	23/95%	*
	6	20	42.50	76.50	+34.00	20/100%	*
	7	-	--	--	--	--	-
	8	-	--	--	--	--	-
Mult/Div Computation (Skill Code 122)	1	-	--	--	--	--	-
	2	-	--	--	--	--	-
	3	-	--	--	--	--	-
	4	73	37.35	77.35	+40.00	68/93%	*
	5	88	33.23	79.77	+46.54	87/98%	*
	6	97	35.57	80.27	+44.70	93/95%	*
	7	1	10.00	100.00	+90.00	1/100%	*
	8	-	--	--	--	--	-
Problem Solving (Skill Code 131)	1	4	35.00	77.50	+42.50	4/100%	-
	2	-	--	--	--	--	-
	3	20	21.00	80.00	+59.00	4/100%	*
	4	18	29.00	74.50	+45.50	20/100%	*
	5	13	30.00	76.11	+46.11	18/100%	*
	6	8	25.38	82.30	+56.92	12/92%	*
	7	3	10.00	97.50	+86.50	8/100%	*
	8		10.00	100.00	+90.00	3/100%	*

*Objective criterion attained (i.e., 50 percent of a sample of participating students will show of 15 percent or more).

APPENDIX E

Resident Tutor Project Stanford Diagnostic Reading Tests Results

Subtest/Code	Grade	N	Pre $\bar{X}$ NCE Score	Post $\bar{X}$ NCE Score	NCE Gain	N/% Gain $\geq$ + 7 NCE	Objective Attained
Auditory Vocabulary (Skill Code 220)	4	75	29.75	45.69	+15.94	60/80%	*
	5	127	27.89	54.36	+26.47	108/85%	*
	6	70	32.93	45.96	+13.03	43/61%	*
Auditory Discrimination (Skill Code 230)	4	1	35.00	49.00	+14.00	1/100%	*
Phonetic Analysis (Skill Code 230)	5	Combined with Skill Code 240					
	6	Combined with Skill Code 240					
Phonetic Analysis (Skill Code 240)	4	2	27.00	48.00	+21.00	2/100%	*
	5	40	25.75	47.98	+22.23	33/75%	*
	6	5	38.40	50.40	+12.00	4/80%	*
Structural Analysis (Skill Code 250)	4	24	32.38	47.21	+14.83	17/71%	*
	5	44	26.66	54.52	+27.86	41/93%	*
	6	37	29.24	44.76	+15.52	26/70%	*

* Objective criterion attained (i.e., mean NCE gain $\geq$ +7).

APPENDIX F

Title I Project Eligibility Procedures and Form Utilized During the 1980-81 School Year

APPENDIX F

PROCEDURE FOR ESTABLISHING SCHOOL COMPENSATORY ELIGIBILITY LIST

- Make-up of Title I Team ..Selection of Team Leader
- Assignment of Pupils to Programs
- Setting up Title I file
- Reporting for Title I Census (or Research)

THE COMPENSATORY TEAM will consist of all persons employed with Compensatory Funds in the building. This will include both certificated and non-certificated personnel.

THE TEAM LEADER will be a person agreed upon by the Project Managers of Reading and Math programs operating in the building. He/She should have ability to organize the work and lead the team. Experience with form will be helpful.

Duties - Team Leaders

(1) Liaison with Principal regarding all matters related to team activities and the School Eligibility File
(2) Receive forms and manuals
(3) Call and conduct meetings
(4) Distribute forms and manuals
(5) Set up and maintain filing system (system will be uniform in all buildings.)

FIRST MEETING - Team will meet with principal to discuss plans for surveying classes to be involved.

SECOND MEETING - Classrooms with pupils eligible for services of programs offered in the building will be divided among the team members for survey purposes. Enrollment forms handed out at this time.

Team members will secure print-outs, lists, or cards (with information relative to the selection criteria for each program) for the classes they will cover.

SPRING TEST SCORES will be used for the initial screening for eligible pupils:

READING IMPROVEMENT	# 1,2,3	At or below 33 %ile
READING STRATEGY	# 4 - 6	"
READING CENTER	# 4 - 6	"
MATHEMATICS SKILLS IMPROVEMENT	# 4 - 6	
	CTBS	"
	CLEVE. MATH TEST	50% or less

PROCEDURE FOR COMPLETING PUPIL ENROLLMENT FORMS - To be done as soon as pupil is identified as eligible.

- Consult manual for correct procedures for filling out forms
- Complete all information on the top half of the form except:
  (1) Exit Code (To be filled in when pupil leaves)
  (2) Authorizing Signature (To be filled in at Project Office.)

APPENDIX F (Cont'd)

Using information available re: test results, fill in the information required next to the test or tests that qualify the pupil for service. THIS WILL INCLUDE BOTH READING TESTS AND MATH TESTS.

NOTE: A FORM SHOULD ONLY BE FILLED OUT IF THE PUPIL SCORES IN THE RANGE INDICATED PREVIOUSLY THAT WOULD MAKE HIM/HER ELIGIBLE IN READING OR MATH OR BOTH.

THIRD MEETING - *Team members bring the forms that they have filled out, grouped according to class.*

Within each class group, forms should be separated according to the following subject area eligibility:

READING
MATH
READING AND MATH

Program selection for each pupil may be made according to the following priorities:

Schools Grades 1 - 3

LAU
ENGLISH AS A SECOND LANGUAGE
READING IMPROVEMENT
READING IMPACT

Schools Grades 4 - 6

LAU
ENGLISH AS A SECOND LANGUAGE
READING CENTER - *Pupils previously diagnosed as long term*
READING STRATEGY AND MATH SKILLS - *Divide pupils for racial balance and consult together with classroom teacher. Teacher will decide whether pupils receive either or both programs. Classroom teacher will initial beside the service selected for the pupils.*
RESIDENT TUTOR - *Waiting List Pupils*

Schools Grades 1 - 6

LAU
ENGLISH AS A SECOND LANGUAGE
READING IMPROVEMENT
READING IMPACT
MATH SKILLS
READING CENTER - *Pupils previously diagnosed as long term*
READING STRATEGY AND MATH SKILLS - *(Cooperative procedure as in 4 - 6 schools)*
RESIDENT TUTOR - *Waiting list Pupils*

When program selection has been made, the person(s) servicing that pupil will:

- Place a check by the name of the program to indicate that the pupil will be enrolled.
- Fill in program number (SEE MANUAL)

Servicing person will then distribute forms as follows:

- White and yellow copy to project office
- Pink form to be filed alphabetically by homeroom in school file

NOTE: SHOULD PUPIL BE SELECTED FOR TWO PROGRAMS (READING AND MATH) A FORM FOR EACH PROGRAM MUST BE MADE. THESE TWO WILL BE CLIPPED TOGETHER IN FILE.

Forms of pupils not selected for service may be filed in the Waiting List section of the file. All copies should remain together. They will not be removed from the Waiting List section until pupil is picked up for service.

FOURTH TEAM MEETING - Should be called by team leader when results of Fall testing are available if more than one project in building selects pupils from this test. Otherwise, teacher from the project using Fall scores (ex. Reading Strategy) will secure own information from classes served.

PROCEDURE FOR TRANSFER OR WITHDRAWAL - ACTIVE FILE

Withdrawals

The servicing teacher will be responsible for notifying his/her project office in the event of a withdrawal of a pupil being serviced.

Each project will establish its own procedure for notification.

- Remove pink copy from active file
- Write in exit code numbers (see manual)
- Write in exit date (see manual)
  - If exact date is known, write in that date
  - If exact date is unknown, write in the last day of service
- File pink copy in transfer/withdrawal section of file.

PROCEDURE FOR RECEIVING TRANSFERS IN

- All transfer forms received in school mail should be addressed to Compensatory Team Leader.
- Team Leader will record date of receipt on top of form.
- Xeroxed form will be circulated among program teachers for whose program pupil appears to qualify, according to test results.
- If space is available in an appropriate program, the teacher will fill out a new Enrollment form for that pupil and forward two top copies to project.

- Pink copy will be placed in active file.
- If space is not available, xeroxed form will be placed in Waiting List section.

PROCEDURE FOR PROCESSING NEW ENTRIES

New entries without necessary test information will be forwarded to the Diagnostic Reading Clinic at Observation Center, or to the Reading Center Teacher for forwarding for diagnosis.

PROCEDURE FOR TRANSFER OR WITHDRAWAL - WAITING LIST

(Sending School - Transfer)

- Enrollment Form (all 3 pages intact) is removed from file.
- No exit information is to be filled in, since pupil was not serviced.
- If pupil transfers to another Cleveland school, then sending school identification (school name, code, room, etc.) is crossed off and new school name is written on form.
- Send this entire form to new school! This will become their information copy. Send to Team Leader.

(Receiving School - Transfer)

- Team leader circulates form among eligible projects.
  - If spaces are filled, form is placed in the waiting list file.
- If pupil is selected for service, either at entry or at a later date, a new form is filled out with current information rewritten on the new form. First two copies sent to Project Office.
- When new form is made, old form may be destroyed.

(Withdrawal)

- Form is removed from Waiting List section of file.
- Date of withdrawal and place pupil left for to be written on form.
- Form is placed in Transfer/Withdrawal Section

MAINTAINING THE FILE - Team members should be free to use the files and to keep the forms of the pupils whom they are servicing updated. It would be each person's responsibility to keep files in order and to return them to the permanent location, should it be necessary to remove them.

END OF THE SCHOOL YEAR -

All pupils with forms in the active file at the end of the school year should have the last day of service entered and exit code affixed.

The team leader will be responsible for supplying information from the files as required for the Division of Compensatory Education or Division of Research. Team members should be willing to assist, if requested.

The Team Leader will be responsible for securing the files as directed by the Division before leaving for the summer.

EACH FILE WILL HAVE THE FOLLOWING SECTIONS:

- ACTIVE
- WAITING
- WITHDRAWAL/TRANSFER

Cleveland Public Schools
Title I Projects

APPENDIX F (Cont'd)

PUPIL ENROLLMENT FORM

SCHOOL NAME _____ PUPIL'S HOMEROOM NO. ____ PUPIL'S GRADE ____

NAME OF PERSON COMPLETING ENROLLMENT FORM _____

POSITION _____

PUPIL'S LAST NAME | PUPIL'S FIRST NAME | MI

PUPIL ID | PROJECT CODE | ENTRY DATE

EXIT DATE | EXIT REASON

Original — *Compensatory Educational Programs*
Duplicate — *File*

_____
Authorizing Signature

BASIS OF ELIGIBILITY

NAME OF TEST	FORM	LEVEL	SUBTEST	GRADE	RAW SCORE	STANINE	% ILE	DATE ADMIN.
MRT								
SDRT								
CTBS								
CMT								

PUPIL ENROLLMENT (Check)

_____ BILINGUAL CLASS
_____ BILINGUAL TUTORING
_____ CHILD DEVELOPMENT
_____ CLEVE. FUND SCHOOL
_____ DIAGNOSTIC CENTER
_____ ENG-AS-A-SEC. LANG
_____ MATH SKILLS
_____ PUPIL ADJUSTMENT
_____ READING IMPACT
_____ READING IMPROVEMENT
_____ READING STRATEGY
_____ RESIDENT TUTOR
_____ RESIDENTIAL SCHOOLS
_____ S T A R
_____ SUMMER SCHOOL
_____
_____

APPENDIX G

Examples of Resident Tutor Project
Reading and Mathematics Skill Tests

APPENDIX G (Cont'd)

220: VOCABULARY TEST A

Score_____ ☐ Pre

Name_____ Date_____ Grade_____ ☐ Post

DIRECTIONS: Circle the word that completes the sentence.

Examples: Her cake is on the _____ red fence (table)

The wagon can go _____ cars fast many

---

1. Her coat is _____ around three blue

2. She likes to jump_____ rope cars toys

3. Tom will eat the _____ box ball apple

4. Mother put the toys _____ over after away

5. Sue will bake _____ ball cookies car

6. My work is _____ done draw eight

7. The baby is _____ hold got asleep

8. Please tell me a _____ play story picture

9. Janet will write a _____ picture letter drink

10. Father will cut the _____ grass seven pick

APPENDIX G (Cont'd)

122: MULTIPLICATION - DIVISION COMPUTATION TEST A

Score_____ ☐ Pre

Name_____ Date_____ Grade_____ ☐ Post

DIRECTIONS: Write the products and/or quotients.

(1)
$$\begin{array}{r} 514 \\ \times\ 3 \\ \hline \end{array}$$

(2)
$$\begin{array}{r} \$4.30 \\ \times\ 2 \\ \hline \end{array}$$

(3)
$$\begin{array}{r} 429 \\ \times\ 3 \\ \hline \end{array}$$

(4)
$$\begin{array}{r} 351 \\ \times\ 4 \\ \hline \end{array}$$

(5)
$$\begin{array}{r} \$3.93 \\ \times\ 5 \\ \hline \end{array}$$

(6) $3\overline{)96}$

(7) $3\overline{)\$7.74}$

(8) $5\overline{)224}$

(9) $3\overline{)106}$

(10) $4\overline{)503}$

STOP

287

APPENDIX H

SURVEY OF PUBLIC SCHOOL TUTOR OPINION*

N=27

Dear Resident Tutor:

The Cleveland Public Schools is gathering information for a report on the Resident Tutor Project. Your answers to the following questions will help us prepare the report and make decisions about improving the program. Please answer all the questions completely and honestly. YOU NEED NOT SIGN THE QUESTIONNAIRE.

Please use the attached envelope to send your completed questionnaire by Friday, June 5,1981 to the address appearing on the envelope. If you are in a nonpublic school return postage has been included to enable you to use the United States mail. Use the school mail if you work in a public school.

1. Counting this year, how many years have you been employed as a Resident Tutor?

6 Average Years of Employment

2. The Resident Tutor Training Workshops you attended this year covered several topics. How effective were each of the following workshop topics in preparing you to work as a Resident Tutor? Please check the response which corresponds to your opinion.

Workshop Topics	Very Effective	Effective	Somewhat Effective	Not Effective	No Response
a. Completing Resident Tutor Project Forms and records	70%	26%	--	--	4%
b. Learning how to assist students in taking tests	70%	30%	--	--	--
c. Tutoring techniques for reading	74%	19%	--	--	7%
d. Sharing tutoring ideas among tutors	52%	33%	15%	--	--
e. Tutoring techniques for mathematics	56%	37%	4%	--	3%

3. Overall, how effective were the Resident Tutor Training Workshops in preparing you to work as a Resident Tutor? (Check one)

67%	30%	--	--	3%
Very Effective	Effective	Somewhat Effective	Not Effective	No Response

* Completed by public school tutors during the week of June 22, 1981.

4. Are there any additional areas you think need to be covered in the training workshops to increase your tutoring effectiveness?

22%	67%	11%
Yes	No	No Response

If you answered YES, please list one or two specific topics that you would like to see added to the training workshops.

I would like at the very beginning to go over all of the criteria of the program. It would give me a chance to start out the year with a clear beginning...Problem solving(math)...Interpersonal relations...Multiplication and division skills.

5. Did the new Resident Tutor Pupil Data Card (yellow card) assist in simplifying your record keeping?

97%	3%	--
Yes	No	No Response

If you answered NO, please explain what problems you encountered when using the Card.

No problems were cited. The following comments, however, were recorded: It helped immeasurably in compiling data at end of year. All information including parent contact was close at hand...The RTP Office copy and the tutor's copy should have been different colors or with a box to be checked indicating original and duplicate.

6. How many different classroom teachers have you tutored pupils for this year?

6 Average Number of Teachers

7. When you are assigned a pupil for tutoring in reading or math, do your classroom teachers clearly identify the specific skill to be tutored? (Please respond by placing one "X" in each column).

When Pupil Needs Reading Tutoring	When Pupil Needs Math Tutoring	
78%	70%	Teacher always identifies specific skill
7%	15%	Teacher usually identifies specific skill
11%	15%	Teacher sometimes identifies specific skill
4%	--	Teacher seldom identifies specific skill

8. On average, how many minutes do you tutor an individual pupil during a single session?

30 Minutes spent with each pupil.

How often do you have conferences with your classroom teachers to review the work done and the progress made by the pupils you tutor? (Please check one)

About once a day	Several times a week	About once a week	About once every two weeks or less frequently	Never	No Resp.
--	37%	48%	7%	--	8%

9. Has your Project Consultant Teacher demonstrated the use of tutoring techniques with any of your pupils this year?

89% Yes	7% No	4% No Response

If you answered YES, how helpful do you find these demonstrations?

Very helpful	Somewhat helpful	Not very helpful	No Response

If you answered NOT VERY HELPFUL, explain in what ways the assistance provided by the Consultant Teacher could become more effective.

No comments were recorded.

10. How often did you refer to the Resident Tutor Manual during the current school year?

44% Very Frequently	48% Somewhat Frequently	4% Infrequently	-- Never	4% No Response

If you answered INFREQUENTLY or NEVER, please explain why you found little use for the manual.

I have memorized most of the techniques suggested and find it beneficial to consult other resource material.

11. How helpful is the Resident Tutor Manual as a source of ideas for tutoring activities?

74% Very Helpful	22% Somewhat Helpful	Not Very Helpful	4% No Response

12. Do you feel that the Resident Tutor Manual should be improved?

48% Yes 44% No 8% No Response

If you answered YES, please list one or two specific suggestions for improvement.

The work is too easy that is being used from the manual...RTP tests should be more difficult...A vocabulary test geared for 3rd & 4th grade...Complete revision of every reading test with an appropriate test devised for each grade level...Skills to be learned in each grade.

13. What has been the greatest problem you have encountered as you tutored students this current school year?

One change after another. My kids were taken away by other Title I teachers... My problems was with the teachers who didn't want to live up to the schedule you agreed on and would punish the children and not let them come...Attaining proper racial balance...Having to keep an overy detailed plan book...Poor attendance for students.

14. What changes would you recommend to improve the project next year?

Make RTP test a little harder and more creative reading...Too much time is being consumed by paperwork and being forced to rapidly turn over tutees...Select our tutees at the same time as other Title I programs in our building...Not have to be last to choose our tutees...More time with less children. Most children love being tutored.

Shorter meetings and not so many...I feel the 50 sessions for some pupils are not enough...I find that the tutor vocabulary tests are too easy for fourth and fifth graders as a whole...Much less emphasis on SDRT and justifying every action that the teacher (classroom) and tutor know is helping the student educationally.

15. What has been your greatest project accomplishment this current school year?

The progress of the tutees...Able to interest more parents in how the project works... Most of the students mastered the skill that was taught...Aside from the improvement in test scores and attendance, I feel that the change in attitude was very positive. Some of our children were apprehensive about their new school setting. All this week I heard numerous comments about how glad they will be should they return to our next year...My 4th grade children have not failed a reading or spelling test since I have been tutoring them...Pupil gains in SDRT tests...

APPENDIX I

SURVEY OF NONPUBLIC SCHOOL TUTOR OPINION*

N-9

Dear Resident Tutor:

The Cleveland Public Schools is gathering information for a report on the Resident Tutor Project. Your answers to the following questions will help us prepare the report and make decisions about improving the program. Please answer all the questions completely and honestly. YOU NEED NOT SIGN THE QUESTIONNAIRE.

Please use the attached envelope to send your completed questionnaire by Friday, June 5, 1981 to the address appearing on the envelope. If you are in a nonpublic school return postage has been included to enable you to use the United States mail. Use the school mail if you work in a public school.

1. Counting this year, how many years have you been employed as a Resident Tutor?

4 Average Years of Employment

2. The Resident Tutor Training Workshops you attended this year covered several topics. How effective were each of the following workshop topics in preparing you to work as a Resident Tutor? Please check the response which corresponds to your opinion.

Workshop Topics	Very Effective	Effective	Somewhat Effective	Not Effective	No Response
a. Completing Resident Tutor Project Forms and records	78%	22%	--	--	--
b. Learning how to assist students in taking tests	67%	33%	--	--	--
c. Tutoring techniques for reading	56%	33%	11%	--	--
d. Sharing tutoring ideas among tutors	56%	33%	11%	--	--
e. Tutoring techniques for mathematics	67%	33%	--	--	--

3. Overall, how effective were the Resident Tutor Training Workshops in preparing you to work as a Resident Tutor? (Check one)

Very Effective	Effective	Somewhat Effective	Not Effective	No Response
56%	44%	--	--	--

4. Are there any additional areas you think need to be covered in the training workshops to increase your tutoring effectiveness?

33%	67%	--
Yes	No	No Response

If you answered YES, please list one or two specific topics that you would like to see added to the training workshops.

Actually allowing totors to participate more with their own ideas and input for the workshops...How to handle a child who is known as a "troublemaker"...Topics or ideas that will help the really slow students comprehend whatever skill they are in...

5. Did the new Resident Tutor Pupil Data Card (yellow card) assist in simplifying your record keeping?

89%	11%	--
Yes	No	No Response

If you answered NO, please explain what problems you encountered when using the Card.

It added to the paper work because it did not eliminate the pupil data forms.

Several important items are omitted from the card.

6. How many different classroom teachers have you tutored pupils for this year?

5 Average Number of Teachers

7. When you are assigned a pupil for tutoring in reading or math, do your classroom teachers clearly identify the specific skill to be tutored? (Please respond by placing one "X" in each column).

When Pupil Needs Reading Tutoring	When Pupil Needs Math Tutoring	
67%	67%	Teacher always identifies specific skill
22%	11%	Teacher usually identifies specific skill
11%	22%	Teacher sometimes identifies specific skill
--	--	Teacher seldom identifies specific skill

8. On average, how many minutes do you tutor an individual pupil during a single session?

28 Minutes spent with each pupil.

How often do you have conferences with your classroom teachers to review the work done and the progress made by the pupils you tutor? (Please check one)

About once a day	Several times a week	About once a week	About once every two weeks or less frequently	Never	No Respon.
44%	34%	11%	11%	--	--

9. Has your Project Consultant Teacher demonstrated the use of tutoring techniques with any of your pupils this year?

89% Yes 11% No

If you answered YES, how helpful do you find these demonstrations?

Very helpful	Somewhat helpful	Not very helpful	No Response
67%	22%	--	11%

If you answered NOT VERY HELPFUL, explain in what ways the assistance provided by the Consultant Teacher could become more effective.

No comments recorded by respondents.

10. How often did you refer to the Resident Tutor Manual during the current school year?

Very Frequently	Somewhat Frequently	Infrequently	Never	No Response
33%	44%	23%	--	--

If you answered INFREQUENTLY or NEVER, please explain why you found little use for the manual.

Classroom teachers find the manual outdated...Only used manual as answer key...

It needs updating.

11. How helpful is the Resident Tutor Manual as a source of ideas for tutoring activities?

Very Helpful	Somewhat Helpful	Not Very Helpful	No Response
44%	34%	11%	11%

12. Do you feel that the Resident Tutor Manual should be improved?

89% Yes 11% No -- No Response

If you answered YES, please list one or two specific suggestions for improvement.

Reading and math tests according to grades. Also, some fractions...Testing does not meet the needs of the in-between student. It's either too hard or too easy...Some words listed in the spelling test are words that are seldom used... More ideas...Tests are too simple for students...Update of tests...

13. What has been the greatest problem you have encountered as you tutored students this current school year?

Keeping tutees interest ater a short time...Not being able to keep the children until mastery was accomplished...Disciplining the students...Record keeping... Children not wanting to leave when the 20 or 30 minute sessions are over...

14. What changes would you recommend to improve the project next year?

Making sessions last only until the student accomplishes the skill. Thirty sessions are too long for some students...I would like to have more RTP tests for each grade level...A cutback in all paperwork...Not so many workshops, if so only a half day so we may return to our school and work with children...A new up-dated manual.

15. What has been your greatest project accomplishment this current school year?

Getting my children to have some gain in the skills that I worked with them...When a teacher tells you that a pupil has improved immensely in a particular skill. To have helped some tutees that at one time were considered to be retarded...Working with children that have improved greatly with a little tutoring. Also, asking our input with this questionnaire.

APPENDIX J

Survey of Tutors Who Were Responsible for Administering Parent Resource Centers

N=13

PLEASE RESPOND TO THE FOLLOWING QUESTIONS IF YOU MANAGE A PARENT RESOURCE CENTER IN YOUR SCHOOL.

Indicate how much you AGREE or DISAGREE with each statement appearing below by placing an "X" in the response box which most closely corresponds to your honest opinion.

N=13	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
a. It is very difficult to get parents to use the Resource Center.	15%	40%	15	15	15
b. Classroom teachers in my building believe the Resource Center is needed in this school.	54%	38%	8%	--	--
c. The Resource Center has an adequate number of instructional materials.	31%	54%	--	8%	8%
d. The principal of my school feels that the Resource Center offers an important service to parents.	69%	15%	8%	--	--
e. I am glad that our school has a Resource Center.	77%	15%	--	--	8%
f. Parents like the Resource Center's instructional materials.	38%	62%	--	--	--
g. The classroom teachers in my building understand how the Resource Center can help parents.	38%	54%	8%	--	--
h. I have been adequately trained in how to manage the Resource Center.	69%	31%	--	--	--
i. Students benefit by having a Resource Center in their school.	85%	15%	--	--	--

APPENDIX K

SURVEY OF NONPROJECT TEACHER OPINION*
(Public School Survey)
N=21

Dear Teacher:

The Division of Research and Development is collecting information and opinion from a sample of teachers who received service from the Resident Tutor Project this year. The information you provide will be used to try to improve project operations. Please answer all the questions completely and honestly. You need not sign the questionnaire.

Please use the attached envelope to send your completed questionnaire by Friday, June 12, 1981 to the address appearing on the envelope. If you are in a non-public school return postage has been included to enable you to use the United States mail. Use the school mail if you work in a public school.

Thank You

1. How many children in your class have received Resident Tutor service this year?

   7 Average Number of Children

2. On average, how many days per week does a pupil work with a tutor?

   4 Average days per week

3. How often are you able to actually observe how the Resident Tutor works with your students?

5%	10%	5%	19%	61%
About once a day	Several times a week	About once a week	About once every two weeks or less frequently	Never

4. How often do you have conferences with the Resident Tutor to review the work done and the progress made by the tutee?

--	19%	24%	43%	14%
About once a day	Several times a week	About once a week	About once every two weeks or less frequently	Never

* Completed by public school teachers during week June 8, 1981.

5. Indicate whether or not you have witnessed an improvement in student reading and/or mathematics skills as a result of participating in the Resident Tutor Project.

71%	10%	19%
Improvement	No Change	Unable to Assess

If you answered NO CHANGE, explain why you feel students who were assisted by the tutor did not make any progress.

Too far behind...Not seen often enough...With overcrowded classes it gives children who have unique problems an opportunity to receive some individual assistance...

6. Do you feel that the Resident Tutor Project adequately supports the instructional program in your school?

Yes 76% No 19% No Response 5%

Why or why not? (Please explain) Too limited in areas to be covered-I need math help but she could only work with reading...Because you can target areas for the tutor to aid the student in...Children are always waiting to be serviced...The Resident Tutor is used more as an office assistant than as a tutor.

7. From your experience this year, what has been the most valuable feature or effect of the Resident Tutor Project?

Individualized attention provided to the students has improved their self-concept... The pupils's enthusiasm for the project is noticeable...Children have tried to do better with their regular class work...Students were motivated to try harder.

8. Are there changes you would like to see in the Resident Tutor Project to make it more beneficial to the students? If so please specify suggestions.

More contact with teacher in setting objectives for students...Some type of "prescription" lesson plan devised by tutor and teacher to focus on weaknessess... Tutor could work with more children...Many times a child needs additional help when the 30 lessons are over...The tutor should spend more time tutoring-less time passing out checks.

9. Have you ever withdrawn a child from Resident Tutor services? -- Yes 100% No

No comments were recorded.

10. Has working with a Resident Tutor created any problems for you? Briefly describe any.

There were a few problems with scheduling, but we were able to work them out... Slightly, worry about the fact that the child is out of the room and missing school work...No, the Resident Tutor helps students. When the tutor helps, the students are able to work better on their own.

11. Do you have any additional comments you would like to make relative to the operations of this project?

I think that the Resident Tutors are great help to all the students that they work with...I just hope the project continues...This is the first time I have ever seen a tutor used by the office as an office assistant...I have worked with tutors before. If the principal is allowed to use the tutor as an office assistant the Resident Tutor Project will be destroyed...It is my hope that this project remains intact or is expanded...I feel that we are fortunate to have such a fine tutor. She has been a fine asset to our instructional staff...Keep it going...

APPENDIX L

SURVEY OF NONPROJECT TEACHER OPINION*

(Nonpublic School Survey)

N=10

Dear Teacher:

The Division of Research and Development is collecting information and opinion from a sample of teachers who received service from the Resident Tutor Project this year. The information you provide will be used to try to improve project operations. Please answer all the questions completely and honestly. You need not sign the questionnaire.

Please use the attached envelope to send your completed questionnaire by Friday, June 12, 1981 to the address appearing on the envelope. If you are in a non-public school return postage has been included to enable you to use the United States mail. Use the school mail if you work in a public school.

Thank You

1. How many children in your class have received Resident Tutor service this year?

   8 Average Number of Children

2. On average, how many days per week does a pupil work with a tutor?

   4 Average days per week

3. How often are you able to actually observe how the Resident Tutor works with your students?

10%	50%	20%	10%	10%
About once a day	Several times a week	About once a week	About once every two weeks or less frequently	Never

4. How often do you have conferences with the Resident Tutor to review the work done and the progress made by the tutee?

10%	60%	20%	10%	--
About once a day	Several times a week	About once a week	About once every two weeks or less frequently	Never

* Completed by nonpublic school teachers during the week of June 8, 1981.

5. Indicate whether or not you have witnessed an improvement in student reading and/or mathematics skills as a result of participating in the Resident Tutor Project.

100%	--	--
Improvement	No Change	Unable to Assess

If you answered NO CHANGE, explain why you feel students who were assisted by the tutor did not make any progress.

No comments were recorded.

6. Do you feel that the Resident Tutor Project adequately supports the instructional program in your school?

Yes 90% No -- Somewhat 100%

Why or why not? (Please explain) I had to give our tutor material to use when working with students. The project material for reading is not up-to-date...Gives confidence to frustrated children...Individualized program...The children really improved...Could use more conference time with tutor...Very flexible.

7. From your experience this year, what has been the most valuable feature or effect of the Resident Tutor Project?

Students who participate in the project usually don't get too much praise within the regular classroom, the tutor can do so...Reinforcing basic skills on an individual basis...Consistency of program...Re-inforcement of classroom material...

8. Are there changes you would like to see in the Resident Tutor Project to make it more beneficial to the students? If so please specify suggestions.

The teacher and tutor should plan an agenda as to what is to be covered withi the year in reading...More drill materials for the tutor to work with...Work with teachers a little closer and implement more things that are being included in the regular classroom at that time...

9. Have you ever withdrawn a child from Resident Tutor services? Yes 20% No 80%

If you answered YES, explain for what reasons you took this action.

Improvement warranted it...Yes, because he had so improved and there was another student who needed help...

10. Has working with a Resident Tutor created any problems for you? Briefly describe any.

Yes - Some in scheduling...None - Very beneficial...Scheduling is difficult...

11. Do you have any additional comments you would like to make relative to the operations of this project?

No comments were recorded.

APPENDIX M
N=32

RESIDENT TUTOR PRINCIPAL'S QUESTIONNAIRE

The Resident Tutor Project is collecting information from principals receiving service from the Resident Tutor Project. You need not sign this questionnaire.

Please use the enclosed envelope to send your completed questionnaire by Friday, June 12, 1981.

1. The educational aide was assigned to provide tutorial services in specific skills, how would you rate the services that were given?

   72% Excellent 22% Good -- Poor 30% No Response

2. Please check the kinds of feedback you have received regarding the tutor's services:

   62% Formal Observation
   94% Informal Observation
   91% Teacher's Comments
   78% Parent's Comments
   66% Pupil's Comments
   38% Other Adults
   59% Room Appearance
   -- Other
   9% Formal monitoring teams (federal, state, local, etc.)

3. List any topics you feel should be covered in staff development workshops for tutors?

   a. Parent awareness of program
   b. Positive approach to discipline
   c. Activities to be used in developing specific skills
   d. Goals of the Language-arts program
   e. Working cooperatively with staff
   f. Prescription method for instruction

4. What do you feel are the best features of the project and deserve expansion?

   Materials for parents...Comprehensive tutor's guide...One to one, friendly, warm concerned. a. attitude of tutor...Diagnostic screening and prescriptive tutoring... Continuation of reinforcing skills recommended by the classroom teacher...Dedication/ interest of tutor...Flexibility in working with students...Remediation, extend to all grades.

5. What features of the project do you feel need modification and/or deletion?

   More emphasis on teacher judgement in addition to test scores...Sometime to rigid standards. Program must serve children not vice-versa...All children whom the classroom teacher feels need help should be tutored despite the percentile rank on standardized tests...There would appear to be a great volume of paperwork...Narrow limits of skills utilized. More experienced tutors should be allowed to broaden concepts covered...Limitation of services.

6. If the school houses a Resident Tutor Parent Resource Center, please rate its worth to parents, staff and pupils:

   71% Excellent 29% Good -- Poor

7. List any educational materials you feel should be added to the Resource Center inventory:

   a. Magazines
   b. More reading materials
   c. List of what is available should be given to teachers and parents
   d. Practice sheets of various concepts
   e. More books for 5th and 6th grade
   f. More concrete materials

THANKS AGAIN FOR YOUR INPUT!!

Marlene McMillan, Project Manager
Resident Tutor Project
Observation Center, Room 105
2064 Stearns Road
Cleveland, Ohio 44106

APPENDIX N

SURVEY OF STUDENT OPINION*

N=55

DEAR STUDENT:

DURING THE YEAR YOU HAVE HAD A TUTOR HELP YOU IN SCHOOL. WE WOULD LIKE TO KNOW HOW YOU FELT ABOUT GETTING THIS HELP. READ EACH SENTENCE BELOW.

- IF YOU AGREE WITH THE SENTENCE PUT AN "X" IN THE YES BOX
- IF YOU DISAGREE WITH THE SENTENCE PUT AN "X" IN THE NO BOX
- IF YOU CANNOT MAKE UP YOUR MIND PUT AN "X" IN THE NOT SURE BOX

1. I LIKED GETTING HELP FROM MY TUTOR. 96% YES -- NO 4% NOT SURE	5. MY FRIENDS WANT TO GET HELP FROM MY TUTOR. 40% YES 11% NO 49% NOT SURE
2. MY TUTOR HELPED ME TO DO BETTER IN SCHOOL. 95% YES -- NO 5% NOT SURE	6. I WOULD LIKE TO GET HELP FROM MY TUTOR NEXT YEAR. 76% YES 7% NO 17% NOT SURE
3. I LIKED THE THINGS MY TUTOR GAVE ME TO WORK WITH. 87% YES 10% NO 12% NOT SURE	7. MY TUTOR HELPED ME WITH THINGS THAT I COULD NOT DO WELL. 95% YES 2% NO 3% NOT SURE
4. THE TESTS MY TUTOR GAVE ME SHOWED HOW WELL I LEARNED. 85% YES 1% NO 14% NOT SURE	8. MY TEACHER WAS HAPPY THAT I GOT HELP FROM MY TUTOR. 93% YES -- NO 7% NOT SURE

*Administered during the week of June 22, 1981.