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ABSTRACT

This document is concerned with the objectives and evaluation of the educational programs of six elementary schools. Charles R. Drew Elementary School has been classified as a Title I school and receives compensatory services to improve academic performances and self-concepts of the pupils. E. R. Carter Elementary School is also a Title I school. Of Carter's pupils, 66 percent are derived from families with incomes less than 2000 dollars. Because of this high deprivation level, the students have the attendant learning problems, especially in reading and the low self-concept characteristics of this lower socioeconomic group. The program at Carter, both federally and locally financed, were designed primarily to improve the educational level of these pupils. C. L. Gideons Elementary School qualified, because of income levels, for funds and services from special projects to help the school meet the needs of the pupils and community. W. H. Crogman Elementary School qualified, because of low-income levels, for funds and services from special projects to help the school meet the needs of the pupils and community, including assistance under Title I of the Elementary Secondary Education Act. Grant Park Elementary school, a Title I school, qualified, because of low-income levels, for funds and services from special projects. English Avenue Elementary School, a Title I school, offered special programs which attempted to compensate for the learning deficiencies of the majority of its pupils who were classified as disadvantaged. (Author/JM)

[PUPIL PERFORMANCE IN THE ELEMENTARY SCHOOLS OF
ATLANTA, GEORGIA.]

RESEARCH AND DEVELOPMENT REPORT

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1971-72

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I. RATIONALE

Charles R. Drew Elementary School is located in the southeast section of Atlanta. Since many of the families have a total income of \$2,000 or less, the school has been classified as a Title I school and receives compensatory services to improve academic performances and self-concepts of the pupils.

Drew Elementary School was built to serve the children of the East Lake Meadows Apartments, a federal housing project. Since the first apartments were ready for occupancy before the school was completed, school began on October 12, 1970, in seven portable classrooms adjacent to the present school building. On opening day, there were 35 pupils and six teachers, but the school enrollment increased tremendously. By the end of the year, there were 456 children attending classes with 12 teachers in six double portables.

During the school year, 1971-72, the new Drew Elementary School building was completed. In March of 1972, enrollment was 1,150 pupils. The faculty consisted of a principal and 42 full-time teachers. In addition, there were two part-time art teachers, one part-time band teacher, a librarian, a counselor, two lead teachers, two office secretaries, and one secretary in the library.

Drew School was named for Dr. Charles Richard Drew, the famous Negro doctor, whose pioneering work with blood plasma was responsible for saving thousands of lives during World War II. As a matter of fact, Dr. Drew is acknowledged to be the father of the blood bank. His outstanding example of scholarship and service should serve as an inspiration to the Drew pupils and teachers for generations to come.

It was decided by the faculty and principal of Drew Elementary School that the emphasis for the 1971-72 school year should be placed on raising the level of the underachievers throughout the school. It was found that there were special needs in the fourth through seventh grades; therefore, 225 pupils in these grades who had serious reading disabilities, were identified as needing the most help provided through the team teaching approach.

Also, it was ascertained that the identified pupils should be taught using the Sullivan Programmed Readers. These pupils included in the Sullivan Program were basically children who came from low-income homes and in most cases, from broken homes where the only parent was the mother. Generally, the families of these children were large, and the educational background of the parent or parents did not include a high school diploma; therefore, the children were exposed to few enriching cultural experiences in the home.

Supporting Services

The regular budget of the Atlanta Public School System, federal and state assistance, and community services provided the following resources for the instructional program at Charles R. Drew School:

A. Instructional Assistance Program (IAP)

A team consisting of a lead teacher, an art teacher aide, a music teacher aide, and a physical education teacher aide provided educational activities for successive groups of pupils on various instructional levels. This service freed regular teachers for group planning. For the most part, the IAP aides worked in grades four through seven; however, one of the aides worked with the first grades for one half of each day. The aide who helped with the first grades assisted the teachers by working with a small group of children each day. There were six first grades, so this was an attempt to provide assistance in an overcrowded situation.

B. Comprehensive Instructional Program (CIP)

During the 1970-71 school year, the CIP began operating. For the first year, the main purpose of the program was that of promoting growth in reading for each pupil through diagnostic teaching and inservice training for teachers. Each school was to implement its own comprehensive reading program. During the 1971-72 school year, the program expanded to include mathematics. A resource person worked one day a week with the pupils in grades one, two, and three in reading and with pupils in grades five and six in mathematics.

C. Title I Program

Since 50.8 per cent of the pupils enrolled in Drew were from families whose incomes were \$2,000 or less, the school qualified as a Title I school. Through the Title I program, a counselor and two aides worked with pupils to improve the instructional program in reading.

The Title I counselor focused much attention on the dental needs of the kindergarten pupils. Other health needs, such as pupils with impaired vision and hearing difficulties, were met. The counselor worked very closely with the community nurse and the parents in the program to meet needs and prevent future problems concerning health. Also, the counselor worked with pupils to raise their self-concepts; to prevent absenteeism; and to gain assistance from other groups, such as church groups, in assisting handicapped parents.

One of the Title I aides was assigned to kindergarten and the other one worked in the third grades. These aides worked with pupils who had pronounced reading difficulties and who were working below grade level. In addition, they assisted the teachers by duplicating materials, operating audio-visual equipment and the like.

D. Youth-Tutoring-Youth (YTY)

The Youth-Tutoring-Youth Program at Drew was funded by Title I. There were five tutors from Murphy High School who were paid \$1.60 an hour to tutor 15 pupils in grades four and five. One of the Title I aides, also, assisted with the program which lasted from 2:00 until 4:00. Title I funds in the amount of \$72.00 were provided for materials in the tutoring program.

E. Neighborhood Youth Corps (NYC)

One seventh grade pupil who was in the NYC worked in the cafeteria and received \$16.00 every two weeks. The funds for this service were supplied by Economic Opportunity of Atlanta.

F. Emergency School Assistance Program (ESAP)

During the summer, ESAP funds provided a team teaching workshop for the school personnel and members of the community. The purpose of the workshop was to foster better home-school relationships.

G. Educable Mentally Retarded (EMR)

There was a special program in the resource room for EMR pupils at Drew. A total of 23 pupils from all grade levels were involved in the program for approximately one hour each day. Also, there were two self-contained EMR classes in addition to those in the resource room.

H. Regular School Program

There was one aide in the regular school program, paid by General Funds, who worked in the second grades. The duties of this aide were similar to those previously described for the Title I aides. Also, there was a lead teacher who worked with **kindergarten** through grade three.

II. NEEDS OF THE PUPILS

Since much success in reading depends on what the reader brings to the printed page, much significance must be attached to the body of direct and indirect experiences he has accumulated prior to his reading. One of the basic needs of these pupils is direct contact with people, things, and events. Another need is a diversified and stimulating language environment that provides for many kinds of highly motivated language experiences. These children have repeatedly encountered failure in reading, so success is important. The pupils need a reading program which does not draw heavily on experiences of the pupils for comprehension and one which is linguistically sound.

In summary a list of the needs of the pupils as assessed by the school staff included the following:

- A. To extend one's own experiential background and facility with oral language.

- B. To develop or improve skills in comprehending material.
- C. To experience success in reading and be rewarded for accomplishments.
- D. To develop and/or improve knowledge in sounds, letter relationships and/or skills in decoding.
- E. To develop a positive attitude toward reading so that the pupil will learn that reading can be a pleasurable experience.
- F. To develop a desire to attend school.
- G. To develop a positive attitude toward school.
- H. To develop a positive self image.

III. GOALS OF THE PROGRAM

Using the Sullivan materials, the major goals for the program as stated in the prospectus included the following:

- A. To enable the children who are reading below grade level to raise their reading levels in a relatively short time.
- B. To begin each pupil on his appropriate level and allow him to progress at his own rate.
- C. To offer each child success in reading so that he will develop confidence in himself and his ability to read, and, hopefully wish to attend school.
- D. To assist each child in developing a positive attitude toward reading so that he will learn that reading can be a pleasurable experience.
- E. To enable the pupils to acquire the necessary decoding skills so that he will be successful in reading outside the programmed texts and will be able to make the transition to a basal reading program.
- F. To increase the pupils' comprehension skills.

- G. To provide experiences that will assist the pupils in developing positive attitudes toward self, other pupils, and school.

The following goals were formulated specifically for the Instructional Assistance Program:

- A. To provide professional and paraprofessional personnel to implement the instructional programs needed by the pupils.
- B. To provide new organizational and administrative structures which will increase teacher effectiveness and pupil achievement.

IV. BEHAVIORAL OBJECTIVES

- A. After completing the program, 90 per cent of the children will exhibit increased proficiency in reading by raising their reading levels a month for each month (approximately 6 months) as demonstrated on the Sullivan test in the Sullivan program.
- B. The pupils will be able to make the transition from the programmed reading to a basal reading program, and will be reading at a more advanced level.
- C. The pupils will demonstrate increased proficiency in decoding and comprehension skills as determined by teacher-made tests and other measuring devices.
- D. Given the Metropolitan Achievement Tests, the pupils in grades 4-7 will show a gain of a month for a months time in the program on reading.
- E. The pupils will show an 80 per cent improvement in attendance as determined by ADA records.
- F. The pupils will exhibit an improvement in attitude observed by the teachers.

V. VARIABLES

The variables treated in the program were:

- A. Achievement in reading

1. comprehension skills
 2. decoding skills.
- B. Attendance
- C. Attitude
1. toward school
 2. other pupils.

VI. MANAGEMENT AND CONTROL

The personnel who worked in the concentrated reading program in grades four through seven and some of their duties included the following:

A. Area Personnel

Reading and curriculum resource personnel assisted in selecting the type of reading program that would guarantee maximum results. They observed the instructional program and offered help to teachers and staff.

B. Principal

The principal served as the instructional leader and provided guidance and assistance for the instructional staff.

C. Lead Teacher

The lead teacher was directly responsible for the execution of the program. He supervised the testing, grouping, and distribution of materials. The lead teacher was concerned and involved in the total instructional program for grades 4-7 and he provided in-service training and guidance for the aides.

D. Teachers

Eight teachers were directly involved in the program: two from the fourth grade, three from the fifth grades, two from the sixth grade, and one from the seventh grade.

E. Paraprofessionals

Three aides (music, art, and physical education) were a part of the Instructional Assistance Program (IAP) and the fourth one was an educational aide (Title I). The aides were assigned to the respective teachers and carried out assigned duties from that phase of the instructional program. For example, one IAP aide worked with the fifth grade teachers and provided art activities; one worked with the seventh grade and provided music activities, and the third aide worked for one-half day with the sixth grades and one-half day with the first grades.

One Title I aide worked with the fourth grade teachers and provided activities for the educationally deprived. All of the aides, assisted the teachers in working with pupils, duplicating materials, operating audio-visual equipment and the like. From time to time, they were reassigned on a temporary basis in order that the teachers would be released for planning and conferences during the instructional hours.

F. Others

The resource room teacher, who taught the educable mentally retarded (EMR) children, also worked with pupils who had severe learning problems. These children were able to remain within the normal classroom and participate in most learning activities, and they were not identified as exceptional children.

The following list shows the availability and distribution of materials and supplies:

A. Availability

1. Teachers' manuals
2. The programmed texts/pupils workbooks
3. Overlays
4. Webtermasters
5. Soundsymbol cards
6. Alphabet cards
7. Filmstrips
8. Story books
9. Supplementary books

10. Teacher made materials (Examples: word games, word analysis charts)
11. Pencils/crayons
12. Writing paper
13. Listening stations
14. Television/radio
15. Tape recorders
16. Test (placement and end-of-sequence test)

B. Distribution

The materials were distributed among the teachers according to the needs of the pupils. Additional materials were located in the lead teacher's office and were easily accessible. The classes involved in the reading program had an accessible special reading and conference room.

VII. PROCESS

The faculty and principal at Drew School designed a program in grades four through seven to meet the needs of 225 underachievers. Since the reading levels of the pupils ranged from nonreaders to pupils reading on a third grade level, an intensive reading program was in operation for the year 1971-72. To structure the reading program, a one hour reading period was provided each day. One-half of the period was spent in independent work, and the other half was devoted to instruction and supplementary activities.

It was ascertained that the identified pupils should be taught using the Sullivan Programmed Readers. The pupils were tested with the Sullivan Program tests for the purpose of grouping. Weekly informal tests indicated that the pupils were improving in achievement. Few tests scores fell below the grade of 90 on teacher-made tests. Also, the children worked in their programmed texts, worked with the Webstermasters, read aloud from the textbook, took dictation from the teacher, and worked with the sound-symbol cards. In some of the grades, an additional reading period was provided during the day for more independent and supplementary work.

The IAP team provided educational activities for successive groups of pupils on various instructional levels. This service freed the regular classroom teachers for group planning. For the most part, the IAP aides worked in grades four through seven; however, one of the aides worked with the first grades for one-half of each day.

A more detailed description of the various activities including the sequence of activities is given in the following:

A. Grouping or Organizing for Instruction

Pupils in grades 4-7 who were reading on the third grade level or below were given the Sullivan test to determine their placement in the program. When the results were made available to the teachers, they grouped the children within each grade level according to the books in which they were placed. There was no grouping across grade levels.

B. Introductory Exercise

Pupils were introduced to new information, letters, and sound-symbol relationships before they encountered these in their texts.

C. Schedule of Activities

A one hour reading period was provided each day. One-half of the period was spent in independent work, and the other half was devoted to instruction and supplementary activities as previously described. In some of the grades, an additional reading period was provided during the day for more independent and supplementary work.

D. Mid-Unit Exercises

Drills were presented by the teachers to reinforce skills introduced in the first half of the unit. They were either presented on the chalkboard or duplicated.

E. Remedial Exercises

Pupils who scored below 70 on the corresponding in-book test were given remedial exercises. These exercises concentrated on word information skills (spelling and sound-symbol relationships) and skills involvement.

F. End-of-Unit Exercises

Pupils were given exercises which covered all skills introduced in the unit.

G. End-of-Sequence Examination

A standardized exam was given each child when he had completed the sequence.

Supplementary activities were provided for additional work in word discrimination and word formation, comprehension, and word usage. These activities in the form of teacher-made word cards and games, ditto sheets, and the like. Other supplementary activities included reading aloud from the text, extra dictation activities; using the language master, listening station, radio, television, filmstrips, library books, magazines, storybooks, and tape recorder. Other projects which were related to the program, included plays and dramatizations, puppet shows, music and art projects, book reports, creative writing, and field trips.

VIII. INSERVICE TRAINING

- A. Consultants from Webster/McGraw Publishing Company conducted a workshop to introduce the program to the teachers involved.
- B. A workshop was held with teachers and school staff (lead teacher and area personnel).
- C. Consultants from Webster/McGraw Publishing Company conducted a second workshop after sequence I was completed (end of workbooks 17). The teachers and staff discussed questions that have arisen. Additional workshops were planned and scheduled from time to time as the needs arose.
- D. A special field consultant from Webster/McGraw Publishing Company conducted a workshop in which the teachers were assisted in developing materials to use with pupil in the program.

IX. EVALUATION

The program at Drew was evaluated in terms of the progress made in achieving goals and behavioral objectives. The methods used to access progress by the pupils in the instructional program included the following:

- A. Gains in reading were measured by comparing scores between the pretests and posttests, on The Metropolitan Achievement Tests for grades four through seven in reading.

- B. The Sullivan Programmed Reading Test was administered to pupils in grades four through seven and gains were measured by comparing differences between the pretest and posttest.
- C. Pupil attendance progress was determined by using attendance records. A comparison was made between the fall and spring Average Daily Attendance (ADA), and the 1970-71 and 1971-72 attendance.
- D. The Self Appraisal Inventory and the School Sentiment Index were administered to a random sample of pupils in grades four through seven. The results will be used for a longitudinal study.
- E. An analysis of the cost effectiveness was made at the end of the school year to give an indication of the combined costs of all resources relating to the instructional program.

X. FINDINGS

In order to ascertain the effectiveness of the instructional program at Drew each objective will be discussed in view of the findings.

Objective A

Did 90 per cent of the children exhibit an increased proficiency in reading by raising their reading levels a month for each month (approximately six months) as demonstrated on the Sullivan Programmed Reading Test?

Records were kept on 270 pupils (45 pupils having entered the program after the beginning of the school year) in the concentrated reading program in grades 4-7 for Drew. The following table represents the results:

TABLE 1

GAINS MADE ON THE SULLIVAN PROGRAMMED READING TESTS

<u>Grades</u>	<u>N</u>	<u>Average Beginning Reading Level</u>	<u>Average Ending Reading Level</u>	<u>Mean Gain</u>
4	N=65	.0	1.31	1.31
5	N=97	.77	2.49	1.72
6	N=75	.75	1.96	1.21
7	N=33	.70	1.94	1.24
4-7	N=270	.57	1.99	1.42

From the data on the Sullivan test, it can be seen that in grade four there was a mean gain of 1.3; in grade five a mean gain of 1.7; in grade six a mean gain of 1.2; in grade seven a mean gain of 1.2; and an average mean gain for the four grades of 1.4. The fifth grade actually made the highest gain with the other three grades gaining similarly. Therefore, according to the data from the Sullivan Reading Program tests, the pupils in grades four through seven gained more than a month for each month in the program; therefore objective A was met.

Objective B

Were the pupils able to make the transition from the programmed reading to a basal reading program, and were they reading at a more advanced level?

The pupils in grades four through seven used the Macmillan basal reader series. In examining the records kept by teachers on the progression of pupils from Sullivan materials to the basal readers, there were indications, as shown on the teachers records of reading levels in the Sullivan material and their placement in a textbook, that the pupils

did make the transition from programmed readers to reading in a basal reader at a more advanced level and did meet Objective B .

Objective C

Did the pupils demonstrate increased proficiency in decoding and comprehension skills as determined by teacher-made tests and other measuring devices?

In talking with members of the school faculty, the research assistant was assured that the teachers believed that there had been an increase in decoding and comprehension skills. Weekly informal tests indicated that the teachers were justified in this belief, for few test scores were below 90 on the teacher-made tests .

Objective D

Did the pupils in grades 4-7 show a month's gain for a month's time in the program on reading as measured by the Metropolitan Achievement Tests (MAT)?

Grade Five

The Instructional Assistance Program (IAP) was concentrated on grades four through seven in Drew Elementary School. Comparisons were made in grades five through seven (for whom there were scores on the Metropolitan Achievement Tests). (Tables 2 and 3 .)

TABLE 2
GAINS MADE ON THE METROPOLITAN ACHIEVEMENT TESTS
PRETEST AND POSTTEST

(GRADES 5, 6, 7)

<u>Subtest</u>	<u>Pretest</u>	<u>Gains</u>	Per Cent Expected Gain	<u>Posttest</u>
<u>Fifth Grade</u>				
Word Knowledge	3.5	0.46	74	3.9
Reading	3.5	0.45	75	3.9
<u>Sixth Grade</u>				
Word Knowledge	3.7	0.22	35	3.9
Reading	3.9	0.02	2	4.0
<u>Seventh Grade</u>				
Word Knowledge	4.1	0.37	60	4.5
Reading	3.8	0.38	62	4.2

In Table 2 it can be seen that the fifth grade pupils began school below grade level in reading and they made less than a month's gain for each month in the program.

TABLE 3
 FREQUENCY DISTRIBUTION OF READING GAINS
 ON THE METROPOLITAN ACHIEVEMENT TESTS*
 (GRADES 5, 6, 7)
 1971-1972

Gain (in Months)	Grade 5		Grade 6		Grade 7	
	No.	Per Cent	No.	Per Cent	No.	Per Cent
10 or more	22	26	13	15	13	22
8-9	6	7	1	1	8	13
6-7	11	13	9	10	2	3
4-5	6	7	7	8	6	10
2-3	4	5	10	11	9	15
0-1	14	16	7	8	9	15
-1 to -2	5	6	7	8	3	5
-3 or less	<u>17</u>	<u>20</u>	<u>35</u>	<u>39</u>	<u>10</u>	<u>17</u>
	68	80	53	61	50	23

*There was a period of approximately six months between pretest and posttest.

Table 3 shows a frequency distribution of reading gains on the MAT. In grade five, 36 pupils (42 per cent) made a gain of one month or less, 4 pupils (five per cent) gained from two to three months, 6 pupils (seven per cent) gained from four to five months, and 39 pupils (46 per cent) gained from six to ten months or more.

Grade Six

The sixth grade began school below grade level in reading and they made less than a month's gain for each month in the program.

An examination of a frequency analysis for the sixth grade revealed that 49 pupils (45 per cent) made a gain of one month or less, ten pupils (11 per cent) gained from two to three months, seven pupils (eight per cent) gained from four to five months, and 23 pupils (26 per cent) gained from six to ten months or more.

Grade Seven

The seventh grade began school below grade level in reading and they also, made less than a month's gain for each month in the program.

In the frequency analysis, it can be seen that 22 pupils (37 per cent) made gains of one month or less, nine pupils (15 per cent) gained from two to three months, 6 pupils (ten per cent) gained from four to five months, and 23 pupils (38 per cent) gained from six to ten months or more.

Although the principal and faculty at Drew were emphasizing the improvement of the instructional program in reading for grades four through seven, they were, also, working towards a better instructional program for all children. Therefore, the results of the reading program in other grades should not be omitted. The overall reading performance of each grade (1-7) is shown in Table 4.

The data in Table 4 show that the first grade pupils who began with a pretest score of C on the Metropolitan Readiness Tests (MRT), were rated average and likely to succeed in first grade; therefore, there was an estimated gain when using the Metropolitan Achievement Tests (MAT) as the posttest, of six months.

TABLE 4

COMPARISON OF MEAN READING PRETEST-POSTTEST
 SCORES, GAIN, PER CENT OF EXPECTED GAIN,
 GAIN SCORE t-TEST, PER CENT OF ATTENDANCE
 AND COEFFICIENT OF CORRELATION
 BETWEEN ATTENDANCE VS. READING

Grade	No.	Mean Score		Gain	Per Cent	t-test	Per Cent	r
		Pre	Post		Expected		Attendance	
1	125	C	1.64					
2	93	1.32	1.77	.45	.72	2.25*	.96	.06
3	85	1.88	2.14	.25	.41	1.17	.92	.02
5	95	3.48	3.93	.45	.73	2.15*	.92	.11
6	99	3.90	3.91	.02	.02	.11	.90	-.17
7	63	3.82	4.20	.38	.62	1.99*	.90	-.06

*significant at .05 level.

**significant at .01 level.

NOTE: There were no MAT scores for grade four.

In grades two through seven, the MAT was used as both the pretest and posttest. The second grade made a gain of five months (72 per cent of the expected gain). The third grade made a gain of three months (forty-one per cent of the expected gain). The fifth grade made a gain of five months (73 per cent of the expected gain). The sixth grade made less than a month's gain (two per cent of the expected gain). The seventh grade made a gain of 4 months (62 per cent of the expected gain).

The gains made in grades two, five and seven were significant at the .05 level, and the gains made in grades three and six were not significant. Also, special attention is called to the tendency of the negative correlations between attendance and reading in grades six and seven. As one increased, the other tended to decreased.

Members of the Division of Research and Development conducted a study of the effectiveness and acceptability of the reading programs, using data from the Metropolitan Achievement Tests, for 1970-71 and 1971-72. The results from this study as it effected Drew Elementary School are shown in Table 5.

TABLE 5

EFFECTIVENESS AND ACCEPTABILITY OF PUPIL PERFORMANCE
IN READING FOR 1971-72

<u>Grade</u>	<u>Gain</u>		<u>Gain Rate of Effectiveness</u>	<u>Index of Acceptability</u>
	<u>Actual</u>	<u>Predicted</u>		
2	0.4	0.0		63
3	0.3	0.3	100	57
4	0.6	0.5	120	57
5	0.4	0.3	133	63
6	-0.1	0.2	-50	54
7	0.7	0.2	350	53
		AVERAGE	131	58

NOTE: The interval between pretest and posttest was from April, 1971, to April, 1972, for the fourth grade, and from October, 1971, to April, 1972, for all other grades.

The data in Table 5 show the actual and predicted gains, the gain rate of effectiveness, and acceptability over a two year period in reading. The gain rate of effectiveness and level of acceptability were based on the following six factors which influence pupil achievement: (1) inadequate previous academic preparation; (2) disadvantaged or deprived family background, (3) frequent moving from school to school; (4) excessive absences from school; (5) large classes providing little individualized instruction; and (6) the negative effect on achievement of having many pupils who fail in a grade or in a school.

The predicted gain was less than the expected gain of six months between the pretest and the posttest. That is, after considering the six influencing factors (previously named) in the school, the pupils generally were not expected to make a gain for each month of instruction. Therefore, the data from this study, which considered contributing factors, and were median scores differed from the data in Tables 2 and 4 which did not consider contributing factors and were mean scores.

According to these data, the reading program was effective in grades two, three, four, five and seven. Therefore, Drew operated an effective program for these grades but the pupils did not attain acceptable levels of performance. (The reason for the low performance in grade six should be investigated.) Further, the high level of effectiveness indicates that the level of achievement should be raised to that of acceptability, and therefore, move the pupils closer to the national norms.

For grade two, the predicted rate of gain was 0 and the actual gain was four months, so a percentage of effectiveness could not be figured.

Objective E

Did the pupils show an 80 per cent improvement in attendance as determined by Average Daily Attendance (ADA) records?

Since Objective E could be interpreted in at least two different ways, the attendance records were analyzed in these ways. In looking at the ADA record for Drew from October until school closed for the 1970-71 school year, it was found that the ADA was 86.3. For the 1971-72 school year the ADA was 85.8. Thus, there was not an increase in attendance from one school year to another.

In comparing the ADA records for the first three months, with those for the last three months of the 1971-72 school year, it was found that there was a decrease from an ADA of 91 to one of 84; therefore, as stated the objective was not met. However, in talks with the counselor, it was learned that those pupils who were chronically absent did increase their attendance, so that there were indications that attendance improved for those pupils who were most often absent.

Objective F

Did the pupils exhibit an improvement in attitude as observed by the teachers?

According to the teachers who worked directly with the pupils, there were many evidences that the pupils improved in attitude. For example, the pupils exhibited a more cooperative attitude in working with teachers and other pupils. The pupils were very interested in working with the counselor to improve attitudes. The counselor devised games for this purpose, and reported much progress in this area.

Also, for the purpose of determining the self concept of the pupils in the Instructional Assistance Program, the Self Appraisal Inventory (SAI) and the School Sentiment Index (SSI) were administered in Drew Elementary School on the intermediate level. A random sample of twenty pupils from each grade level was used for securing data.

According to the School Appraisal Inventory (SAI) the different dimensions of the learner's self concept are:

1. Family, i.e., one's self esteem yielded from family interactions;
2. Peer, i.e., one's self esteem associated with peer relations;
3. Scholastic, i.e., one's self esteem derived from success on failure in scholastic endeavors; and
4. General, i.e., a comprehensive estimate of how the self is esteemed.

The results of the SAI for grades 4-7 were as follows:

	<u>N</u>	<u>Peer</u>	<u>Family</u>	<u>School</u>	<u>General</u>	<u>School Total</u>
Drew	80	.63	.73	.64	.67	.67

The maximum response was 100 per cent; therefore, it can be seen that the majority of responses were well above 50 per cent.

According to the School Sentiment Index, the six dimensions of the learner's attitude toward schooling are:

1. Teachers, i.e., one's subjective feelings about teacher behavior with respect to instruction, authority and control, and interpersonal relationships with pupils;
2. School Subjects, i.e., one's differential attitudes toward various commonly-taught school subjects;
3. Learning, i.e., one's attitude toward the learning experience, independent of attitude toward school, teachers and subjects, as reflected in intellectual curiosity, willingness to study, interest in problem solving, etc.;
4. School Social Structure and Climate, i.e., one's attitude toward his school as a social center, a rule making and rule enforcing entity, and an extracurriculum opportunity system;
5. Peer, i.e., one's feelings regarding the structure of, and climate of relationships within the peer group;
6. General, i.e., one's general orientation toward schooling, independent of a particular school.

The intermediate level SSI also was administered in grades 4-7. The results were as follows:

	<u>N</u>	<u>Peer</u>	<u>Teacher</u>	<u>General</u>	<u>School Climate</u>	<u>Learning</u>	<u>School Total</u>
Drew	80	.58	.61	.64	.61	.67	.62

Since it is hoped that the Instructional Assistance Program will improve learners' self concept, or at least to impede an increasing negativism in their self concepts, the SAI and SSI will be administered again during the 1972 school year to ascertain if, generally, the self concept has improved.

XI. COST ANALYSIS

In order to determine the cost for the amount of gain made in each grade, a cost analysis of reading gains was made. The data in Table 6 show the total school (K-7) average daily attendance (ADA), the ADA by grade, and the ADA for the pretest/posttest population for which gains were computed.

The expenditures have been separated into two sections entitled (1) general funds (salary and non-salary), and (2) compensatory funds (salary and non-salary). The cost for food services, new equipment, or capital outlay is not included. The figures were computed from the June 30, 1972 General Funds Financial Report and the Trust and Agency Report, June, 1972. Included, also, is the cost in compensatory funds for each unit of effectiveness as determined in the report entitled Effective? Acceptable?, 1971-1972. The figures pertaining to per pupil cost are broad estimates and are not exact or finite.

In allocating general funds for salaries and non-salaries, the percent of each grade's pre/post ADA of the total population was considered. The funds for non-salary include the cost for materials and supplies and replacement and/or repair of old equipment.

According to these data, there was no relation between the amount of funds spent and the cost for a one-grade-unit of gain. In the sixth grade where the cost of a one-grade-unit of gain was greater than for any of the other grades the rate of reading gain was less than that for all the other grades.

Also, there appeared to be no relation between the amount of compensatory funds and the effectiveness of the reading program. The cost per unit of effectiveness was less for the seventh grade than the other grades and the gain rate of effectiveness was greater. (There was no gain rate of effectiveness for grade two or grade six. In the second grade the predicted gain was zero, and in the sixth grade the gain rate of effectiveness was zero. Therefore, no cost per unit of effectiveness could be figured in these two grades.

TABLE 6
 COST ANALYSIS OF READING GAINS BY GRADES
 TOTAL SCHOOL AVERAGE DAILY ATTENDANCE (ADA)
 K - 7 = 813

	Grades					Average	
	Second	Third	Fourth	Fifth	Sixth		Seventh
ADA For Grade	127	124	121	125	112	86	115
<u>Per Pupil Cost</u>							
A. General Funds							
1. Regular							
a. Salary	\$ 523.89	\$ 523.89	\$ 523.89	\$ 523.89	\$ 523.89	\$ 523.89	\$ 523.89
b. Non-Salary	66.52	66.52	66.52	66.52	66.52	66.52	66.52
c. Total	<u>\$590.41</u>	<u>\$ 590.41</u>	<u>\$590.41</u>	<u>\$590.41</u>	<u>\$590.41</u>	<u>\$590.41</u>	<u>\$ 590.41</u>
2. Comprehensive Instructional Program (CIP)							
a. Salary	\$.05	\$.05	\$.05	\$.05	\$.05	\$.05	\$.05
b. Non-Salary	.81	.81	.81	.81	.81	.81	.81
c. Total	<u>\$.86</u>	<u>\$.86</u>	<u>\$.86</u>	<u>\$.86</u>	<u>\$.86</u>	<u>\$.86</u>	<u>\$.86</u>
3. Total General Funds							
a. Salary	\$523.94	\$ 523.94	\$523.94	\$523.94	\$523.94	\$523.94	\$ 523.94
b. Non-Salary	67.33	67.33	67.33	67.33	67.33	67.33	67.33
c. Total General Funds	<u>\$591.27</u>	<u>\$ 591.27</u>	<u>\$591.27</u>	<u>\$591.27</u>	<u>\$591.27</u>	<u>\$591.27</u>	<u>\$ 591.27</u>
B. Compensatory Funds							
1. National Youth Corps Salaries	\$ 4.49	\$ 4.49	\$ 4.49	\$ 4.49	\$ 4.49	\$ 4.49	\$ 4.49

	Grades						Average
	Second	Third	Fourth	Fifth	Sixth	Seventh	
2. ESAP Salaries	\$ 4.90	\$ 4.90	\$ 4.90	\$ 4.90	\$ 4.90	\$ 4.90	\$ 4.90
3. Title I							
a. Salary	\$ 29.50	\$ 29.50	\$ 29.50	\$ 29.50	\$ 29.50	\$ 29.50	\$ 29.50
b. Non-Salary	1.46	1.46	1.46	1.46	1.46	1.46	1.46
c. Total	\$ 30.96	\$ 30.96	\$ 30.96	\$ 30.96	\$ 30.96	\$ 30.96	\$ 30.96
4. Total Compensatory Funds							
a. Salary	\$ 38.89	\$ 38.89	\$ 38.89	\$ 38.89	\$ 38.89	\$ 38.89	\$ 38.89
b. Non-Salary	1.46	1.46	1.46	1.46	1.46	1.46	1.46
c. Total	\$ 40.35	\$ 40.35	\$ 40.35	\$ 40.35	\$ 40.35	\$ 40.35	\$ 40.35
C. <u>Total Per Pupil Cost</u>	\$591.27	\$ 591.27	\$591.27	\$591.27	\$591.27	\$591.27	\$ 591.27
1. General Funds	40.35	40.35	40.35	40.35	40.35	40.35	40.35
2. Compensatory Funds	\$631.62	\$ 631.62	\$631.62	\$631.62	\$631.62	\$631.62	\$ 631.62
3. Total Per Pupil Cost	.72	.41		.73	.03	.62	.49
D. <u>Rate of Reading Gain</u>							
E. <u>Projected Cost for One-Grade-Unit Gain</u>	\$821.21	\$ 1,442.12	\$ -	\$809.96	\$19,709.00	\$953.66	\$ 1,206.67
1. General Funds	56.04	98.42	-	55.27	1,345.00	65.08	82.35
2. Compensatory Funds	\$877.25	\$ 1,540.54	\$ -	\$865.23	\$21,054.00	\$ 1,018.74	\$ 1,289.02
3. Total Projected Cost							
F. <u>Gain Rate of Effectiveness (Per Cent)</u>		100	120	133	-50	350	133
G. <u>Expenditure (Per ADA) of Compensatory Funds For Each Unit of Effectiveness</u>	\$.40	\$.34	\$.30	\$.12	\$.27		

XII. CONCLUSIONS

The Instructional Assistance Program (IAP) provided the services of a lead teacher who gave guidance, supervision, in-service training and assistance to the art teacher aide, music teacher aide, and physical education teacher aides. Also, the three aides in the program provided educational activities for successive groups of pupils in grades 4-7 while freeing the classroom teachers for group planning.

On a survey reported in the Research and Development Report, Volume VI, Number 17, December, 1972, the teachers at Drew responded very favorably to the effectiveness of the IAP aides. To the question "Would you like to see this program (the IAP) continued next year?", 100 per cent of the teachers, who had worked with the aides, responded "yes".

The emphasis for the total school program was on reading in grades 4-7. Since the IAP team worked in those grades (except for one aide who worked one-half day in the first grade), there were indications that an effective reading program was provided in the upper grades, with the exception of grade six. The Comprehensive Instructional Program (CIP) and two Title I aides worked in kindergarten and grade three, in addition to those persons (including a lead teacher) paid by general funds. There are indications that these two programs assisted in the achievement made by pupils in the primary grades.

The Youth-Tutoring-Youth Program, funded by Title I, proved to be beneficial to both the tutors and tutees. One of the Title I aides supervised the program, and the progress report for the tutees was "Very Good". The tutees worked on projects such as scrapbooks in which they wrote stories of actual experiences. The counselor at Murphy High School, also, reported that there was improvement, in achievement and attitudes, in the tutors who worked with the pupils at Drew. Additionally, there were requests from parents to have their children placed in the program for the 1972-73 school year.

In addition to the facts previously stated, the following conclusions were shown by the research assistant:

- A. The principal and staff should be complimented for the operation of an effective reading program for the majority of grades

during the school's second year of operation.

- B. There were indications that the teachers believed that there had been an improvement in attitudes by the pupils.
- C. According to the data from the Sullivan Reading tests the pupils did raise their reading levels a month or more for each month in the program.
- D. There was not an improvement in attendance for the total pupil population at Drew.

XIII. RECOMMENDATIONS

- A. The principal and staff should work towards making the effective reading program an acceptable one by formulating consistent and comprehensive objectives at the beginning of the school year taking into consideration (1) the needs of pupils, (2) the goals for the program, (3) the pupils' characteristics, and the variables in the program.
- B. A concentrated reading program should be pursued for several years in order to determine definite benefits.
- C. The reason for an ineffective reading program in grade six should be determined and corrective measures should be implemented for this grade for the 1972-73 school year.
- D. Although the Instructional Assistance Program (IAP) proved effective insofar as the lead teacher and aides assisted the teachers and released them for planning time, this team, after having worked together for a year, should make more impact upon the instructional program for the 1972-73 school year.
- E. Programmed reading and the individualized instructional reading program should be continued based on the pretest and posttest results of the Sullivan tests.
- F. Continued emphasis should be placed on improving the attendance and self-concepts of the pupils; and on involving parents in, and with, the education of their children.
- G. The faculty should formulate and carry out plans which would result in a positive and significant correlation between **pupil** achievement and expenditures.

R E S E A R C H A N D D E V E L O P M E N T R E P O R T

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ENGLISH AVENUE PRIMARY SCHOOL
1971-72

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INTRODUCTION

English Avenue Elementary School is an inner-city school of the Atlanta Public Schools System. According to data gathered in January, 1971, 54.8 per cent of the pupils came from low-income families which made the school eligible for Title I aid. (Low-income family was defined by Title I as family receiving an income of \$2000 or less per year.)

English Avenue Elementary School, which consists of grade levels K-7, had an enrollment of approximately 870 pupils. The principal of English Avenue Elementary School served also as principal of English Avenue Primary School, a school within the zone boundaries of the elementary school. The primary school provided a prekindergarten and grade levels K-2; the enrollment was approximately 210 children.

Because the majority of the pupils at the English Avenue school's were classified as disadvantaged, special programs were offered which attempted to compensate for their learning deficiencies. Follow Through, a special project which provided medical, dental, and psychological services for pupils from low-income families as well as specialized instruction for all pupils, operated in grades K-2 at English Avenue Primary School and in the third grade at English Avenue Elementary School. The elementary school served also as a community school providing adult education classes and day care services for the community.

English Avenue Elementary School had an Extended Day Program. This program involved certified personnel, assisted by Project Concern Volunteers, who tutored pupils in reading and mathematics after the regular school day.

The principal at English Avenue Elementary, in viewing his total school program, wished to observe closely the fourth grade pupils. The pupils in the fourth grade who had attended English Avenue Primary School had benefit of four years of the Follow Through Program; those who had attended English Avenue Elementary School had benefit of Follow Through only in the third grade. However, according to the principal, 80 per cent of the fourth graders were reading on the first and second grade levels. For this reason, the principal initiated a intensive reading program at the fourth grade level.

SUPPORTING PROJECTS

Elementary and Secondary Education Act (ESEA) Title I

The emphasis of the Title I Program at English Avenue Elementary School was toward improving the reading skills of the most educationally deprived pupils. Toward this effort, a lead teacher and ten aides were hired through Title I funds.

Career Opportunities Program (COP)

The Career Opportunities Program (COP) was a program through which aides pursued professional teaching certification. Although COP paid no salaries, it did provide funds for tuition at accredited colleges, books, and supplies. Ten aides at English Avenue Elementary School and six aides at English Avenue Primary School participated in COP.

Follow Through Project

The Follow Through project was designed as a total program for disadvantaged pupils. At English Avenue Primary School all pupils in grades K-2 were participants. At English Avenue Elementary School only third graders were involved in the project.

Follow Through made use of the Interdependent Learning Model (ILM), a games approach to learning. The project utilized a specialized method of teaching phonics skills, and offered special instruction in music, art, speech, and inactive communication. In addition, medical and dental care and psychological guidance were offered to all eligible pupils (pupils from homes in which the income did not exceed \$1800 per year for a one child family plus \$600 for each additional child).

Comprehensive Instructional Program (CIP)

The Comprehensive Instructional Program (CIP) was concerned with curriculum improvement and teacher in-service training. Reading and mathematics instruction in grades 1-3 were stressed during FY 72. Through the Comprehensive Instructional Program, each school was encouraged to develop behaviorally stated objectives directed at improving the reading and mathematics instruction.

Child Development Program

The Child Development Program provided day care and extended day services for children from ages 2-4. The program was directed by a lead teacher for the program and a family service worker.

NEEDS OF THE PUPILS

Children of school age were recognized as needing the following:

1. To learn to read.
2. To develop mathematical ability.
3. To develop positive self-concepts and positive attitudes toward school, teachers, and peers.

Follow Through pupils were recognized as having the following needs:

1. To receive medical and dental care.
2. To have psychological services available.
3. To receive parental reinforcement for the Follow Through instructional program.

There was a need for community day care services for children from the ages of two to four years old which would provide not only supervision but also learning experiences. Information provided by the local staff regarding staffing and activities is included in this report. However, day care external evaluation information (objectives, test scores, and program evaluation, etc.) was not available for use in this report; it will be published at a later date in the Title IV-A Day Care final report for 1971-72.

GOALS, OBJECTIVES, AND CRITICAL VARIABLES

A. Goal: To enable pupils to read.

1. Objective for Follow Through Kindergarten Pupils:

The kindergarten pupils will be introduced to the Direct Approach to Decoding program, the Follow Through approach for teaching phonics.

Critical Variable: Phonics skills.

2. Phonics Skills Objectives for Follow Through Pupils in Grades 1-3: The pupils will increase their competence

in phonics skills so that they will make the following gains on the Phonics Skills Test (PST): eight levels for grade one, fifteen levels for grade two, and ten levels for grade three.

Critical Variable: Phonics skills.

3. Reading Objective for All Pupils in Grades 2-7: Pupils will show a mean gain of one month in reading ability for each month in school as shown by the pretest and posttest of the Metropolitan Achievement Tests.

Critical Variable: Total reading skills.

B. Goal: To enable pupils to develop mathematics skills.

1. Objective for Pupils in Grades 1-7: The pupils will demonstrate a mean gain of one month in total mathematics skills for each month in school between the pretest and posttest of the Metropolitan Achievement Tests (MAT).

Critical Variable: Mathematics skills.

C. Goal: To enable pupils to develop positive self-concepts.

Objective for Follow Through Pupils: Pupils will demonstrate positive self-concepts on the Self Appraisal Inventory (SAI).

- D. Goal: To promote parental involvement in the Follow Through Program.

Objective: The parents or guardian of each eligible pupil will be visited during the year by the parent workers, who will demonstrate to the parents the Follow Through games and encourage the parents to play the games with the child. Parents will be invited to parent meetings, to visit the classroom, and to participate in parent volunteer groups throughout the year.

Critical Variable: Extent of parent participation.

- E. Goal: To provide medical and dental care for the Follow Through pupils.

Objective: Each eligible Follow Through child will receive medical and dental check-ups during the year and, when indicated, additional treatment. Individual medical records in the form of a survey-checklist will be kept for each child.

Critical Variable: Health of pupils.

- F. Goal: To provide psychological services to pupils.

Objective: Psychological services will be made available to all eligible pupils as needed. Referrals to psychologists will be made by teachers, social workers, or Follow Through staff when a need is observed so that the reason for referral will be eliminated.

Critical Variable: Psychological needs of pupils.

MANAGEMENT AND CONTROL

The principal of English Avenue Elementary School was the chief administrator of both English Avenue Elementary School and English Avenue Primary School. However, since the principal was based at the elementary school, the lead teacher of the primary school was responsible for many of the daily administrative tasks concerning the school. The lead teacher of the primary school was paid through the general funds of Atlanta Public Schools.

In operation at English Avenue Primary School were the prekindergarten for children four years old and the Follow Through Program in grades K-2. The Follow Through program assistant coordinated the Follow Through activities at the school. Additional Follow Through staff included the following: (1) a parent assistant to handle clerical work, (2) an instructional assistant, (3) four parent workers, (4) the classroom teachers in grades K-2, and (5) an educational aide for each classroom.

At English Avenue Elementary School an assistant principal aided the principal in administrative tasks. Coordinating instruction and services in special projects at the school were a lead teacher for Title I, a lead teacher for the Child Development Program, and a program assistant for Follow Through.

In the Title I Program there were three aides who worked with classroom teachers under the guidance of the Title I lead teacher. In the Follow Through Program, which operated in the third grade only at English Avenue Elementary School, there were a parent assistant, four parent workers, an instructional assistant, the third grade classroom teachers, and an aide for each classroom.

In the Child Development Program, in addition to the lead teacher for child development and the family service workers, there were three paraprofessionals assigned to each of three age groups (ages two, three, and four years old). Six paraprofessionals were involved in the Extended Day.

PROCESS

An inservice workshop on writing behavioral objectives was held for all teachers at English Avenue Elementary School at the beginning of the school year. Other inservice sessions included instruction in the following:

1. The purpose of standardized tests and how to use the test results.
2. The reading inventory.
3. The case history of a pupil which reveals family background, cultural advantages, and disadvantages.

4. The use of audiovisual equipment.
5. How to involve parents who volunteer.

The Title I Program, which stressed reading instruction, was aimed at the most educationally deprived pupils. Special attention was given to the fourth grade pupils with reading difficulties. The pupils were grouped according to ability and given individualized instruction.

In order to enable pupils to increase reading skills, word recognition, decoding, encoding, and phonetic and structural analysis were taught. Basal readers were used and were supplemented by library books. To ensure total reading progress, pupils were given daily opportunities to demonstrate oral reading skills and reading comprehension.

Emphasis was placed on vocabulary development. The pupils participated in classroom plays, gave choral readings and learned poems. A frequent activity was for the pupils to cut pictures from old magazines, glue them in books, and explain to the class what they represented. Game puzzles were used in instruction, and pupil-teacher discussions were encouraged. Many of the instructional materials used in the reading instruction were made by parent volunteers. (These volunteers were trained in making the materials by Follow Through personnel.) Supplies were kept in the classrooms and additional materials were obtained as needed from the material and book center of the school. In addition, an interest inventory was set up for each child. Audiovisual equipment such as film strips and filmstrips reviewers, tape recorders, record players, controlled readers, and a language master were used to expand the instructional effectiveness of the teachers in the classroom.

In the Follow Through Program, the Interdependent Learning Model (ILM) was the basic model for teaching all classes. The model made use of a game format for reinforcing classroom instruction and strengthening skills. The games, which were made by the Follow Through staff and parent volunteers, were developed as needed.

An important component of the Interdependent Learning Model (ILM) was the method utilized for teaching phonics skills. All classes in grades K-2 at English Avenue Primary School and in grade 3 at English Avenue Elementary School were taught the Direct Approach to Decoding (DAD). The DAD was used with basal readers.

A Follow Through aide was assigned to each Follow Through class. The aide worked under the guidance of the classroom teacher and served mainly as a tutor for small groups of pupils.

A Follow Through communication team, consisting of one art teacher, one music teacher, and one speech teacher, served the Follow Through Program. The three teachers divided their time equally among three Follow Through schools, spending one and one-half days at each. Rather than teaching classroom teachers, the music and art teachers rotated classes, teaching the pupils in the presence of the classroom teachers. The music activity was taught to a class and was then continued by the classroom teacher. Art was taught to pupils in small groups instead of entire class groups. While both music and art teachers served all Follow Through classes, the speech teacher concentrated on the speech problems of the kindergarten and first grade pupils.

The four parent workers worked with the Follow Through social worker and directly under the Follow Through program assistant. They visited in the home of each eligible child, explained the Follow Through Program, and attempted to enlist the active support of parents for the Follow Through Program.

In the Child Development Program the children were divided according to age. The science activities for all the children were to observe and feed a goldfish, observe a bumble bee and butterfly in captivity, and to plant seeds and watch them grow. Music activities involved record playing, singing songs, fingerplays, musical games, and playing rhythm instruments. Art activities included finger painting, making paper and yarn collages, coloring, and the use of an easel board.

To develop mathematics readiness skills, the children who were two years old made use of the stack-a-rack, the form filter, and the add-a-stack to learn different sizes and shapes. The children three years old began learning numbers and counting, stringing beads, and matching shapes, pegs, and tiles. Through all the activities, the children learned colors. The four-year-olds, in addition to the activities available to the younger children, used the learning tree and the cuisenaire math test.

The area of social studies was covered by studying farm animals, the role of the community workers, and the roles of the family. The children put together puzzles dealing with transportation, food, and animals and then discussed them. Children three and four years old were taken on short field trips.

To develop reading readiness, flannel board stories and the Touch Me Book were used with the two-year olds. The same process was utilized with the three-year-old children with the addition of such books as The Very Best of Friends, Pat the Bunny, the Three Little Pigs, and the ABC Book. A favorite activity among the four-year-old children was to listen to stories on records.

EVALUATION

Diagnosis

All pupils in grades two through seven at English Avenue Elementary School and in grade two at English Avenue Primary School were administered the Metropolitan Achievement Tests (MAT) as pretest and posttest. First grade pupils at both schools took the Metropolitan Readiness Tests (MRT) as pretest and the Metropolitan Achievement Tests (MAT) as posttest. The tests were used to evaluate the reading and mathematics performance of the pupils.

In addition to the MRT and MAT, performance of the Follow Through pupils was evaluated by means of the Phonics Skills Test (PST), the Self-Appraisal Inventory (SAI) and the Test of Attitudes of Children (TAC). The pupils were grouped for analysis in the basis of instructional level and Follow Through experience to determine if the number of years in the Follow Through Program influenced performance.

Attendance data was analyzed for the entire pupil population at English Avenue Elementary School and English Avenue Primary School, and the cost effectiveness of the instruction at each level was determined. In addition, a study was conducted by the Department of Research and Development to determine the effectiveness and acceptability of the reading and mathematics programs of English Avenue primary and elementary schools.

Effectiveness-Acceptability Study

A study which utilized median Metropolitan Achievement Tests (MAT) pretest, posttest, and gain scores was conducted within all the Atlanta Public Schools in order to compare the progress of pupils by school and by grade level, taking into account six factors which were believed to influence achievement. The factors were as follows:

1. Pretest scores.
2. Stability Index.
3. Per cent of paid lunches.
4. Pupil-teacher ratio.
5. Per cent of pupil attendance.
6. Per cent of pupils passing.

If the pupils at any grade level achieved the predicted gain, the reading or mathematics program at that level was defined as effective. If the median posttest scores of the pupils were at grade level (indicating performance at the national norm) the program was defined as acceptable.

At English Avenue Primary School only the second grade level was involved in the study. At that grade level the reading program was found effective with the pupils achieving 100 per cent the predicted gain. Because the pupils achieved less than the predicted gain in mathematics, the mathematics program was declared ineffective. Since the pupils were performing below grade level in reading and mathematics, neither the reading nor the mathematics program at English Avenue Primary School was found acceptable (Table 1).

TABLE 1
EFFECTIVENESS-ACCEPTABILITY STUDY OF THE READING AND
MATHEMATICS PROGRAMS AT ENGLISH AVENUE PRIMARY SCHOOL

	<u>Grade</u>	<u>MAT Scores</u>		<u>Gain</u>		<u>Gain Rate of</u>	<u>Index of</u>
		<u>Pre</u>	<u>Post</u>	<u>Actual</u>	<u>Predicted</u>	<u>Effectiveness</u>	<u>Acceptability</u>
						<u>1971-72</u>	<u>1971-72</u>
<u>Reading</u> <u>Program</u>	2	1.3	1.7	0.4	0.4	100	63
<u>Mathematics</u> <u>Program</u>	2	1.4	1.9	0.5	0.7	71	70

All grade levels two through seven were included in the Effectiveness-Acceptability study at English Avenue Elementary School. Although found very effective during the 1970-71 school year, the overall reading program during 1971-72 was found neither effective nor acceptable. However, when the grade levels were viewed separately, it was found that the reading program at the second grade level was effective with a gain of 100 per cent of the prediction and the fourth grade level was effective with a gain of 160 per cent of the prediction. (The median gain of the fourth grade pupils was eight months during the six months period between the pretest and the posttest.) A problem area was indicated by the performance of the sixth grade pupils who made no median gain (Table 2).

TABLE 2
EFFECTIVENESS-ACCEPTABILITY OF THE READING PROGRAM
AT ENGLISH AVENUE ELEMENTARY SCHOOL

Grade	Actual		Gain		Gain Rate of Effectiveness		Index of Acceptability	
	Pre	Post	Actual	Predicted	1971-72	1970-71	1971-72	1970-71
2	1.5	1.8	0.3	0.3	100	75	67	63
3	1.9	2.1	0.2	0.5	40	100	57	68
4	2.3	3.1	0.8	0.5	160	125	66	68
5	3.4	3.6	0.2	0.5	40	40	63	60
6	3.7	3.7	0.0	0.3	0	500	55	61
7	3.9	4.1	0.2	0.3	67	133	53	56
Average					68	162	60	63

Mathematics performance was included in the Effectiveness-Acceptability study for the first time during the 1971-72 school year. The overall mathematics program at English Avenue Elementary School showed a gain rate of effectiveness of 96 per cent, indicating the program was effective. The programs of the second, fourth, sixth, and seventh grades were very effective, with gains of 120 to 150 per cent of the prediction. The only problem area was the fifth grade; instead of a gain, the pupils showed a median loss of one month between the pretest and posttest (Table 3).

TABLE 3

EFFECTIVENESS-ACCEPTABILITY OF THE MATHEMATICS
PROGRAM OF ENGLISH AVENUE ELEMENTARY SCHOOL
1971-72

Grade	Actual		Gain		Gain Rate of Effectiveness	Index of Acceptability	
	Pre	Post	Actual	Predicted			
2	1.3	2.0	0.7	0.5	140	74	
3	2.1	2.5	0.4	0.5	80	68	
4	2.4	3.6	1.2	1.0	120	77	
5	4.5	4.4	-0.1	0.2	- 50	77	
6	4.9	5.2	0.3	0.2	150	78	
7	5.3	5.7	0.4	0.3	133	74	
Average						96	75

Performance of Follow Through Pupils

A. Phonics Skills

All Follow Through pupils (pupils in grades K-2 at English Avenue Primary School and in grade three at English Avenue Elementary School) were taught by means of the Direct Approach to Decoding (DAD) Program during the year and were administered the Phonics Skills Test (PST). There were 23 levels of the first chapter of the DAD Program and five chapters in all. The kindergarten pupils were administered the PST as posttest only, and the mean scores of the pupils, which are listed in Table 4, corresponded to levels of the first chapter, indicating the pupils had an introductory knowledge of phonics at the end of the school year.

The Follow Through first grade pupils at English Avenue Primary School were divided for evaluation into two groups: (1) pupils who had participated in Follow Through during the kindergarten and the first grade and (2) pupils who had participated in Follow Through during the first grade only. All the pupils scored at levels corresponding to the first chapter of the DAD Program. However, those pupils who had participated in Follow Through for two years scored higher on the posttest, though not significantly higher at the .05 level, than the pupils who had entered Follow Through in the first grade. The objective

was an eight level gain between the PST pretest and posttest; it was achieved by the first grade pupils who were in Follow Through for two years in letter sounds and oral reading. Those first grade pupils in Follow Through for one year achieved the eight level gain in the same two categories (Table 5).

TABLE 4

PHONICS SKILLS TEST
KINDERGARTEN
 ENGLISH AVENUE PRIMARY SCHOOL
 N = 54

	<u>Mean Raw Scores</u>	<u>Level</u>
Letter Sounds	4.43	10
Decoding	2.70	7
Auditory Blending	6.43	15
Oral Reading	2.81	9
Total	16.37	

The second grade pupils at English Avenue Primary were grouped according to the number of years of Follow Through participation into three groups. Twenty-nine pupils or 68 per cent of the forty-five pupils taking both the PST pretest and posttest had participated in Follow Through from kindergarten through grade two (3 years). The objective of a fifteen level gain was not achieved by the pupils. There was no pattern of gain on the PST based on Follow Through experience; those six pupils who entered Follow Through in the second grade showed the highest mean performance (though not significantly higher at the .05 level) on the PST posttest (Table 6).

The phonics skills performance of the third grade pupils at English Avenue Elementary School was analyzed on the basis of Follow Through experience. Since only those pupils transferring from English Avenue Primary School had benefit of Follow Through in grades K-2, the result was that only 23 pupils or 16 per cent of the total third grade Follow Through group had participated in Follow Through for four years (Table 7).

TABLE 5

PHONICS SKILLS TEST

COMPARISON OF GAINS OF FIRST GRADE PUPILS IN FOLLOW THROUGH FOR 1 AND 2 YEARS
ENGLISH AVENUE PRIMARY SCHOOL

	FIRST GRADE PUPILS IN FOLLOW THROUGH FOR 1 YEAR				FIRST GRADE PUPILS IN FOLLOW THROUGH DURING K AND GRADE 1					
	No. of Pupils	Pre Mean Raw Score	Post Mean Raw Score	Gain Level	No. of Pupils	Pre Mean Raw Score	Post Mean Raw Score	Gain Level		
Letter Sounds	21	1.43	3.76	10	8	3.24	7	6.02	15	8
Decoding		0.48	2.67	7	6	1.56	5	3.78	10	5
Auditory Blending		0.86	4.48	11	7	3.90	11	6.88	18	7
Oral Reading		0.05	3.62	11	11	0.32	0	6.10	16	16

TABLE 6

PHONICS SKILLS TEST
 COMPARISON OF GAINS OF ENGLISH AVENUE PRIMARY SCHOOL SECOND GRADE PUPILS IN FOLLOW THROUGH FOR 1, 2, AND 3 YEARS

	PUPILS IN FOLLOW THROUGH FOR 1 YEAR						PUPILS IN FOLLOW THROUGH FOR 2 YEARS						PUPILS IN FOLLOW THROUGH FOR 3 YEARS					
	Pre		Post		Gain Level	No. of Pupils	Pre		Post		Gain Level	No. of Pupils	Pre		Post		Gain Level	No. of Pupils
	Mean Raw Score	Level	Mean Raw Score	Level			Mean Raw Score	Level	Mean Raw Score	Level			Mean Raw Score	Level	Mean Raw Score	Level		
Letter Sounds	8.00	19	8.67	21	2	6	6.35	15	8.65	21	6	20	7.10	17	8.72	21	4	29
Decoding	9.67	21	15.17	9(II) ^a	11	6	5.40	12	8.60	21	9	20	6.55	17	12.31	3(II) ^a	9	29
Auditory Blending	10.67	1(II) ^a	16.83	3(III) ^a	9	6	8.60	21	11.50	3(II) ^a	5	20	12.69	3(II) ^a	13.79	7(II) ^a	4	29
Oral Reading	12.67	3(II) ^a	17.33	3(III) ^a	9	6	5.10	14	11.50	1(III) ^a	10	20	7.72	18	13.46	5(II) ^a	10	29

^aThe Roman numeral in parenthesis refers to the Chapter number. If not indicated, the level was from Chapter 1 of the DAD.

TABLE 7

PHONICS SKILLS TEST
COMPARISON OF GAINS OF THIRD GRADE PUPILS IN FOLLOW THROUGH FOR 1, 2, 3, AND 4 YEARS
ENGLISH AVENUE ELEMENTARY SCHOOL

	PUPILS IN FOLLOW THROUGH FOR 1 YEAR						PUPILS IN FOLLOW THROUGH FOR 2 YEARS					
	No. of Pupils	Pre		Post		Gain Level	No. of Pupils	Pre		Post		Gain Level
		Mean Raw Score	Level	Mean Raw Score	Level			Mean Raw Score	Level	Mean Raw Score	Level	
	62						16					
Letter Sounds		7.48	17	9.37	21	4		9.06	21	9.75	23	2
Decoding		9.65	21	15.15	9(II) ^a	11		12.94	5(II) ^a	17.63	5(III) ^a	9
Auditory Blending		10.87	1(II) ^a	15.19	7(II) ^a	6		19.19	7(III) ^a	20.75	9(III) ^a	2
Oral Reading		13.23	5(II) ^a	20.11	9(III) ^a	13		13.31	5(II) ^a	19.75	7(III) ^a	12
	PUPILS IN FOLLOW THROUGH FOR 3 YEARS						PUPILS IN FOLLOW THROUGH FOR 4 YEARS					
	No. of Pupils	Pre		Post		Gain Level	No. of Pupils	Pre		Post		Gain Level
		Mean Raw Score	Level	Mean Raw Score	Level			Mean Raw Score	Level	Mean Raw Score	Level	
	14						23					
Letter Sounds		8.50	21	9.64	23	2		9.39	21	9.87	23	2
Decoding		12.50	5(II) ^a	15.93	1(III) ^a	10		16.91	3(II) ^a	19.52	1(III) ^a	10
Auditory Blending		19.86	9(III) ^a	17.50	5(III) ^a	-4		24.04	7(IV) ^a	18.87	5(III) ^a	-11
Oral Reading		13.36	5(II) ^a	19.14	7(III) ^a	20		19.91	7(III) ^a	23.35	5(IV) ^a	7

^aThe Roman numeral in parenthesis refers to Chapter number. If none is indicated, the level is from Chapter I.

The objective was a ten level gain in each category. All four groups were performing at the highest levels in letter sounds. While there was no significant difference in the mean posttest scores of the four groups and there was no pattern of achievement based on Follow Through experience, the objective was achieved by the first year, third year, and fourth year Follow Through experience groups in decoding and by the first year, second year, and third year Follow Through experience groups in oral reading.

B. Reading and Mathematics Performance of the First-Grade Follow Through and Non-Follow Through Pupils

The objective for the first grade pupils stated that the same percentage of pupils who scored C or above on the Metropolitan Readiness Test's (MRT) would achieve a score of 1.6 (first grade, six months) on the reading and mathematics sections of the Metropolitan Achievement Tests (MAT). In Table 8 the percentages of pupils scoring C or above are listed. In comparing the performance of the Follow Through first grade pupils at English Avenue Primary School with the non-Follow Through first grade pupils at English Avenue Elementary School, the performance of the Follow Through pupils at English Avenue Primary School was superior. When breaking down the first grade at English Avenue Primary into pupils who had attended Follow Through kindergarten and those who had not attended Follow Through kindergarten, it was found that 73 per cent of the first grade pupils who had attended Follow Through kindergarten scored C or above. This performance was far superior to the performance of the pupils at English Avenue Primary School who participated in Follow Through for one year and those first grade pupils at English Avenue Elementary School who had not participated in Follow Through. However, it must be noted that the first grade pupils at English Avenue Elementary School were not divided for evaluation on the basis of whether or not they had kindergarten experience. (Because kindergarten attendance is not mandatory within Atlanta Public Schools, many pupils enter school at the first grade level.)

In Table 9 the percentages of first grade pupils scoring first grade, six months (1.6) on the MAT, which was given as a posttest, are listed. When comparing the performance of all the Follow Through first grade pupils at English Avenue Primary School with the performance of the non-Follow Through pupils at English Avenue Elementary School, the percentages of the non-Follow Through pupils at English Avenue Elementary achieving the objective were far greater in reading and slightly greater in mathematics. In addition, the objective stating that

TABLE 8

FIRST GRADE PUPILS
METROPOLITAN READINESS TEST VS. FOLLOW THROUGH EXPERIENCE

	<u>Years of Follow Through Experience</u>	<u>No. of Pupils</u>	<u>Pupils Scoring C or above on the MRT</u>	
			<u>No.</u>	<u>Per Cent</u>
English Avenue Primary School	2 (grades K & 1)	45	33	73.3
	1 (grade 1)	30	5	16.7
	Total	75	38	50.7
English Avenue Elementary School	0	104	46	44.2

TABLE 9

FIRST GRADE PUPILS
METROPOLITAN ACHIEVEMENT TEST VS. FOLLOW THROUGH EXPERIENCE

	<u>Years of Follow Through Experience</u>	<u>No. of Pupils</u>	<u>Pupils Scoring 1.6 or above on Total Reading</u>		<u>Pupils Scoring 1.6 or above on Total Math</u>	
			<u>No.</u>	<u>Per Cent</u>	<u>No.</u>	<u>Per Cent</u>
English Avenue Primary School	2 (grades K and 1)	43	14	32.6	12	26.7
	1 (grade 1 only)	24	3	12.5	3	10.3
	Total	67	17	25.4	15	20.3
English Avenue Elementary School	0	96	47	49.0	23	24.0

the same percentage of pupils scoring C or above on the MRT would score 1.6 or above on the MAT was achieved in reading by the non-Follow Through first grade pupils of English Avenue Elementary School. The objective was not achieved by the Follow Through first grade pupils at English Avenue Primary School.

The MAT mean scores of the second grade pupils at English Avenue Elementary School and English Avenue Primary School are recorded in Table 10. The objective was a mean gain of one month for each month between the pretest and the posttest. The objective was not achieved by the total second grade group (non-Follow Through) at English Avenue Elementary School. However, the pupils did gain 5.5 months in word analysis and 5.7 months in total mathematics during the six month period.

When viewing the second grade at English Avenue Primary School, the group who entered Follow Through in the second grade and remained the whole year consisted of only six pupils, too few for a valid comparison with the other groups. However, the mean performance of the six pupils indicated gains of 8.9 months in total math and 10.5 months in total reading during the six month period.

The twenty-two second grade pupils at English Avenue Primary School who entered Follow Through in the first grade achieved the objective in word knowledge with a gain of seven months during the six-month period. Those second graders who had entered the program in the kindergarten achieved the objective in word knowledge, reading, and total reading by gaining from 7.4 to 7.6 months in each category between the pretest and the posttest.

An analysis of variance was performed to determine if there was significant difference in the posttest scores among the second grade pupils at English Avenue Elementary School who had no Follow Through experience and the second grade pupils at English Avenue Primary School who had three years, two years, or one year of Follow Through experience. The results are shown in Table 11; there was no significant difference in the posttest scores.

TABLE 10

COMPARISON OF METROPOLITAN ACHIEVEMENT TESTS (MAT) SCORES OF SECOND GRADE PUPILS IN FOLLOW THROUGH FOR 1, 2, AND 3 YEARS -- 1971-72

	English Avenue Elementary School				English Avenue Primary School								
	Total Second Grade				First Year in		Second Year in		Third Year in				
	No	Follow Through	Through	Experience	Pre	Post	Pre	Post	Pre	Post	Gain		
Word Knowledge	Mean	1.43	2.07	0.45	1.65	2.69	1.05	1.47	2.13	0.70	1.65	2.43	0.76
	S.D.	0.68	0.82	-	0.42	1.12	-	0.27	0.96	-	0.51	1.04	-
	N	54	54	54	6	8	6	22	23	22	36	33	33
Word Analysis	Mean	1.50	2.05	0.55	1.60	2.35	0.83	1.35	1.80	0.48	1.53	1.97	0.44
	S.D.	0.67	0.97	-	0.72	1.16	-	0.30	0.73	-	0.46	0.70	-
	N	54	54	54	6	8	6	22	22	22	36	33	33
Reading	Mean	1.79	2.00	0.21	1.32	2.63	1.10	1.38	1.86	0.50	1.37	2.12	0.74
	S.D.	0.93	0.70	-	0.35	1.12	-	0.23	0.51	-	0.25	0.75	-
	N	53	53	53	6	8	6	22	23	22	36	35	35
Total Math	Mean	1.53	2.10	0.57	1.43	2.28	0.89	1.43	1.91	0.55	1.47	1.89	0.52
	S.D.	0.49	0.78	-	0.28	0.89	-	0.23	0.67	-	0.27	0.58	-
	N	52	52	52	6	8	6	22	23	22	36	35	35
Total Reading	Mean	1.76	2.05	0.28	1.50	2.71	1.05	1.46	1.96	0.53	1.52	2.30	0.76
	S.D.	0.95	0.73	-	0.32	1.17	-	0.19	0.62	-	0.23	0.83	-
	N	55	55	55	6	8	6	22	23	22	36	33	33

TABLE 11

METROPOLITAN ACHIEVEMENT TESTS VS. FOLLOW THROUGH EXPERIENCE (SECOND GRADE)

<u>Subtest</u>	<u>Sum of Squares</u> <u>Between Groups</u>	<u>Degrees of Freedom</u> <u>Between Groups</u>	<u>Sum of Squares</u> <u>Within Groups</u>	<u>Degrees of Freedom</u> <u>Within Groups</u>	<u>F</u>
Word Knowledge	4.55	3	99.62	114	1.74
Word Analysis	2.02	3	86.04	113	0.89
Reading	3.83	3	59.43	115	2.47
Total Math	1.11	3	57.50	114	0.73
Total Reading	4.68	3	68.94	115	2.60

As stated earlier, there was no third grade at English Avenue Primary School, all the pupils transferred to English Avenue Elementary School. The total third grade (7 classes) at English Avenue Elementary School were included in Follow Through. The objective concerning the MAT was a gain of a month for each month in the program. Table 12 shows which pupils, grouped for analysis according to Follow Through experience, achieved the objective. As can be seen in the table, all the third grade pupils achieved the objective in spelling and math concepts. No pattern of gains based upon Follow Through experience was revealed. The actual pretest, posttest, and gain scores of each of the groups are shown in Table 13.

An analysis of variance was performed to determine if there was significant difference in the posttest scores of the four groups of third grade pupils. The results of the analysis are shown in Table 14. The only significant difference in scores occurred in word analysis; there was a significant difference at the .05 level with the third grade pupils in Follow Through for four years achieving the highest score and the third grade pupils in Follow Through for one year achieving the lowest score.

Self-Concept

A small sample (75 Follow Through pupils from the 6 Follow Through schools) was administered the Self Appraisal Inventory (SAI) by the Research and Development Division for the purpose of analyzing the total Follow Through Program. The scores were analyzed by grade level. However, because of the small sample, there were too few pupils from the English Avenue School taking the inventory to analyze the scores separately.

The Test of Attitudes of Children (TAC) was administered to all Follow Through pupils by the Follow Through coordinator of assessment and development. After factor analysis of the test items, many were deleted for the posttest. Although the scores were requested, the scores of neither the pretest or the posttest were made available for the external evaluation of Research and Development by the Educational Evaluative Services (EES).

Parent Involvement

The parents of each eligible Follow Through child were to be visited during the school year. At English Avenue Primary 72 per cent of the parents were visited with an average of 1.4 visits per family. At English Avenue Elementary School there were an average of 1.5 visits per family with 85.2 per cent of the families visited. Parents were invited to Follow Through meetings, to visit the classrooms, and to participate in parent volunteer groups.

TABLE 12

THIRD GRADE PUPILS WITH MEAN GAINS OF 1 MONTH ON METROPOLITAN
ACHIEVEMENT TESTS (MAT) FOR EACH MONTH IN SCHOOL
ENGLISH AVENUE ELEMENTARY SCHOOL

	Word Knowledge	Word Analysis	Reading	Spelling	Math Computation	Math Concepts	Math Problems	Total Math	Total Reading
1st yr. in F.T. N = 73	-	-	-	x	x	x	-	x	-
2nd yr. in F.T. N = 17	-	-	-	x	-	x	-	-	-
3rd yr. in F.T. N = 16	-	x	-	x	x	x	-	-	-
4th yr. in F.T. N = 24	-	x	-	x	-	x	-	-	-



TABLE 13

ENGLISH AVENUE ELEMENTARY
COMPARISON OF METROPOLITAN ACHIEVEMENT TESTS (MAT) MEAN SCORES
OF THIRD GRADE PUPILS IN FOLLOW THROUGH FOR 1, 2, 3, AND 4 YEARS
1971-72

	First Year in F.T.			Second Year in F.T.			Third Year in F.T.			Fourth Year in F.T.			
	Pre	Post	Gain	Pre	Post	Gain	Pre	Post	Gain	Pre	Post	Gain	
Word Knowledge	Mean	2.44	2.52	0.07	2.40	2.73	0.05	2.18	2.47	0.31	2.33	2.81	0.50
	S.D.	1.16	0.68	-	0.74	1.21	-	0.68	0.69	-	0.53	0.81	-
	N	77	82	73	19	18	17	16	17	16	24	25	24
Word Analysis	Mean	1.94	2.45	0.50	2.33	2.77	0.24	2.03	2.68	0.61	2.15	3.06	0.93
	S.D.	0.81	0.89	-	1.26	1.03	-	0.67	1.08	-	0.53	1.13	-
	N	77	82	73	19	18	17	16	17	16	24	25	24
Reading	Mean	2.10	2.27	0.15	2.15	2.33	0.05	2.08	2.54	0.39	2.08	2.58	0.50
	S.D.	0.61	0.72	-	0.82	0.58	-	0.54	0.80	-	0.56	0.90	-
	N	77	82	73	19	18	17	16	17	16	24	25	24
Spelling	Mean	2.22	2.80	0.70	2.29	2.87	0.76	2.16	2.84	0.96	2.15	3.28	1.15
	S.D.	0.95	1.08	-	0.92	1.24	-	1.01	1.22	-	0.45	1.02	-
	N	66	76	65	15	18	17	14	17	16	24	25	24
Math Computation	Mean	2.34	3.04	0.79	2.34	2.83	0.45	2.30	3.14	0.86	2.45	3.06	0.57
	S.D.	0.71	1.22	-	1.04	1.10	-	0.96	1.21	-	0.81	1.05	-
	N	75	81	71	18	18	17	16	17	16	24	25	24
Math Concepts	Mean	2.45	3.33	0.95	2.44	3.51	0.94	2.43	3.05	0.65	2.56	3.29	0.87
	S.D.	0.95	1.65	-	1.23	1.86	-	1.29	1.30	-	1.04	1.38	-
	N	76	81	72	18	18	17	16	17	16	24	25	24
Math Problems	Mean	2.46	2.85	0.40	2.32	3.15	0.41	2.19	2.81	0.06	2.37	2.77	0.20
	S.D.	0.08	0.92	-	0.97	1.55	-	0.82	1.06	-	0.69	0.71	-
	N	76	80	71	18	18	17	16	17	16	24	24	23
Total Math	Mean	2.35	2.93	0.64	2.32	2.98	0.55	2.19	2.83	0.54	2.37	2.83	0.48
	S.D.	0.71	0.95	-	0.97	1.08	-	0.82	0.76	-	0.69	0.72	-
	N	75	80	70	18	18	17	16	17	16	24	24	23
Total Reading	Mean	2.19	2.38	0.19	2.23	2.62	0.09	2.13	2.48	0.33	2.20	2.67	0.46
	S.D.	0.64	0.61	-	0.66	1.20	-	0.58	0.70	-	0.51	0.72	-
	N	77	82	73	19	18	17	16	17	16	24	25	24

TABLE 14

ANALYSIS OF VARIANCE IN THE METROPOLITAN ACHIEVEMENT TESTS (MAT) POSTTEST SCORES
AMONG THIRD GRADE GROUPS AT ENGLISH AVENUE ELEMENTARY SCHOOL

<u>Subtest</u>	<u>Sum of Squares</u> <u>Between Groups</u>	<u>Degrees of Freedom</u> <u>Between Groups</u>	<u>Sum of Squares</u> <u>Within Groups</u>	<u>Degrees of Freedom</u> <u>Within Groups</u>	<u>F</u>
Word Knowledge	2.21	3	85.67	138	1.19
Word Analysis	7.67	3	131.45	138	*2.69
Reading	2.44	3	77.36	138	1.45
Spelling	4.45	3	162.34	132	1.21
Math Computation	0.96	3	189.49	137	0.23
Math Concepts	1.91	3	349.30	137	0.25
Math Problems	1.74	3	137.22	135	0.57
Total Math	0.38	3	112.23	135	0.15
Total Reading	2.07	3	74.88	138	1.27

*Significant to .05 level.

At English Avenue Primary School, 142 of the 164 parents (87.8 per cent) participated in meetings and/or volunteered for service. There were a total of 573.50 hours of volunteer service which included the following types of service: 73.25 hours for field trips, and 93.5 hours in miscellaneous activities. Service data were unavailable for English Avenue Elementary School.

Health Care

Each Follow Through eligible child was given dental and health check-ups during the school year. When necessary, dental work was performed. When illnesses occurred, pupils were taken to a pediatrician. The final health services report for Follow Through, which was included in the internal Follow Through final report, gave the data for English Avenue Primary and Elementary Schools. See Table 15.

Psychological Service

Psychological service was provided for Follow Through eligible children by two Follow Through psychologists. Referrals were made by classroom teachers, the social workers, or other Follow Through staff when the recognized so that the need would be eliminated.

Independent Learning

A Follow Through objective was to enable pupils to become independent learners. A checklist was to be developed during the year to measure progress. However, the checklist is still in the developmental stage. Problems arose in attempting to isolate the behavioral characteristics of an independent learner.

Career Opportunities Program

There were ten aides at English Avenue Elementary School and six aides at English Avenue Primary School who participated in the Career Opportunities Program. Since the analysis of the progress of the Follow Through pupils was based on their years of experience in Follow Through rather than a comparison of achievement among classes, the effect of the COP aides at English Avenue Primary was not a component of the evaluation. However, in conjunction with COP, a random sample of teachers at the two schools was asked to complete the Organizational Climate Index (OCI) which was developed by George Stern of Syracuse University.

TABLE 15

FOLLOW THROUGH HEALTH SERVICES FOR PUPILS IN GRADES K-2 AT
ENGLISH AVENUE PRIMARY SCHOOL AND IN GRADE 3 AT ENGLISH
AVENUE ELEMENTARY SCHOOL
1971-72

<u>Health Procedures</u>	<u>Pupils Assessed</u>	<u>Number of Pupils</u>
Dental Care	Kindergarten	56
	New pupils (Grades 1-2)	62
	New pupils (Grade 3)	87
Physical Examinations	Kindergarten and new pupils (Grades 1-2)	94
	New pupils (Grade 3)	85
Height and Weight	All pupils K-2	232
	All pupils 3	167
Hematocrits	Kindergarten, new pupils K-2, Follow Through pupils with history of Anemia	100
Tuberculin Test	As directed by Public Health Department K-2	143
Immunizations	Follow Through pupils as needs indicated	35
Urinalysis	Kindergarten and new pupils Grades 1-2	98
Vision Screening	All Follow Through pupils K-2	130
	All Follow Through pupils 3	166
Hearing Screening	All Follow Through pupils K-2	130
	All Follow Through pupils 3	121

The Organizational Climate Index (OCI) consists of 300 true or false statements concerning the organizational climate of the school. The index is based on thirty need-press scales postulated by Henry A. Murray and his associates of Harvard University in 1938. These scales are derived from six first-order OCI factors. (The list is on page 1 of the Appendix.) Five of the six first order factors describe a second-order factor called "development press," which is the capacity of the organizational environment to support, satisfy, or reward self-actualizing behavior. The sixth first-order factor, impulse control, describes the second-order factor "control press," the characteristics of the environment which inhibit or restrict personal expressiveness.

Although administered to some Atlanta schools during 1970-71, the OCI was given first at the English Avenue Schools during 1971-72. The data on the climate is included in Table 10. The raw scores on the six factors were converted to standard scores. Therefore, the higher the score on each factor (including number 6), the more open the climate.

There were no extremes in scores at either school. The standard scores of each category did not vary more than ten from the mean in either school with one exception: English Avenue Primary was rated more than ten points higher in orderliness. It can be interpreted from the scores that both schools had an average degree of openness.

In the general organizational climate study of the twenty-eight Atlanta Public Schools with COP aides, an intercorrelation matrix including the OCI factors, reading achievement scores, and per cent of attendance was computed. No significant correlation was found between the degree of openness of climate and achievement.

Pupil Attendance

The per cent of pupil attendance at English Avenue Primary School ranged from 86 per cent in the kindergarten to 91 per cent in the second grade. At English Avenue Elementary School the per cent of pupil attendance ranged from 90 per cent in grades two and four to 92 per cent in grade five. The citywide attendance average for elementary schools was 91.3 per cent during 1971-72.

The stability index was 74 per cent at English Avenue Primary School and 75 per cent at English Avenue Elementary School, indicating high pupil mobility.

TABLE 16

SCHOOL PROFILE OF STANDARD FACTOR SCORES ON
 THE ORGANIZATIONAL CLIMATE INDEX
 ENGLISH AVENUE ELEMENTARY SCHOOL

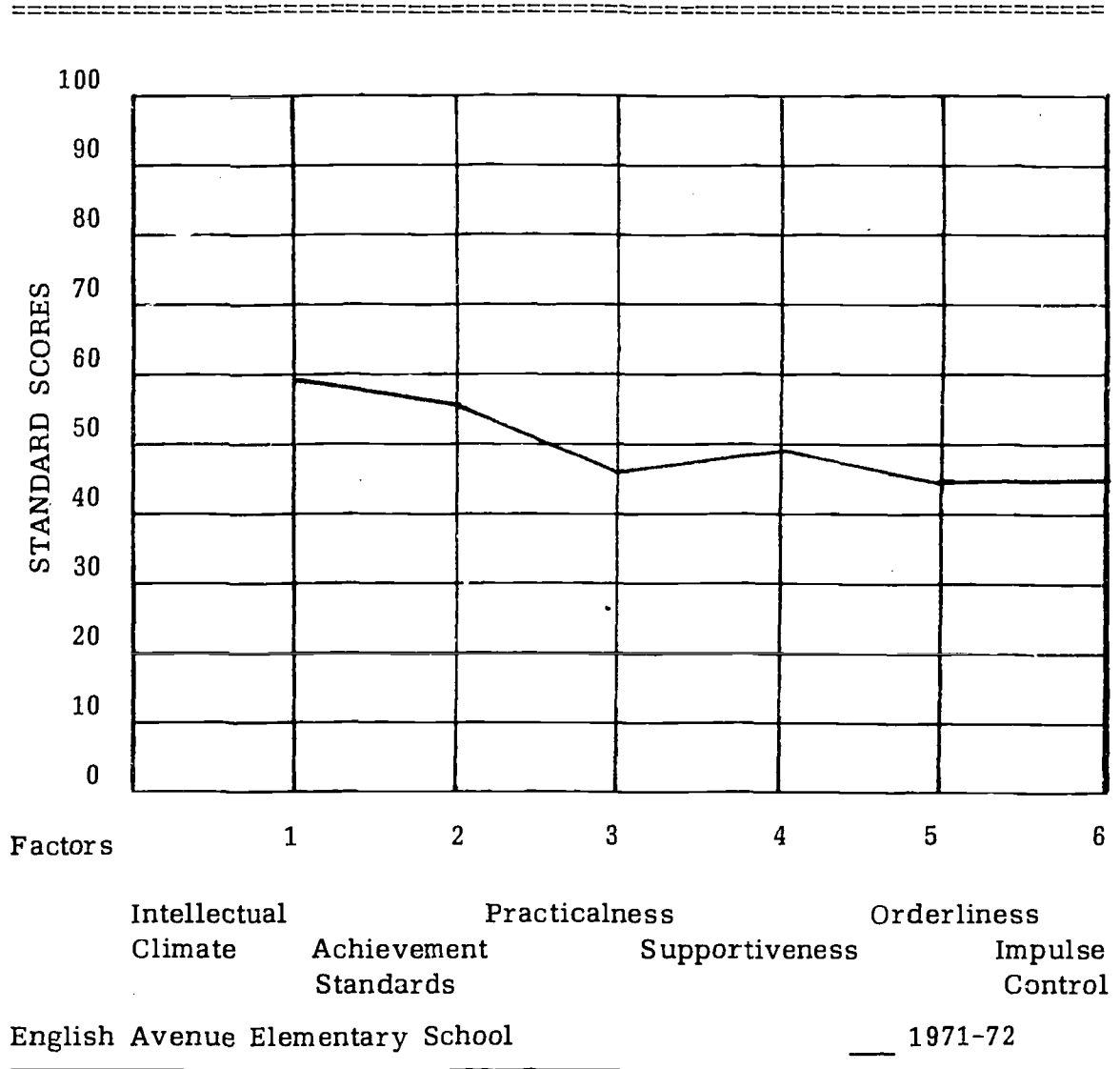
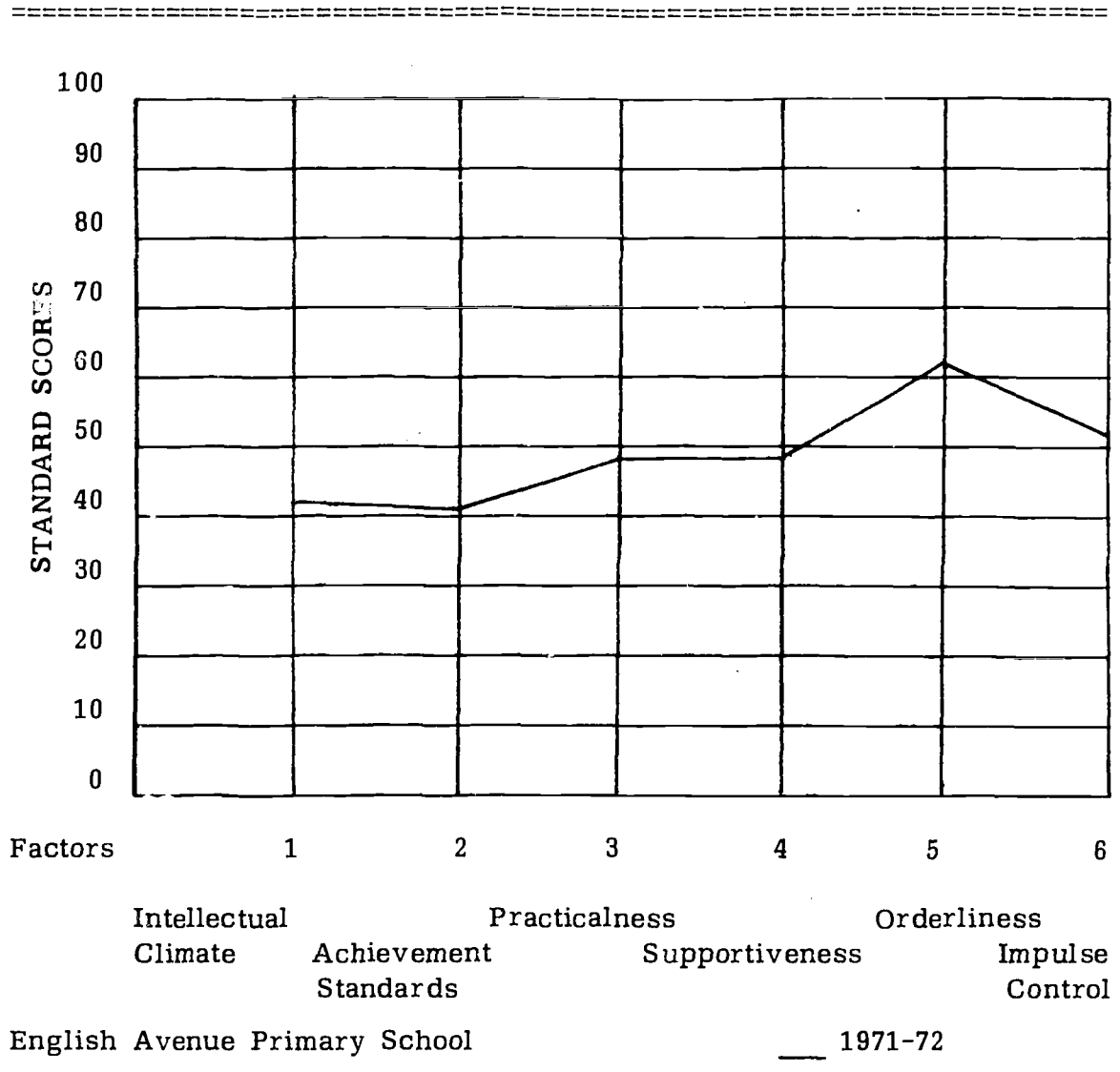


TABLE 16 (Cont'd.)

SCHOOL PROFILE OF STANDARD FACTOR SCORES ON
THE ORGANIZATIONAL CLIMATE INDEX
 ENGLISH AVENUE PRIMARY SCHOOL



COST ANALYSIS

A cost analysis was performed to determine the relative cost for one grade unit of reading gain based upon the rate of MAT reading gain for 1971-72 and the amount spent. Data from Atlanta Public Schools General Funds Report, July, 1972, and the Trust and Agency Report, June, 1972, were used. Included were general funds and compensatory funds from special projects.

Only the second grade was included in the study at English Avenue Primary School. The actual per pupil cost for the second graders was \$1,321.12. However, the rate of reading gain for the total second grade was only 0.45, indicating the pupils gained 45 per cent of one grade unit. Since \$1,321.12 was spent per pupil to achieve 45 per cent of the gain, the projected cost for these pupils to achieve one grade unit of gain was \$2,935.83 per pupil.

The cost analysis of the reading gain at English Avenue Elementary School included grades two through seven. The highest rate of reading gain, 0.37, was in the third grade. At this level the actual per pupil cost was \$1,614.55; therefore, the projected cost for one grade unit of gain was \$4,363.73.

CONCLUSIONS

To avoid confusion in the interpretation of the results of the Effectiveness-Acceptability Study in comparison with the Cost Analysis of the English Avenue elementary and primary reading programs, it must be remembered that the Effectiveness-Acceptability Study was based on the median scores of all pupils taking the Metropolitan Achievement Tests (MAT) pretest and/or posttest. The cost analysis utilized the mean scores of only the pupils who attended English Avenue elementary or primary schools for the entire year, taking both the MAT pretest and posttest. However, even though the two approaches were taken to analyze the pupil performance, the findings of the two studies were similar.

In viewing the total programs of English Avenue Elementary School and English Avenue Primary School, conclusions were reached as follows:

TABLE 17

COST ANALYSIS OF READING GAIN
ENGLISH AVENUE PRIMARY SCHOOL
1971-72

	Second 65	Average 65
ADA		
<u>Per Pupil Cost</u>		
A. General Funds		
1. Regular		
a. Salary	\$ 678.72	\$ 678.72
b. Non-salary	61.57	61.57
c. Sub Total	\$ 740.29	\$ 740.29
B. Compensatory Funds		
1. ESAP (salary)	0.54	0.54
2. Follow Through		
a. Salary	\$ 479.70	\$ 479.70
b. Non-salary	75.66	75.66
c. Total	\$ 555.36	\$ 555.36
3. Title I		
a. Salary	\$ 3.35	\$ 3.35
b. Non-salary	0.04	0.04
c. Total	\$ 3.39	\$ 3.39
4. COP (non-salary)	21.54	21.54
5. Total Compensatory Funds		
a. Salary	\$ 483.59	\$ 483.59
b. Non-salary	97.24	97.24
c. Total	\$ 580.83	\$ 580.83
C. Total Per Pupil Cost		
1. General Funds	\$ 740.29	\$ 740.29
2. Compensatory Funds	580.83	580.83
3. Total	\$1,321.12	\$1,321.12
D. Rate of Reading Gain	0.45	0.45
E. Projected Cost for One-Grade-Unit of Gain		
1. General Funds	\$1,645.09	\$1,645.09
2. Compensatory Funds	1,290.73	1,290.73
3. Total	\$2,935.83	\$2,935.83
F. Gain Rate of Effectiveness	100	100
G. Expenditures Per ADA for Each Unit of Effectiveness		
1. General Funds	\$ 7.40	\$ 7.40
2. Compensatory Funds	5.81	5.81
3. Total	\$ 13.21	\$ 13.21

TABLE 18
 COST ANALYSIS OF READING GAINS BY GRADES
 ENGLISH AVENUE ELEMENTARY SCHOOL

ADA	GRADES							Average 104 (Total = 624)
	Second 74	Third 160	Fourth 139	Fifth 125	Sixth 66	Seventh 60		
<u>Per Pupil Cost</u>								
A. General Funds								
1. Regular								
a. Salary	\$ 677.53	\$ 677.53	\$ 677.53	\$ 677.53	\$ 677.53	\$ 677.53	\$ 677.53	\$ 677.53
b. Non-salary	74.42	74.42	74.42	74.42	74.42	74.42	74.42	74.42
c. Sub Total	\$ 751.95	\$ 751.95	\$ 751.95	\$ 751.95	\$ 751.95	\$ 751.95	\$ 751.95	\$ 751.95
2. CIP								
a. Salary	\$ 0.11	\$ 0.11	\$ 0.11	\$ 0.11	\$ 0.11	\$ 0.11	\$ 0.11	\$ 0.11
b. Non-salary	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85
c. Sub Total	\$ 1.96	\$ 1.96	\$ 1.96	\$ 1.96	\$ 1.96	\$ 1.96	\$ 1.96	\$ 1.96
3. Total General Funds								
a. Salary	\$ 677.64	\$ 677.64	\$ 677.64	\$ 677.74	\$ 677.74	\$ 677.74	\$ 677.74	\$ 677.74
b. Non-salary	76.27	76.27	76.27	76.27	76.27	76.27	76.27	76.27
c. Sub Total	\$ 753.91	\$ 753.91	\$ 753.91	\$ 753.91	\$ 753.91	\$ 753.91	\$ 753.91	\$ 753.91
B. Compensatory Funds								
1. Follow Through								
a. Salary	-	\$ 535.00	-	-	-	-	-	\$ 535.00
b. Non-salary	-	93.47	-	-	-	-	-	93.47
c. Sub Total	-	\$ 628.47	-	-	-	-	-	\$ 628.47
2. ESAP								
a. Salary	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ -0-	\$ -0-
b. Non-salary	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92
c. Sub Total	\$ 4.92	\$ 4.92	\$ 4.92	\$ 4.92	\$ 4.92	\$ 4.92	\$ 4.92	\$ 4.92
3. Title IV-A								
a. Salary	\$ 168.73	\$ 168.73	\$ 168.73	\$ 168.73	\$ 168.73	\$ 168.73	\$ 168.73	\$ 168.73
b. Non-salary	25.14	25.14	25.14	25.14	25.14	25.14	25.14	25.14
c. Sub Total	\$ 193.87	\$ 193.87	\$ 193.87	\$ 193.87	\$ 193.87	\$ 193.87	\$ 193.87	\$ 193.87
4. Title I								
a. Salary	\$ 152.69	\$ 20.40	\$ 55.61	\$ 20.40	\$ 20.40	\$ 101.98	\$ 51.78	\$ 51.78
b. Non-salary	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76
c. Sub Total	\$ 154.45	\$ 22.16	\$ 57.37	\$ 22.16	\$ 22.16	\$ 103.74	\$ 53.54	\$ 53.54
5. COP								
Non-salary	16.22	11.25	-0-	-0-	-0-	10.00	12.25	12.25
6. Total Compensatory Funds								
a. Salary	\$ 321.42	\$ 724.13	\$ 224.34	\$ 189.13	\$ 189.13	\$ 270.71	\$ 357.69	\$ 357.69
b. Non-salary	48.04	136.54	31.82	31.82	41.82	41.82	61.56	61.56
c. Total	\$ 369.46	\$ 860.67	\$ 356.16	\$ 220.95	\$ 220.95	\$ 312.53	\$ 419.25	\$ 419.25
C. Total Per Pupil Cost								
1. Salary	\$ 999.06	\$1,401.77	\$ 901.98	\$ 866.77	\$ 866.77	\$ 948.35	\$1,035.33	\$1,035.33
2. Non-salary	124.31	212.81	108.09	108.09	108.09	118.09	137.83	137.83
3. Total	\$1,123.37	\$1,614.58	\$1,010.07	\$ 974.86	\$ 974.86	\$1,066.44	\$1,173.16	\$1,173.16
D. Rate of Reading Gain								
	0.34	0.37	-	0.35	0.07	0.34	0.32	0.32
E. Projected Cost for One-Grade- Unit of Gain								
1. General Funds	\$2,217.38	\$2,037.59	-	\$2,154.03	\$10,770.14	\$2,217.38	\$3,305.62	\$3,305.62
2. Compensatory Funds	1,086.65	2,326.14	-	631.29	3,156.43	919.21	1,639.14	1,639.14
3. Sub Total	\$3,304.03	\$4,363.73	-	\$2,785.32	\$13,926.57	\$3,136.59	\$4,944.76	\$4,944.76
F. Gain Rate of Effectiveness								
	100	40	160	40	00	67	68	68
G. Expenditures Per ADA for Each Unit of Effectiveness								
1. General Funds	\$ 7.54	\$ 18.85	\$ 4.71	\$ 18.85	-	\$ 11.25	\$ 11.09	\$ 11.09
2. Compensatory Funds	3.69	21.52	1.60	5.52	-	4.66	6.17	6.17
3. Total	\$ 11.23	\$ 40.37	\$ 6.31	\$ 24.37	-	\$ 15.91	\$ 17.26	\$ 17.26

1. According to the Effectiveness-Acceptability study conducted by the Division of Research and Development, the second grade reading program at English Avenue Primary School was effective. Because the pupils scored below the national norm (below grade level) the program was not labeled acceptable. The mathematics program for the second grade pupils at English Avenue Primary School was found neither effective nor acceptable.
2. The Effectiveness-Acceptability study of English Avenue Elementary School revealed the overall mathematics program to be effective. At grade levels two, four, six, and seven, the mathematics programs were very effective. While the overall reading program was not found effective, the reading programs at grades two and four were found effective. Neither the reading nor the mathematics programs were found acceptable because the mean performance of the pupils was below grade level at the time of the posttest.
3. Regarding the Direct Approach to Decoding (DAD) of the Follow Through Program, the following conclusions were reached.
 - a. The kindergarten pupils at English Avenue Primary School had an introductory knowledge of phonics skills at the end of the school year indicated by mean scores corresponding to the first chapter of the DAD Program.
 - b. The first grade pupils at English Avenue Primary School who had participated in Follow Through during kindergarten and the first grade and those who entered Follow Through in the first grade achieved the objective of an eight level gain in Letter Sounds and Oral Reading between the pretest and posttest of the Phonics Skills Test. The first grade pupils who had participated in Follow Through for the two years scored higher on the posttest, though not significantly higher at the .05 level, than the pupils who participated in Follow Through only during the first grade. Therefore, there was no significant difference in phonics skills ability of the first grade pupils based on Follow Through experience.

- c. The second grade pupils at English Avenue Primary School did not achieve the objective of a mean gain of fifteen levels between the pretest and posttest of the Phonics Skills Test. There was no significant difference (.05 level) in the phonics skills performance of the second grade pupils who had participated in Follow Through from the kindergarten through the second grade, the second grade pupils who participated in Follow Through during the first and second grades, and the second grade pupils who participated in Follow Through during the second grade only.
 - d. Only sixteen per cent of the third grade pupils at English Avenue Elementary School had participated in Follow Through from kindergarten through the third grade. The third grade pupils performed on the Phonics Skills Test (PST) at maximum mean levels in Letter Sounds. Those pupils in Follow Through for one year, three years, and four years achieved the objective of a mean gain of ten levels in Decoding; the pupils in Follow Through for one year, two years, and three years achieved the objective in Oral Reading. There was no significant difference (.05 level) in pupil performance on the PST posttest based on Follow Through experience.
4. Seventy-three per cent of the first grade pupils at English Avenue Primary who had attended Follow Through during kindergarten and first grade compared with sixteen per cent of pupils who had attended Follow Through during the first grade only achieved a score of C or above on the Metropolitan Readiness Tests (MRT). Comparing the MRT performance of the Follow Through first grade pupils at English Avenue Elementary School with non-Follow Through first grade pupils at English Avenue Primary School, forty-four per cent and fifty-one per cent respectively achieved the score of C or above on the MRT. Therefore, the Follow Through first grade pupils performed better on the MRT than the non-Follow Through pupils, and the Follow Through pupils in the program for two years performed better on the MRT than those in the program for only one year.

5. Forty-nine per cent of the non-Follow Through first grade pupils at English Avenue Elementary School compared with twenty-five per cent of the Follow Through first grade pupils at English Avenue Primary School scored at or above grade level on the MAT posttest; twenty-four per cent compared with twenty-seven per cent respectively scored at or above grade level in mathematics. The objective stating that the same percentage of first grade pupils who scored C or above on the MRT would score at or above grade level on the MAT was achieved in reading at English Avenue Elementary School.
6. There was no significant difference in the performance of the second grade pupils at English Avenue Primary School who had three years, two years, and one year of Follow Through experience and the non-Follow Through second grade pupils at English Avenue Elementary School; all performed at levels corresponding to the second grade on the posttest. However, a mean gain of one month for each month in school was achieved on the MAT by all Follow Through second grade pupils at English Avenue Primary School in Word Knowledge; by the six pupils who entered Follow Through in the second grade in Word Analysis, Reading, Total Mathematics, and Total Reading; and by the pupils who had participated in Follow Through from kindergarten through the second grade in Reading and Total Reading.
7. At English Avenue Elementary School all the third grade pupils, grouped for analysis of MAT scores on the basis of the number of years of Follow Through experience, achieved a mean gain of one month for each month in school in Spelling and Math Concepts. In addition, those third grade pupils in Follow Through for one year achieved the objective in Math Computation and Total Math; those in Follow Through for three years achieved the objective in Word Analysis and Math Concepts, and those in Follow Through for four years achieved the objective in Word Analysis. The mean posttest scores of the four third grade groups were compared; the only significant difference (.05 level) occurred in Word Analysis with the pupils in Follow Through for four years achieving the highest mean score and those who entered Follow Through in the third grade achieving the lowest mean score.

8. The parent involvement aspect of the Follow Through Program at English Avenue Primary School was successful with approximately 88 per cent of the parents participating during the year and volunteering approximately 574 hours. Data were available for English Avenue Elementary School.
9. All Follow Through eligible pupils were screened for vision and hearing deficiencies, checked for height and weight, and immunized. All Follow Through kindergarten and new pupils in grades one through three were given dental examinations, physical examinations, hematocrits and urinalysis. Tuberculin tests were given as directed by the Public Health Department. As the need arose, all Follow Through children were provided dental and health care.
10. Psychological service was provided to pupils when the need was recognized by the classroom teacher or the social workers.
11. The inventory measuring the self-concept of the Follow Through pupils, which was planned by the Research Assistant assigned to the Follow Through Program as a part of the external evaluation of the total Follow Through Program involving six schools, was not given to a sufficient number of pupils at English Avenue Elementary School and English Avenue Primary School to analyze the scores separately from the total Follow Through group.
12. A checklist to evaluate independent learners was not developed; problems arose in isolating the behavioral characteristics of an independent learner.
13. There were no extremes in the climates of the two English Avenue Schools as indicated by the Organizational Climate Index, a questionnaire which was anonymously answered by a random sample of the teachers of the two schools. Therefore, it can be concluded that the climates of the two schools were relatively open.
14. The pupil attendance at English Elementary School was equal to the citywide average for elementary schools. The average at English Avenue Primary Schools, including grades K-2, was slightly lower than the citywide average.

15. The pupil populations at both English Avenue Elementary School and English Avenue Primary School were highly mobile. One-fourth of the pupils at each school either moved in or out of the school during the school year.
16. There was no apparent correlation between the amount of money spent at each grade level and the achievement gains of the pupils as determined by the cost analyses of the reading programs at English Avenue Elementary School and English Avenue Primary School.

RECOMMENDATIONS

In viewing the total programs of English Avenue Elementary School and English Avenue Primary School, the following recommendations are made:

1. At English Avenue Primary School continue the effective reading program and place greater stress on mathematics computation at the second grade level.
2. Continue the effective mathematics program at English Avenue Elementary School.
3. In order to bring the reading achievement of all pupils up to the level of effectiveness, close attention should be placed at fourth grade level where a median gain of eight months during the six month period was made. The special reading program at this level which was initiated by the principal was very successful. Therefore, the recommendation is to expand this method of reading instruction to all grade levels.
4. Since the only third grade pupils at English Avenue Elementary School who had prior benefit of the Follow Through Program were those who had attended English Avenue Primary School, the result was that forty-seven per cent of the third grade pupils at English Avenue Elementary School were new to the program at the third grade level. It is recommended that the new pupils, who must learn the Follow Through process, be taught separately from those pupils who are accustomed to the processes involved in the Follow Through instructional program. Also, efforts should be made to increase the benefits derived from the Follow Through Program which is rather expensive.

5. Since a strong aspect of the Follow Through Program is the parent involvement component, the strengths and weaknesses of the component should be analyzed during FY 73.
6. The self-concept of the Follow Through and the Title I pupils should be assessed.
7. The faculty should give specific and consistent attention to gaining a positive and significant relationship between expenditures and achievement of pupils.

APPENDIX

MURRAY'S NEED-PRESS SCALES

1. Abasement-assurance: self-deprecation versus self-confidence
2. Achievement: striving for success through personal effort
3. Adaptability-defensiveness: acceptance of criticism versus resistance to suggestion
4. Affiliation-rejection: friendliness versus unfriendliness
5. Aggression-blame avoidance: hostility versus disorganization

6. Change-sameness: flexibility versus routine
7. Conjunctivity-disjunctivity: planfulness versus organization
8. Counteraction-inferiority avoidance: re striving after failure versus withdrawal
9. Deference-restiveness: respect for authority versus rebelliousness
10. Dominance-tolerance: ascendance versus forbearance

11. Ego Achievement: striving for power through social action
12. Emotionality-placidity: expressiveness versus restraint
13. Energy-passivity: effort versus inertia
14. Exhibitionism-inferiority avoidance: attention-seeking versus shyness
15. Fantasied achievement: daydreams of extraordinary public recognition

16. Harm avoidance--risk-taking: fearfulness versus thrill seeking
17. Humanities-social sciences: interests in the humanities and the social sciences
18. Impulsiveness-deliberation: impetuosity versus reflection
19. Narcissism: vanity
20. Nuturance-rejection: helping others versus indifference

21. Objectivity-projectivity: detachment versus superstition (AI) or suspicion (EI)
22. Order-disorder: compulsive organization of details versus carelessness
23. Play-work: pleasure-seeking versus purposefulness
24. Practicalness-impracticalness: interest in practical activities versus indifference
25. Reflectiveness: introspective contemplation

26. Science: interest in the natural sciences
27. Sensuality-puritanism: interest in sensory and aesthetic experiences
28. Sexuality-prudishness: heterosexual interests versus inhibitions of heterosexual interests
29. Supplication-autonomy: dependency versus self-reliance
30. Understanding: intellectuality

ORGANIZATIONAL CLIMATE INDEX FACTORS

A. Development Press

1. Intellectual climate -- This factor describes a concern with intellectual activity, social action, and personal effectiveness. It is based on the scales for humanities, social science, science, reflectiveness, understanding, fantasied achievement, exhibitionism, and change. A school that scores high on this factor is one in which there is a high degree of intellectuality, heterosexual interests, flexibility, and attention seeking.
2. Achievement standards -- This is the factor reflecting press for achievement. Schools high on this factor stress hard work, perseverance, and a total day-by-day commitment to institutional purposes. It is defined by counteraction, energy, achievement, emotionality, and ego achievement.
3. Practicalness -- This factor suggests an environmental dimension of practicality tempered with friendliness. It is defined by practicalness and nurturance. A school that scores high on this factor is one in which the teachers feel there is high interest in practical activity and a desire for helping others.
4. Supportiveness -- This factor deals with aspects of the organizational environment that respect the integrity of the teacher as a person, but the implication is that dependency needs must be supported rather than personal autonomy emphasized. It might be considered a measure of democratic paternalism. The scales defining it are assurance, tolerance, objectivity, affiliation, conjunctivity, supplication, blame avoidance, harm avoidance, and nurturance. A school that scores high on this factor is one in which the teachers feel a high degree of self-confidence, friendliness, and planfulness.
5. Orderliness -- The components of this factor are concerned with the press for organizational structure, procedure, orderliness, and a respect for authority. Conformity to community pressures and an effort to maintain a proper institutional image probably are also concomitants of a high score on this factor. It is based on order, narcissism, adaptability, conjunctivity, deference, and harm avoidance. A school that scores high on this factor is one in which the teachers feel there is a compulsive organization of details, acceptance of criticism, respect for authority, vanity, and planfulness.

B. Control Press

In addition to the reflection of factors (1) and (2) under Development Press, Control Press involves:

Impulse control -- This factor implies a high level of constraint and organizational restrictiveness. There is little opportunity for personal expression or for any form of impulsive behavior. It is based on work instead of play; prudishness versus sexuality; aggression versus blame avoidance; impulsiveness versus deliberation; emotionality versus placidity; and exhibitionism versus inferiority avoidance. A school that scores high on this factor is one in which the teachers feel there is a high degree of purposefulness, heterosexual interests, hostility, impetuosity, expressiveness, and restriving after failure.

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RESEARCH AND DEVELOPMENT REPORT

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1971-72

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I. INTRODUCTION

Grant Park Elementary School is located at 750 Kalb Avenue in the southeast section of Atlanta. Residents are primarily low-income rental home dwellers. Sixty-four per cent of the children come from families with incomes below \$3,000. There is very high mobility in the neighborhood. The mobility index for 1970-71 was .62, in 1971-72 it was .74. The school contains pupils from preschool through seventh grade. The school population for 1970-71 was 492; for 1971-72 it was 484. Grant Park Elementary School qualified, because of low-income levels, for funds and services from special projects to help the school meet the needs of the pupils and community. These included: the Comprehensive Instructional Program (CIP), Career Opportunities Program (COP), Model Cities Educational Component Programs, and Title I Programs. These resources were used in creating and sustaining activities designed to overcome educational and cultural deficiencies in the pupils.

II. NEEDS OF THE PUPILS

The identified needs of the participants was the foundation for the development of the school year plan. The goals, behavioral objectives, and critical variables are determined from and are to satisfy the identified needs. These needs were as follows:

- A. To acquire basic reading and communication skills.
- B. For the pupils to be exposed to various enrichment experiences.
- C. For the pupils to develop a more positive self-concept.
- D. For the pupils to acquire acceptable social behaviors.
- E. For the pupils to improve their school attendance habits.
- F. For parents to be more aware of and involved in school activities.
- G. For the pupils to have improved health care and proper diet.

III. GOALS

The primary goal of Grant Park Elementary School was to increase the pupils' reading capabilities. The secondary goals were as follows:

- A. To improve the pupils' self-concepts through successful academic experiences.
- B. To provide the pupils with various enrichment experiences through films, field trips, community events, and cultural activities.
- C. To improve parent involvement through strengthened home-school relationships.
- D. To improve the pupil's attendance habits through various activities offered by the school.
- E. To provide the pupils with as much individual instruction as possible through supplementary funded educational programs.

IV. BEHAVIORAL OBJECTIVES

The following objectives were formulated to evaluate the extent to which the school was meeting the needs of the pupils and the goals of the school program. The behavioral objectives to be met were as follows:

- A. Seventy per cent of the pupils in first grade would be reading at or above the 1.5 grade-level.
- B. Thirty-five per cent of the school population would increase their reading skills at a rate of one month of gain for each month of instruction (0.6).
- C. Per cent of attendance will increase by one per cent over last year's rate.

Specific goals and objectives are shown for each supportive project in Section VI.

V. CRITICAL VARIABLES

The critical variables which were observed and measured to reflect desired changes were as follows:

- A. Reading skills
 - 1. Vocabulary
 - 2. Word attack
 - 3. Comprehension.
- B. Attendance rate
- C. Individualized instruction

VI. SUPPORTIVE PROJECTS

The supportive projects as well as the existing educational programs were directed toward satisfying the identified needs. At Grant Park Elementary School the supportive projects were as follows: Comprehensive Instructional Program (CIP), Model Cities Educational Component Programs, Title I Program, and the Career Opportunities Program (COP).

A. Comprehensive Instructional Program (CIP)

The Comprehensive Instructional Program (CIP) focused on diagnostic teaching of reading in grades one through three and mathematics in grades four through six. The goal was to provide the pupils with the skills in reading and mathematics for educational growth. The objective was for each pupil to gain one month for each month of instruction.

B. Career Opportunities Program (COP)

The Career Opportunities Program (COP) is a training program for selective paraprofessionals. The goal was to up-grade paraprofessionals to certified teachers. The objective was: those pupils being taught by a COP team will show a greater gain than similar pupils not taught by a COP team. The goal was to be met through inservice training and availability of certain college courses to those in the program.

C. Model Cities Educational Component Programs

The Model Cities Educational Component Programs offered to schools in the Model Neighborhood Area (MNA), educational programs that would increase attendance and achievement of pupils, decrease dropouts, provide day care services, and lower adult illiteracy and unemployment. The community residents selected the programs which best suited the community needs. Grant Park Elementary School participated in the following activities:

1. Preschool Program -- The preschool program goal was to provide educationally directed day care services to children of working mothers and to prepare the children for kindergarten and first grade. The objectives of the program were to teach the child basic learning and motor skills, and to develop good group play, social, and attendance habits.
2. Expanded Youth Program -- The goal of the expanded youth program was to provide the pupils with an enrichment oriented day care service before and after school hours. The objectives were to improve the pupils' self-concept and to develop the pupils' positive attitudes toward school.
3. Breakfast Program -- The goal of the breakfast program was to provide a free, nutritional breakfast to as many pupils as desired it. The objective of the program was to help increase last year's attendance rate by one per cent.
4. Teacher-Pupil Services -- The goal of teacher-pupil services was to help increase the attendance by one per cent above the rate of last year. The objective was to improve home-school relationships. An attendance aide was used to improve the pupils attendance habits, attitudes toward school, teachers, and peers, and to involve parents in school activities. A social worker handled referral cases from the attendance aide.

D. Title I Program

The Title I Program was designed to provide additional educational training to those pupils found to be educationally deprived. The activities at Grant Park Elementary School were as follows:

1. Youth-Tutoring-Youth (YTY) -- The Youth-Tutoring-Youth Program (YTY) goal was to provide educationally deprived pupils with additional educational training. The objective was to use under-achieving high school pupils to tutor under-achieving pupils in grades five through seven.
2. Kindergarten -- The goal of the kindergarten project was to provide the kindergarten teachers with aides to allow for more individualized instruction. The objective was to have the children better prepared for entry into the first grade.
3. Lead Teacher -- The goal of the lead teacher project was to train the classroom teachers in diagnosing, prescribing, and preparing instruction which would benefit the pupils. The project objective was to improve the reading skills of the educationally deprived pupils.

VII. MANAGEMENT AND CONTROL

A. Administration

The faculty at Grant Park Elementary School was experienced and very stable. Most teachers had been in the school for a number of years. The teacher-pupil ratio was 1-26. The greatest problem was the high mobility among the pupils, which caused a problem in maintaining a continuous instructional program for most of the pupils.

B. Instructional

All classes were self-contained with primary stress put on individualization of instruction. Remedial and enrichment classes were maintained in the expanded youth program in conjunction with the teachers. The teachers gave information to the program director in order to best use the enrichment and remedial program to help each child attain his goals.

VIII. PROCESS

In addition to the supportive programs and personnel as previously covered, examples of activities that were used to achieve the goals and behavioral objectives included the following:

- A. School Community Council which provided extra mathematics materials and extra reading materials in the school.
- B. A close association between the community, principal, and faculty at Grant Park Elementary School.
- C. Stress on community involvement to over-come some of the problems that are inherent with a high mobility rate.
- D. Expanded Youth program has both a remedial and enrichment program.

IX. EVALUATION PLAN

The projects at Grant Park Elementary School were evaluated on the basis of goal achievement and behavioral objective achievement. The plan for evaluation was as follows:

Instruments

- A. Rate of gain for reading skills to be determined from differences in the pretest and posttest of the Metropolitan Achievement Tests (MAT) scores.
- B. Per cent of attendance improvement will be determined by school attendance records.
- C. Expanded youth program participants attitude changes will be measured by pretest and posttest attitude survey.
- D. Metropolitan Achievement Tests (MAT) scores for Youth-Tutoring-Youth (YTY) and Non-Youth-Yutoring-Youth pupils were to be compared to show the effects of the Youth-Tutoring-Youth Program.

- E. Breakfast program participation rate will be determined from the records of the daily meals served.
- F. Teacher-Pupil service program performance was determined from the monthly output measures for both the attendance aide and the social worker.
- G. Cost effectiveness was determined on a per pupil expenditure basis for each grade.

Methodology

Evaluation of the accomplishments for the 1971-72 school year will take four approaches: (1) evaluation of behavioral objectives, (2) evaluation of supportive programs, (3) a review of test performance in 1971-72, and (4) a longitudinal view of test data for 1970-71 and 1971-72 school years based on effectiveness and acceptability. Included will be comparisons of scores of reading against national norms, city-wide norms, and frequencies in gains and posttest scores.

X. FINDINGS

Evaluation of Behavioral Objectives

- A. Seventy per cent of the pupils in first grade will be reading at or above the 1.5 grade level.

Based on the Metropolitan Achievement Tests (MAT) posttest scores 30 per cent of the pupils were at the 1.5 level or above and 70 per cent were between 1.0 and 1.4. The mean level for the class was 1.4. The objective was not achieved. This is shown in Table 1.

TABLE 1

POSTTEST LEVEL IN READING - GRADE ONE
ON THE METROPOLITAN ACHIEVEMENT TESTS (MAT)

<u>Total</u> <u>Number</u>	<u>1.0 - 1.4</u>		<u>1.5 and Above</u>	
	<u>Number</u>	<u>Per Cent</u>	<u>Number</u>	<u>Per Cent</u>
50	35	70	15	30

- B. Thirty-five per cent of the school population will increase their reading skills at a rate of one month for each month of instruction (0.6).

Table 2 shows the gains by grades and percentages of pupils gaining at various levels. Overall, 47 per cent of the pupils scored a gain of 0.6 or more. Grade two had 52 per cent, grade three had 47 per cent, grade five had 40 per cent, and grade six had 54 per cent scoring at or above this level. The objective was reached.

- C. The per cent of attendance will increase by one per cent over last year's rate.

The attendance per cent for 1970-71 was 86.1 and was increased to 87.1 in 1971-72. This is an increase of one per cent, and the objective was achieved.

Evaluation of the Supportive Programs

- A. Comprehensive Instructional Program (CIP)

The Comprehensive Instructional Program (CIP) had an objective to have each pupil in grades two and three to gain one month in reading for each month of instruction. This would be a gain of 0.6 due to the six-month pretest/posttest period. There were 13 pupils in grade two who gained more than 0.6, with a mean gain for the grade of 0.7. There were 15 pupils in grade three who gained more than 0.6, with a mean gain for the grade of 0.6. This is shown in Table 2. The objective was not reached.

TABLE 2

READING GAINS ON THE METROPOLITAN ACHIEVEMENT TESTS BETWEEN PRETEST AND POSTTEST*

Grade	Total Number	Negative to 0		0.1 - 0.5		0.6 - 0.9		1.0 - 2.0		2.0 or Above		Mean Gain
		No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	
2	25	4	16	8	32	8	32	3	12	2	8	0.7
3	32	6	19	11	34	9	28	5	16	1	3	0.6
5	52	27	52	5	10	7	14	7	14	6	12	0.5
6	49	14	29	8	16	8	16	9	18	10	20	0.9
7**	46	-	-	-	-	-	-	-	-	-	-	-

*Six months between pretest and posttest.

**Testing difficulties negate this grade's scores.

B. Career Opportunities Program (COP)

The objective of the Career Opportunities Program (COP) was to have pupils taught by COP teams to show greater gains than other similar pupils. Because the COP aides were used in several grades, it was not possible to determine if the objective was reached in this program.

C. Model Cities Educational Component Programs

1. Breakfast Program -- The goal was to provide a free, nutritional breakfast to all children who desired it.

The program started in March and approximately 200 children per day took part in the free breakfast. The objective was to help reduce absenteeism and for the year attendance increased by one per cent over the previous year. It was felt that this program did help achieve this gain in attendance.

2. Preschool Program -- The preschool unit did not start until March, 1972, and had only 11 children enrolled. No testing was done and it is not possible to evaluate this program due to the short period of operation.
3. Expanded Youth Program -- This was part of the Community School Program at Grant Park Elementary School. One hundred and fifty children per day took part in the enrichment, remedial, and social activities. No attitude testing was done due to problems that arose in setting up the test procedures.
4. Teacher-Pupil Service Program -- This program was designed to help increase the attendance rate through the use of attendance aides. There was an increase of one per cent over the previous year in attendance. Some of this gain was attributable to this program.

D. Title I Program

The Title I Lead Teacher concentrated on improving the teaching skills of all teachers in the area of reading. Overall good gains were shown in the reading program

as indicated in Table 2. It was felt that the objective was achieved in improving reading skills in the total school program. The kindergarten program used aides to help the teachers better prepare the pupils for first grade. The Metropolitan Readiness Tests (MRT) was not given in the fall of 1972, so it was not possible to determine if the objective was reached in this program. The Youth-Tutoring-Youth program was impossible to evaluate because no records were maintained as to the results achieved by pupils taking part in the program.

Evaluation of Test Performance

With emphasis on the reading program at Grant Park Elementary School, the Metropolitan Achievement Tests (MAT) can be used to gauge progress in reading. All grades showed good gains as shown in Table 2. The mean level of grades two and three was close to the city-wide levels and grades five, six, and seven were above. This is shown in Table 3. However, the largest group of pupils in grades five, six, and seven were in the category of two years or more behind the national norms, which is not entirely satisfactory.

Evaluation of Longitudinal Data

This was an attempt to track pupil progress in the school. Table 4 shows grade level, gain, and rate of gain comparisons for 1970-71 and 1971-72. This is a comparison of pupils over a two-year period. It shows the level of performance and actual gain made. The rate of gain is a projected gain for the full year based on gains in the sixth month pretest-posttest period. Further analysis of reading scores was made on the basis of predicted achievement for each grade level. The regression equations employing factors of attendance, mobility, social economic status, pupil-teacher ratio, percentage of pupils passing, and pretest scores formulated predictions of posttest scores and resulting gains. A ratio of actual gain to predicted gain yielded a percentage described as a gain-rate-of effectiveness. Another ratio of the actual posttest score divided by the national norm for the respective grade level resulted in an index of acceptability. Table 5 shows the changes in the gain-rate-of effectiveness and the index of acceptability.

TABLE 3

ANALYSIS OF POSTTEST SCORES IN READING ON THE
METROPOLITAN ACHIEVEMENT TESTS

Grade	24 Months or More Behind*		11-23 Months Behind*		3-10 Months Behind*		Within 2 Months*		Posttest Level	City-Wide Level	National Level
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent			
2	-	-	9	36	9	36	7	28	2.3	2.4	2.7
3	2	6	17	53	5	16	8	25	2.9	3.0	3.7
4	20	30	25	37	13	19	9	13	3.5	-	4.7
5	23	44	16	31	3	6	10	19	4.5	3.9	5.7
6	23	47	10	20	6	12	10	20	5.3	4.4	6.7
7	26	57	7	15	6	13	7	15	5.82	4.8	7.7
Totals	94	35	84	31	42	15	51	19			

*National Norms.

TABLE 4

COMPARISON OF POSTTEST LEVEL, GAIN, AND RATE OF GAIN
1970-71 AND 1971-72

	Grades					
	<u>Second</u>	<u>Third</u>	<u>Fourth</u>	<u>Fifth</u>	<u>Sixth</u>	<u>Seventh</u>
<u>Grade Level</u>						
<u>Posttest</u>						
1970-71	2.4	2.6	3.5	4.3	5.2	5.0
1971-72	2.2	2.9	3.5	4.5	5.3	5.8
<u>Gain (Pretest- Posttest)</u>						
1970-71	0.9	0.4	0.8	0.7	1.1	0.4
1971-72	0.6	0.6	-	0.5	0.9	-0.4*
<u>Rate of Gain</u>						
1970-71	1.4	0.6	1.3	1.1	1.8	0.6
1971-72	1.0	0.9	-	0.7	1.4	-0.7*

*Invalid results because of testing difficulties.

XI. COST ANALYSIS

The data presented in Table 6 show the relative cost for a one-grade-unit of gain based on the rate of gain for 1971-72 and the amounts spent. In order to compute these costs, expenditures were taken from the General Funds Report, June, 1972, and the Trust and Agency Report, June, 1972. From these figures estimates were made of the per pupil cost from general funds and special projects (compensatory funds). These data also show the cost in compensatory funds for each unit of effectiveness, effectiveness as determined in the 1972 Effective? Acceptable? Study. The reader is cautioned that these data are not exact or refined. Broad estimates were made based on information obtained from the school staff relative to the utilization of resources.

TABLE 5
READING TEST DATA FOR 1971-72

Grade	Actual		Acceptable Posttest	Predicted Posttest	Gain		Gain Rate of Effectiveness		Index of Acceptability	
	Pretest	Posttest			Actual	Predicted	1971-72	1970-71	1971-72	1970-71
2	1.6	1.8	2.7	1.8	0.2	0.2	100	225	67	89
3	2.2	2.6	3.7	2.5	0.4	0.3	133	80	70	70
4	2.6	3.2	4.7	3.3	0.6	0.7	86	160	68	74
5	3.6	3.9	5.7	3.9	0.3	0.3	100	140	68	75
6	3.9	4.8	6.7	4.2	0.9	0.3	300	275	72	78
7	5.0	5.6	7.7	5.4	0.6	0.4	150	80	73	65
Average					145	160	70	75		

According to these data, grades six and seven had the highest gain and lowest amount of funds spent. In relationship to effectiveness, there are no indications that funds spent influenced the effectiveness of the reading program.

XII. CONCLUSIONS

Based on the findings concerning pupil progress the following conclusions were drawn:

- A. The objectives of the reading program in the school were achieved.
- B. The gain-rate-of-effectiveness was satisfactory but not the index of acceptability.
- C. In comparison to city-wide averages, the school performed very well.
- D. All supportive programs contributed to the total school program.
- E. The amount of funds spent did not relate significantly to the performance of the pupils.

XIII. RECOMMENDATIONS

Based on the findings in this report the following recommendations are made to strengthen the total program at Grant Park Elementary School.

- A. Concentration should be made in maintaining the gain-rate-of-effectiveness which will in turn increase the index of acceptability.
- B. Continued use of supportive programs should be made as has been done in the past.

TABLE 6

COST ANALYSIS OF READING GAINS BY GRADES TOTAL AVERAGE
DAILY ATTENDANCE (ADA) -- K - 7 = 420

	Grades					Total
	Second	Third	Fifth	Sixth	Seventh	
Average Daily Attendance (ADA)	38	46	62	64	64	
<u>Per Pupil Cost</u>						
<u>A. General Funds</u>						
1. Regular						
a. Salary	\$ 682	\$ 682	\$ 682	\$ 682	\$ 682	\$ 682
b. Non-Salary	80	80	80	80	80	80
c. Total	\$ 762	\$ 762	\$ 762	\$ 762	\$ 762	\$ 762
2. Comprehensive Instructional Program						
Non-Salary	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2
3. Total General Funds						
a. Salary	\$ 682	\$ 682	\$ 682	\$ 682	\$ 682	\$ 682
b. Non-Salary	82	82	82	82	82	82
c. Total	\$ 764	\$ 764	\$ 764	\$ 764	\$ 764	\$ 764
<u>B. Compensatory Funds</u>						
1. Model Cities						
a. Salary	\$ 22	\$ 22	\$ 22	\$ 22	\$ 22	\$ 22
b. Non-Salary	1	1	1	1	1	1
c. Total	\$ 23	\$ 23	\$ 23	\$ 23	\$ 23	\$ 23
2. Emergency School Assistance Program (ESAP)						
Salary	\$ 1	\$ 1	\$ 1	\$ 1	\$ 1	\$ 1
3. Title I						
a. Salary	\$ 86	\$ 86	\$ 42	\$ 42	\$ 42	\$ 55
b. Non-Salary	2	2	2	2	2	2
c. Total	\$ 88	\$ 88	\$ 44	\$ 44	\$ 44	\$ 57

TABLE 6 (Cont'd)

	Grades						Total
	Second	Third	Fifth	Sixth	Seventh		
4. Educational Improvement Program (EIP) Salary	\$ 43	\$ 43	\$ 43	\$ 43	\$ 43	\$ 43	\$ 43
5. Career Opportunities Program (COP) Salary	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2
6. Total Compensatory Funds	\$154	\$ 154	\$ 110	\$110	\$110	\$110	\$123
a. Salary	3	3	3	3	3	3	3
b. Non-Salary	\$157	\$ 157	\$ 113	\$113	\$113	\$113	\$126
c. Total							
C. Total Per Pupil Cost	\$764	\$ 764	\$ 764	\$764	\$764	\$764	\$764
1. General Funds	157	157	113	113	113	113	126
2. Compensatory Funds	\$921	\$ 921	\$ 877	\$877	\$877	\$877	\$890
3. Total							
D. Rate of Reading (Per Cent)	102	89	73	140	-70		67
E. Projected Cost For One-Grade-Unit of Gain	\$749	\$ 858	\$1,047	\$546	\$ -	\$ -	\$799
1. General Funds	154	176	155	81	-	-	137
2. Compensatory Funds	\$903	\$1,034	\$1,202	\$627	\$ -	\$ -	\$936
3. Total							
F. Gain Rate of Effectiveness	100	133	100	300	150		145
G. Funds For Each Unit of Effectiveness	\$1.57	\$1.18	\$1.13	\$0.38	\$0.75		\$0.94

- C. Better use should be made of some of the aides to supplement the instructional services in the school.
- D. Attention should be given (1) to gaining a positive and significant correlation between pupil achievement and expenditures, (2) to regrouping or eliminating some of the activities in order to concentrate efforts more than is currently possible with the extensive number of activities, and (3) to developing an instructional management approach to improving pupil achievement on a longitudinal basis.

The principal and faculty at Grant Park Elementary School are to be commended for an overall excellent job in goal and behavioral objective achievement for the year 1971-72.

RESEARCH AND DEVELOPMENT REPORT

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1971-72

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I. INTRODUCTION

This report is the official evaluation of the attainment of the educational goals for E. R. Carter for 1971-72 school year. In addition to an analysis of the accomplishment of the goals of federally funded programs, there will be an evaluation of specific goals decided upon by the members of the faculty. The federally funded programs at Carter included: the Title I Elementary and Secondary Education Act (ESEA), Pre-Kindergarten and Reading Programs; and the Title IV-A Social Security Act hereafter referred to as Title IV-A, Child Development Program and Extended Day Program.

II. RATIONALE

E. R. Carter is located in a low-income community in close proximity to the business district of downtown Atlanta. The survey conducted in the spring of 1971 for purposes of identifying schools as Title I, ESEA disclosed that 66.2 per cent of Carter's pupils are derived from families with incomes less than \$2,000. Because of this high deprivation level, the students have the attendant learning problems, especially in reading and the low self-concept characteristic of this lower socio-economic group. The programs at Carter, both federally and locally financed, were designed primarily to improve the educational level of these pupils.

Carter's pupil population increased slightly during the 1971-72 school year. The May 1972 enrollment was 603 which was an increase of eleven over the May 1971 enrollment. The following structural arrangement served these pupils: Child Development Center (ages 2 - 4), Pre-Kindergarten (age 4), Kindergarten (two sections), First Grade (four sections), Second Grade (four sections), Third Grade (three sections), Third and Fourth Grade combination (one section), Fourth Grade (three sections), Fifth Grade (three sections), Sixth Grade (one section), Seventh Grade (one section), Educable Mentally Retarded class (one section). The pupils enrolled in the Child Development Center and in the Pre-Kindergarten classes are not included in the regular school enrollment of 603. Also the reason for such a small enrollment in grades six and seven results from transferring the majority of the pupils in those grades to Kennedy Middle School after completion of the fifth grade.

The attendance record of the pupils at Carter in 1971-72 was commendable. Records as of May of 1972 indicated the following: Second Grade 92 per cent, Third Grade 93 per cent, Fourth Grade 94 per cent, Fifth Grade 94 per cent, Sixth Grade 92 per cent, and Seventh Grade 94 per cent. At each grade level, the pupils at Carter surpassed the 1971-72 city-wide average of 91.3 for elementary schools.

Carter's racial constituency is entirely Negro. The faculty itself is well integrated but the same is not true of the pupil population.

III. NEEDS OF THE PARTICIPANTS AND GOALS TO MEET THESE NEEDS

In the fall of 1971, two research assistants for the division of Research and Development went to the center and met the entire faculty to discuss establishing a prospectus for the 1971-72 school year. At this time the decision was made to concentrate on math and reading gains for seven different groups of students. These objectives plus those for the federally funded Title I, ESEA and Title IV-A Child Development Programs were established a month or so after this initial meeting.

These needs are as follows:

- A. The need for improving in math and reading skills by seven groups of fourth, fifth and sixth grade pupils.
- B. The need for improving in reading skills by those pupils identified as the lowest achievers at Carter hereafter labeled Title I pupils.
- C. The need to provide model day care services for preschool children age two and one-half through five who are from low income families.

The goal of the Carter faculty was to meet the needs specified above. At one time or another, all the faculty members had some influence in meeting the above mentioned needs.

IV. BEHAVIORAL OBJECTIVES

Need I. The need for improving math and reading skills for seven groups of fourth, fifth and sixth grade pupils resulted in seven behavioral objectives which are as follows:

- A. Eighty per cent of the pupils will perform at capacity level in reading. Capacity will be determined by a formula which is as follows: chronological age times intelligence quotient (IQ) divided by 100 is equal to mental age, then mental age minus five is equal to capacity.
- B. The average gain of four third grade elementary pupils via tutoring will be a two month increase in reading for each month of instruction.
- C. The expected gain in math for an extremely low-ability group of fourth graders will be six months gain as measured by the spring 1971 Metropolitan Achievement Tests (MAT) score to the spring 1972 MAT scores.
- D. The expected gain in math for two classes of fourth grade pupils will be four months gain as measured by the spring 1971 MAT scores to the spring 1972 MAT scores.
- E. The expected gain in math for one group of fifth and sixth grade pupils will be a four months gain for six months instruction.
- F. The expected gain in math for one group of fifth and sixth grade pupils will be a three months gain for six months instruction.
- G. The expected gain in math for the seventh grade pupils will be four months gain for six months instruction.

Need II. Through the special assistance of the Title I lead teacher, the Title I aides, and the Title I materials, those Title I pupils will improve in reading. This improvement in reading will be reflected in an average gain of one month for each month of instruction in reading of the pupils in grades two through seven.

Need III. Through the special assistance of Title IV-A funds those pupils in the model day care center will perform at age level or above on the Southern Regional Education Board (SREB) instrument measuring preschool knowledge and skills.

V. SUPPORTING PROJECTS

As mentioned previously Carter had Title I, ESEA funds and Title IV-A Social Security Act funds in addition to regular Atlanta Board of Education funds. These were used to provide personnel and material necessary to meet the needs of the pupils at Carter.

One specific Atlanta Board of Education program appeared to be important at Carter, namely, the Comprehensive Improvement Program (CIP). Four of the teachers at Carter have completed the math and reading modules available at the area office and the teachers did utilize the diagnostic tests administered under the auspices of CIP.

VI. MANAGEMENT AND CONTROL

The basic organization at Carter for 1971-72 was a self-contained classroom approach for grades one through four with departmentalization at grades five through seven. There was no assistant principal but each of the federally funded programs had a lead teacher stationed in the main office who served in both an instructional and administrative capacity.

Approximately twice a month the faculty met for professional faculty meetings; the topic of the meeting depended upon a need expressed by the faculty. In addition to the regular faculty meetings, each teacher stayed for an hour on Wednesdays for parental conferences and to work individually with pupils. Wednesdays were also used for grade level meetings.

In general, Carter seemed to operate smoothly with almost all units fully informed of their purpose.

VII. PROCESS

The activities to accomplish the first need expressed in Section III were quite varied. For the seven groups the six teachers responsible for instruction provided the instruction in either math or reading. Each teacher met with the pupils under study each day. Special instruction was given in the designated subject area.

The activities to accomplish the second need expressed in Section III were fairly uniform across the grades at Carter. The Title I lead teacher and the Title I aides helped the regular classroom teachers identify those pupils with reading problems and design remedial instruction and in some cases actually assisted in the instruction of the pupils. In some cases the special instruction took place within the regular classroom and at other times it took place in a separate room.

The activities to accomplish the third need expressed in Section III were also fairly uniform. The Child Development Center functioned as a self-contained unit at Carter under the direction of the lead teacher. Working with the lead teacher was a social worker, four group leaders and seven aides. Their activities consisted of a variety of readiness activities for the pupils in the center.

VIII. EVALUATION

The evaluation of the seven objectives expressed under the first need in Section IV yielded the following results:

- A. The resource room teacher determined capacity level by the formula mentioned previously. The objective was not obtained because less than 80 per cent of those pupils with whom she worked were performing at capacity level. The informal reading inventory was the instrument used to determine the reading level of each of the pupils. The percentage for the sixth grade pupils was 37.5, for the fifth grade pupils 47.6, for the fourth grade pupils the percentage was 33.3.

- B. The objective concerned with the average gain of four third grade pupils was not attained because the average gain of the fourth grade pupils was less than the two months increase for each month of instruction that was predicted. This was determined by comparing the fall 1971 MAT scores to the spring 1972 MAT scores of the particular pupils.
- C. The objective concerned with the extremely low-ability group of fourth graders was attained because the average gain in math of the identified pupils was six months for the interval between the spring 1971 MAT and the spring 1972 MAT.
- D. The objective concerned with the two classes of fourth grade pupils was attained because the average gain was .99 months in arithmetic comprehension and .68 months in arithmetic problem solving concepts for the interval between the spring 1971 MAT and the spring 1972 MAT.
- E. The objective concerned with one group of fifth and sixth grade pupils (to gain four months) was attained because the average gain for the group was a .35 months gain in arithmetic comprehension and a .39 months gain in arithmetic problem solving skills for the interval between the fall 1971 MAT and the spring 1971 MAT.
- F. The objective concerned with one group of fifth and sixth grade pupils (to gain three months) was attained because the average gain for the group was three months for the interval between the fall 1971 MAT and the spring 1971 MAT.
- G. The objective concerned with the seventh grade pupils (to gain four months) was attained because the average gain for the seventh grade pupils was .38 months in arithmetic comprehension and .45 months gain in arithmetic problem solving skills for the interval between the fall 1971 MAT and the spring 1971 MAT.

The evaluation of the Title I reading objective of one month's gain for each month of instruction was measured by the gain in reading during the six months between the administration of pre and post MAT instruments to grades two, three, five, and seven. The reading subtest gain was the one which indicated whether or not the objective was attained. The following were the gains in reading for each of the above mentioned grades for the group of pupils who took both the pre and post MAT: Second Grade - .36; Third Grade - 1.21; Fifth - .19; Sixth Grade - .34; Seventh Grade - .11. As can be easily determined by these gains no grade level other than the third grade attained the goal of one month for each month of instruction, here the gain was almost two months for each month of instruction. To afford the reader more information about the gains on MAT at each of the above levels, Table 1 is included.

TABLE 1

CARTER ELEMENTARY SCHOOL, 1971-72
 RATE OF GAIN IN READING AS MEASURED
 BY THE METROPOLITAN ACHIEVEMENT TESTS (MAT)
 FOR THOSE PUPILS WHO TOOK BOTH THE PRE AND POST MAT*

	Subtests			Reading Total
	Word Knowledge	Word Analysis	Reading	
Second Grade N = 75	1.07	.82	.59	.66
Third Grade N = 65	.72	.66	1.96	1.31
Fifth Grade	.16	N.A.**	.31	N.A.**
Sixth Grade	-.58	N.A.**	.54	N.A.**
Seventh Grade	.52	N.A.**	.18	N.A.**

*The first grade is not included because its pupils do not take the MAT pretest.
 The fourth grade pupils did not take the MAT in the fall because of their participation in a state-wide testing program.

**Subtest score not available.

Table 1 translates the gain scores into a rate of gain based upon 100 per cent using as the base line one month for each month of instruction. As can be determined by examining Table 1, there were areas in the reading field in which those pre/post pupils did make gains of one month for each month of instruction. Attention is directed to word knowledge for the second grade and the reading total for the third grade. In regard to the failure to attain this objective which was a very important one at Carter, the following explanations are offered: (1) The Title I pupils' scores were not separated from the other pupils, (2) Title I pupils may or may not be included in the pre/post group which has been analyzed.

The evaluation of the Title IV-A Child Development Center objective was limited to eleven three-year-old children who were assessed in May of 1972. Additional children in the center were given an unacceptable, for analysis purposes, form of the SREB; it was the form above or below the age level of these pupils. The instrument used was the SREB rating form for three-year-olds and consisted of questions in the following areas: cognitive, social and emotional, motor skills, and hygiene and self-help (a copy of the instrument with its 26 items is in the appendix.) Each of the eleven children were assessed on the proper age form of the SREB and each of the eleven children had been in the program for a minimum of six months. Table 2 reports the responses for the eleven children on each of the 26 items.

TABLE 2

CARTER CHILD DEVELOPMENT CENTER
 RESPONSE ON THE SOUTHERN REGIONAL
EDUCATION BOARD (SREB), FORM C

JUNE, 1972

Pupil	ITEMS																										
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	
A	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
B	+	+	+	+	-	+	+	+	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+
C	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
D	+	+	+	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
E	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
F	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
G	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
H	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
I	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
J	-	-	-	-	-	+	+	+	+	+	+	+	-	+	-	-	+	+	+	+	+	+	+	+	+	+	+
K	+	-	-	+	+	+	+	+	+	+	+	+	+	+	-	-	+	+	+	+	+	+	+	+	+	+	-

+ = Positive response.

- = Negative response.

As can be determined by looking at the data in the table, only five of the eleven children attained age level on the instrument. The remaining six missed between two and ten items each. Analyzing the responses on each of the items indicated weaknesses and strengths. Table 3 contains an item analysis with the number of children responding correctly and the percentage of children who responded correctly. In the areas of social and emotional activities and hygiene and self-help, the children are almost at age level, but the opposite is true in the cognitive and motor skills areas. The latter areas are apparently those in which these children need some special instruction. Based on the information obtained from the eleven children of age three, the child development objective was not attained.

TABLE 3

CARTER CHILD DEVELOPMENT CENTER
 ITEM ANALYSIS OF RESPONSES OF ELEVEN
 CHILDREN ON THE SOUTHERN REGIONAL
EDUCATION BOARD (SREB)

Items No.	Cognitive Items								Social and Emotional			
	1	2	3	4	5	6	7	8	9	10	11	12
Number of Correct Responses	10	9	9	10	8	11	11	11	11	11	11	11
Percentage Correct	91	82	82	91	73	100	100	100	100	100	100	100

Items No.	Motor Skills						Hygiene and Self-Help						
	13	14	15	16	17	18	19	20	21	22	23	25	26
Number of Correct Responses	10	9	7	10	10	10	10	11	11	11	11	11	10
Percentage Correct	91	82	64	91	91	91	91	100	100	100	100	100	91

IX. COST EFFECTIVENESS

The data presented in Table 4 shows the relative cost for a one-grade-unit of gain based upon the rate of gain in reading for FY72. In order to compute these costs expenditures were taken from the General Funds Report in June of 1972 and the Trust and Agency report of June 1972. From these figures estimates were made of the per pupil cost from general funds and special projects (compensatory funds). These data also show the cost in compensatory funds for each unit of effectiveness - effectiveness as determined in effectiveness/acceptability study of 1972. The reader is cautioned that these data are not exact or finite, rather broad estimates were made based upon information obtained from the school staff relative to the utilization of resources. Also, the analysis was not completed for the kindergarten, first, and fourth grades because of the lack of test data at each of these levels. According to these data, the cost for a one-grade-unit of gain was not related to the amount of funds spent. There was much similarity and little variability between the expenditures at each of the grade levels. This can be determined by looking at Table 4.

TABLE 4

CARTER ELEMENTARY SCHOOL COST ANALYSIS
OF READING GAINS BY GRADES TOTAL SCHOOL
AVERAGE DAILY ATTENDANCE (ADA)
GRADES K - 7
N = 530

ADA Per Pupil Cost	Grades					
	Second 96	Third 86	Fifth 73	Sixth 27	Seventh 23	Average 61
A. General Funds						
1. Regular						
a. Salary	\$ 591.95	\$591.95	\$ 591.95	\$ 591.95	\$ 591.95	\$ 591.95
b. Non-Salary	75.95	75.95	75.95	75.95	75.95	75.95
c. Total	\$ 667.90	\$667.90	\$ 667.90	\$ 667.90	\$ 667.90	\$ 667.90
2. CIP						
a. Salary	\$.08	\$.08	\$.08	\$.08	\$.08	\$.08
b. Non-Salary	1.27	1.27	1.27	1.27	1.27	1.27
c. Total	\$ 1.35	\$ 1.35	\$ 1.35	\$ 1.35	\$ 1.35	\$ 1.35
3. Total General Funds						
a. Salary	\$ 592.03	\$592.03	\$ 592.03	\$ 592.03	\$ 592.03	\$ 592.03
b. Non-Salary	77.22	77.22	77.22	77.22	77.22	77.22
c. TOTAL GENERAL FUNDS	\$ 669.25	\$669.25	\$ 669.26	\$ 669.25	\$ 669.25	\$ 669.25
B. Compensatory Funds						
1. ESAP						
a. Salary	\$.08	\$.08	\$.08	\$.08	\$.08	\$.08
b. Non-Salary	1.57	1.57	1.57	1.57	1.57	1.57
c. Total	\$ 1.65	\$ 1.65	\$ 1.65	\$ 1.65	\$ 1.65	\$ 1.65
2. Title I						
a. Salary						
(1) Aides	\$ 22.58	\$ 22.58	\$ 0	\$ 0	\$ 0	\$ 22.58
(2) Other	28.23	28.23	28.23	28.23	28.23	28.23
(3) Total	\$ 50.81	\$ 50.81	\$ 28.23	\$ 28.23	\$ 28.23	\$ 50.81
b. Non-Salary	5.99	5.99	5.99	5.99	5.99	5.99
c. Total	\$ 56.80	\$ 56.80	\$ 34.22	\$ 34.22	\$ 34.22	\$ 34.22
3. COP	\$ 1.13	\$ 1.13				\$ 1.13
4. Title IV-A						
a. Salary	\$ 86.62	\$ 86.62	\$ 86.62	\$ 86.62	\$ 86.62	\$ 86.62
b. Non-Salary	46.50	46.50	46.50	46.50	46.50	46.50
c. Total	\$ 133.12	\$133.12	\$ 133.12	\$ 133.12	\$ 133.12	\$ 133.12
5. Total Compensatory Funds						
a. Salary	\$ 138.64	\$138.64	\$ 114.93	\$ 114.93	\$ 114.93	\$ 129.08
b. Non-Salary	54.06	54.06	54.06	54.06	54.06	54.06
c. TOTAL COMPENSATORY FUNDS	\$ 192.70	\$192.70	\$ 168.99	\$ 168.99	\$ 168.99	\$ 183.14
C. Total Per Pupil Cost						
1. General Funds	\$ 669.25	\$669.25	\$ 669.25	\$ 669.25	\$ 669.25	\$ 669.25
2. Compensatory Funds	192.70	192.70	168.99	168.99	168.99	183.14
3. TOTAL PER PUPIL COST	\$ 861.95	\$861.95	\$ 838.24	\$ 838.24	\$ 838.24	\$ 852.39
D. Rate of Reading Gain (Per Cent)						
	0.59	1.96	0.31	0.54	0.18	0.72
E. Projected Cost for One-Unit Gain						
1. General Funds	\$1,134.32	\$341.45	\$2,158.87	\$1,239.35	\$3,718.06	\$ 929.51
2. Compensatory Funds	326.61	98.32	545.13	312.94	938.83	234.71
3. Total	\$1,460.93	\$439.77	\$2,704.00	\$1,552.29	\$4,656.89	\$1,164.22
F. Gain Rate of Effectiveness						
	100	200	0	200	0	112
G. Expenditure per (ADA) of Compensatory Funds for Each Unit of Effectiveness						
	\$ 1.93	\$ 0.96	\$ -	\$ 0.84	\$ -	\$ 1.64

X. CONCLUSIONS

As can be determined by the evaluation section, most of the objectives for the school year 1971-72 were not attained. This failure can be attributed to many factors, some of which are:

- A. Failure to identify the Title I pupils who receive the intensive instruction from the aides and the lead teacher.
- B. Failure to obtain useable test data for all the pupils in the Child Development Center.
- C. The need for more relevant instructional materials in both math and reading.
- D. The need for more teacher inservice in reading and math.
- E. Failure to identify attainable objectives.

These evaluative findings were returned to the school personnel prior to the commencement of the 1972-73 school year and were utilized in stating the objectives for this year.

APPENDIX

Southern Regional Education Boards
RATING FORM FOR THREE YEAR OLDS
 (From Age 3 to Age 4 - Rate at 6-Month Intervals - Use Pen)

Name of Child _____ Date of Birth _____

Date of Enrollment in Day Care _____ Date of Rating _____
Mo. Day Yr.

Rater's Name _____ Position _____

<u>Cognitive</u>		YES	NO
1. Compares size	Extends "matching" concept to size, as big or little. Comparisons may be easy, but should be verbalized and of practical use, as in block building.	—	—
2. Counts 3	Extends concept of counting to three. Understands process of counting beyond two. May rote count beyond this.	—	—
3. Dramatizes	Acts out, singly, or with others, simple stories, Mother Goose rhymes and characters and scenes. Acts out role playing.	—	—
4. Uses Plurals		—	—
5. Converses	In short sentences, answers questions, gives information, repeats, uses language to convey simple ideas.	—	—
6. Sings	Sings short snatches of songs.	—	—
7. Knows name	Gives first and last name.	—	—
8. Names pictures and tells action	Names pictures, and on request tells the action, e.g., "Baby is sleeping," or can identify the usage of things in pictures, "Show me the one you wear."	—	—

Social and Emotional

9. Plays beside	Plays singly with sustained interest alongside or among other children or with adults, pets, or belongings with little disturbance or disturbing.	—	—
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(SREB-SDC-16C)

Social and Emotional (Continued)

		Yes	No
10. Plays with	Interacts with another child or children. Interpersonal play with other children, pets or adults.	—	—
11. Helps	Helps at little household tasks or errands.	—	—
12. Knows and re- lates to own sex	Can respond correctly to "Are you a little boy or a little girl?" Relates and acts accordingly.	—	—

Motor Skills

13. Assembles	Takes simple objects available, puts simple parts together not requiring much mechanical skill.	—	—
14. Builds	Uses simple building blocks, color blocks, construction toys. Shows imagination.	—	—
15. Copies circle	Draws a circle, usually from copy.	—	—
16. Builds tower	Stacks blocks eight high in imitation of one you do.	—	—
17. Jumps in place		—	—
18. Walks down stairs	One step per tread.	—	—
19. Balances	On one foot for one second.	—	—
20. Throws ball pur- posely overhand	Distance, direction and accuracy not essential, but should be more than grossly random.	—	—

(SREB-SDC-16C)

Hygiene and Self-Help

21. Is toilet trained	Exercises bladder and bowel control.	—	—
22. Uses toilet alone	Cares for self at toilet (goes to toilet alone without help, knows papering.) Pulls up and pulls down own clothes but may require help.	—	—
23. Dresses	Puts on coat or dress with help on hard parts, but need not button.	—	—
24. Puts on shoes	Puts on shoes, not tied.	—	—
25. Feeds alone	Feeds self well alone.	—	—
26. Washes hands	Washes hands unaided acceptably and dries same.	—	—

(SREB-SDC-16C)

PROGRESS NOTES

Date _____ Staff Member _____
(Name) (Position)

Child's Name _____

Separation Problems: _____

Development Areas Needing Attention: _____

Suggested Activities: _____

COMMENTS:

(SREB-SDC-16C)

R E S E A R C H A N D D E V E L O P M E N T R E P O R T

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1971-72

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I. INTRODUCTION

C. L. Gideons Elementary School is located in the Pittsburg community area of the Model Cities area. The official school boundaries are Glenn Street to the north, Southern Railway to the east, Pearce Street, Stewart Avenue, Arthur Street to the south and the Central of Georgia Railway to the west. Many of the homes in the area have been torn down as a result of urban renewal. Some of the residents have been temporarily placed in trailer homes provided by Model Cities. This has caused a reduction in the school population. In 1970-71 there were 476 pupils, in 1971-72 there were 418 pupils. The school serves grades preschool through seventh. The racial composition is roughly 8 blacks to one white. The mobility index in 1970-71 was 0.36, and in 1971-72 it was 0.29. Gideons School qualified, because of income levels, for funds and services from special projects to help the school meet the needs of the pupils and community. These included the Comprehensive Instructional Program (CIP), Career Opportunities Program (COP), and the Model Cities Educational Component Programs. These resources were used in creating and sustaining activities designed to help in educationally deprived areas.

II. NEEDS

The identified needs of the participants was the foundation for the development of the school year plan. The goals, behavioral objectives, and critical variables were determined from and were to satisfy the identified needs. These needs were as follows:

- A. To improve the self-concept of the pupils.
- B. To provide day care facilities for the children of working mothers.
- C. For pupils to be exposed to cultural and enrichment experiences.
- D. To improve the basic reading skills of pupils.
- E. To improve the pupil's school attendance habits.

- F. To have improved health care and proper diet for pupils.
- G. For parents to be more aware of and involved in school activities.

III. GOALS

The primary goals of Gideons School were to produce pupils who were flexible and adaptive, who have learned how to learn, who were able to cope with the perplexities of life, and who were able to make decisions. The secondary goals were as follows:

- A. To develop and improve pupils' self-concept through successful learning experiences.
- B. To provide the pupils with various enrichment experiences through films, field trips, community events, and cultural activities.
- C. To provide day care services to those children whose parents work by extending the school hours and offering planned supervised activities.
- D. To improve home-school relationships and increase parental involvement through activities and events offered to both parents and pupils.
- E. To provide the pupils with a balanced nutritional breakfast.

IV. BEHAVIORAL OBJECTIVES

The following objectives were formulated to evaluate the extent to which the school was meeting the needs of the pupils and the goals of the school program. The behavioral objectives to be met were as follows:

- A. The preschool children would show a total mean gain of at least 20 points on the Basecheck test.
- B. The per cent of attendance would increase by at least one per cent over the rate of last year.

- C. Forty per cent of the school enrollment would participate in the enrichment, tutorial, and recreational activities of the community school program.
- D. The school population would show a significant (.01 level) gain in reading skills.
- E. Fifty per cent of the pupils in grades two and three would complete the Comprehensive Instructional Program (CIP) diagnostic tests with 70 per cent accuracy.

V. CRITICAL VARIABLES

The critical variables which were observed and measured to reflect the desired changes were as follows:

- A. Attitude Toward School
- B. Attendance Rate
- C. Academic Achievement
- D. Self-Concept
- E. Adult Educational Levels

VI. SUPPORTIVE PROGRAMS

The supporting projects as well as the existing educational programs were directed toward satisfying the identified needs. At Gideons School the supportive projects were funded by the Comprehensive Instructional Program (CIP), the Career Opportunities Program (COP), and the Model Cities Educational Component Programs.

A. Comprehensive Instructional Program (CIP)

The Comprehensive Instructional Program (CIP) focused on diagnostic teaching of reading in grades two and three, and of mathematics in grades four through six. The

goal was to provide the pupils with the skills in reading and mathematics for educational growth. The objective was for each pupil to gain one month for each month of instruction.

B. Career Opportunities Program (COP)

The Career Opportunities Program (COP) was a training program for selected paraprofessionals. The goal was to up-grade paraprofessionals to certified teachers. The objective was: those pupils being taught by a COP team will show a greater gain than similar pupils not taught by a COP team.

C. Model Cities Educational Component Programs

The Model Cities Program offered, to schools in the Model Neighborhood Areas (MNA), educational programs that would increase attendance and achievement of pupils, decrease dropouts, provide day care services, and lower adult illiteracy and unemployment. The community residence selected those programs which best suited the community needs. Gideons School participated in the following activities:

1. Preschool Program

The Preschool Program goals were to provide an educationally directed day care service to children of working mothers and to prepare the children for kindergarten and first grade. The objectives were to teach the child basic learning and motor skills, to develop good group play, social, and attendance habits.

2. Expanded Youth Program

The goal of the Expanded Youth Program was to provide the pupils with an enrichment orientated day care service after school hours. The objectives were to improve the pupils' self-concepts and develop positive attitudes toward school.

3. Community School Program

The goals of the Community School Program were to improve employability of adults, to improve educational level of adults, and develop better home-school relationships.

The objectives were to provide adult vocational training, to provide adult basic education, and General Educational Development (GED) preparation courses, to involve parents in social and recreational activities, and to develop the school setting as a focal point for community activities.

4. Breakfast Program

The goal of the Breakfast Program was to provide a free nutritional breakfast to as many pupils as desired it. The objective was to help increase the attendance rate of last year.

5. Teacher-Pupil Services Program

The goal of Teacher-Pupil Services was to help increase the attendance rate over the previous year. The objective was to improve home-school relationships. An attendance aide was used to improve attendance habits, attitudes toward school, teachers, and peers, and involve parents in school activities. A social worker handled the referral cases from the attendance aide.

VII. MANAGEMENT AND CONTROL

Administration

The teacher-pupil ratio at Gideons School in 1971-72 was one to twenty-six. The staff at Gideons School emphasised the fact that there are many alternatives in life. They conveyed to pupils the fact that there are many avenues he or she may venture into and the idea that everyone can serve a purpose is stressed. Concentration was placed on a program to produce pupils who are flexible and adaptive, open to change, and who have learned how to learn.

Instructional Organization

The prekindergarten class was self-contained. Clusters are used in grades one, two, and three. Team teaching was used in grades four, five, six, and seven with individualized

instruction in a non-graded atmosphere as the primary emphasis. The principal and faculty emphasized the relationship of all special programs with the general program to achieve the objectives that had been set.

Philosophy

In order for the school to fulfill its purpose, it must provide those interesting and challenging experiences that enable the pupils enrolled therein to reach their maximum potentials through the development of intellectual curiosity; the ability to think critically, the opportunity to grow at rates commensurate with their capacities without experiencing failure or being stigmatized; to develop a love for learning; to develop the basic skills; to develop self-control and self-direction; and to grow into responsible, self-supporting, contributing citizens.

All pupils are different in most aspects. Those that are the same height, may differ in weight, those that are talented in Art, may have little interest in Music, etc. These differences are unrelated to age or sex. Similarly experimental background, capacity, and interest are widely varied. Though different, each individual has the potential to make a contribution and each has a rate of growth uniquely his own. Artificial barriers of a given time for acquiring a skill and an age at which a given skill should be learned, negate the individual differences mentioned above. Through individualization of instruction we can increase the economy and efficiency of group instruction, based on the process of diagnosis and prescription. Individualization does not imply that a teacher should assume the impossible role of tutor for each of her pupils, but rather that by manipulating content, expectation, and psycho-motor potential, she can provide a ceiling as high as is necessary and a floor as low as is needed to adequately care for the individual differences within a given group.

Intelligence test, quite frequently, fail to assess the true learning potential of pupils in a disadvantaged community. Pupils can learn and their intelligence scores can be increased through improved instructional techniques and a curriculum tailored to meet their specific needs. Standardized tests do not measure the growth of each pupil in an individualized instructional environment.

VIII. PROCESS

In addition to the supportive programs and personnel as previously covered, examples of activities that were used to achieve the goals and behavioral objectives include the following:

- A. A faculty committee on the exploration of ideas and innovations in teaching.
- B. The Reading Reward program was used as a method of increasing interest in reading among the pupils.
- C. Field trips were used to expose the pupils to new learning experiences.
- D. Faculty studies are done annually to improve academic achievement. An example was the experimental study in the improvement of reading through the development of listening skills and oral language facilities.
- E. Community involvement through the use and functions of the Community School.
- F. The use of the school library as a reading resource room was stressed.
- G. Comprehensive Instructional Program (CIP) diagnostic tests as well as the Newman Analysis Tests were used as a constant monitoring and assessment tool in the reading program.

IX. EVALUATION PLAN

The projects of Gideons Elementary School were evaluated on the basis of goal achievement and behavioral objective attainment. The plan for evaluation was as follows:

Instruments

- A. Rate of gain for reading skills were determined from the differences in the pretest and posttest of the Metropolitan Achievement Tests (MAT) scores.
- B. Per cent of attendance improvement was determined from the school attendance records.
- C. Breakfast Program participation rate was determined from the record of daily meals served.
- D. Teacher-Pupil Service performance was determined from the monthly output measures for both attendance aide and social worker.
- E. The results and effectiveness of the Community School Program was determined from the monthly output measures.
- F. Participation in the Expanded Youth Program was determined from the monthly output measures.
- G. Rate of achieved accuracy by the pupils in grades two and three was determined from the scores of the Comprehensive Instructional Program (CIP) third scheduled tests.
- H. Cost effectiveness was determined on a per pupil expenditure basis for each grade.

Methodology

Evaluation of the accomplishments for the 1971-72 school year took four approaches: (1) evaluation of behavioral objectives, (2) evaluation of supportive programs, (3) a review of test performance in 1971-72, and (4) a longitudinal view of test data for 1971-71 and 1971-72 based on effectiveness and acceptability.

Included will be comparisons of scores in reading against national norms, city-wide norms, and frequencies in gains and posttest scores.

X. FINDINGS

Evaluation of Behavioral Objectives

- A. The preschool children would show a total mean gain of at least 20 points on the Basecheck test.

The mean gain for the year was 20.5 or an increase of 30 per cent between pretest and posttest periods. Pretest score was 54.5, the posttest score was 75. This objective was achieved.

- B. The per cent of attendance rate would increase by at least one per cent over the rate of last year.

The increase in attendance was 0.9 per cent from 88.8 per cent in 1970-71 to 89.7 in 1971-72. The objective was barely achieved.

- C. Forty per cent of the school enrollment would participate in the enrichment, tutoring, and recreational activities of the Community School Program.

This was the Expanded Youth portion of the Model Cities Program. There was an average participation of 200 pupils per month. The total school enrollment was 418. This is a 49 per cent participation rate, which means the objective was achieved.

- D. The school population would show a significant gain (.01 level) in reading skills. The only grade that showed a significant gain in reading skills were grades two and three. Second grade pupils had a mean gain of 0.5 and third grade 0.2 in reading for the six-month period between pretest and posttest on the Metropolitan Achievement Tests (MAT). The objective for the total school was not reached. This is shown in Table 1.

- E. Fifty per cent of the pupils in grades two and three would complete the Comprehensive Instructional Program (CIP) diagnostic with 70 per cent accuracy.

In these two grades there were 79.3 per cent of the children who did score with 70 per cent accuracy. This objective, therefore, was achieved.

Evaluation of Supportive Programs

The supportive programs each have a goal and/or an objective that was related to specific needs in the schools. Each should be evaluated in respect to its accomplishments in reaching this goal or objective.

A. Comprehensive Instructional Program (CIP)

The Comprehensive Instructional Program (CIP) had as an objective to have each pupil in grade two and three gain one month in reading for each month of instruction. This would be a gain of 0.6 due to the six month pretest/posttest period. There were eight pupils of 30, or 26 per cent who achieved this gain in second grade and seven of 49 pupils, or 14 per cent who achieved this gain in the third grade. The objective was not reached. This is shown in Table 1.

B. Career Opportunities Program (COP)

The objective of the Career Opportunities Program (COP) was to have pupils taught by a COP team show greater gains than other similar pupils. Because the COP aides did not spend all of the time with one grade or group it is not possible to evaluate this program.

C. Model Cities Educational Component Program

1. Breakfast Program -- The goal was to provide a free nutritional breakfast to all children who desired it. The program started in March, and an average of 175 pupils per day took part. The objective was to help reduce absenteeism. For the year attendance increased 0.9 per cent over the previous year. It is felt that the program helped achieve this gain.
2. Preschool Program -- The goal was to provide educationally directed day care for children of mothers who worked, and to prepare children for kindergarten. Thirty-one children were enrolled in the program. The objectives were to teach the child basic learning and motor skills, and develop good play, social, and attendance habits. The Basecheck test was used to measure gain in learning skills. The children had a 20.5 gain, or a mean gain of 37.7 per cent between pretest and posttest. The criteria was 25 per cent, the objectives of the program were reached.

3. Expanded Youth Program -- The goal of the Expanded Youth Program was to provide the pupils with an enrichment oriented day care service after school hours. The objectives were to improve the pupils self-concept and to develop positive attitudes toward school. An average of 205 children per day took part in this program. The difficulties in the attitude testing did not make it possible to evaluate this portion of the program.

4. Community School Program -- The goal of the Community School Program was to improve employability of adults, to improve the educational level of adults, and to develop better home-school relationships. The objectives were to provide adult vocational training, to provide adult basic education, and General Educationally Development (GED) preparation courses, to involve parents in social, recreational activities, and to develop the school setting as the focal point for community activities. There were 10 adults enrolled in the GED classes, 90 adults were enrolled in adult vocational classes, 50 adults took part in the social, recreational program offered by the Community School Program. It is felt that the goals and objectives in the Community School Program must be long-range and that the enrollment showed that some progress was being made toward reaching these goals and objectives.

5. Teacher-Pupil Services -- The goal of the Teacher-Pupil Services was to help increase the attendance rate. The objective was to improve home-school relationships. The attendance rate increase by 0.9 per cent. The Teacher-Pupil Program should be given some credit for this gain.

Evaluation of Test Performance

With emphasis on the reading program at Gideons Elementary School, the Metropolitan Achievement Tests (MAT) can be used to gauge progress in reading. As shown in Table 1, the second grade had a 0.5 mean gain. The majority of third, fifth, sixth, and seventh grade pupils had zero or negative gains. This must be considered a very low level of performance for the reading program and very unsatisfactory gains were made.

TABLE 1
READING GAIN ON THE METROPOLITAN ACHIEVEMENT
TESTS BETWEEN PRETEST AND POSTTEST*

Grade	<u>Negative or 0</u>		<u>0.1 to 0.3</u>		<u>0.4 to 0.6</u>		<u>0.7 to 0.9</u>		<u>0.9 or More</u>		Mean Gain	t-Statistic of Pretest/ Posttest Scores
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent		
2	4	13	8	27	10	33	4	13	4	13	0.5	6.9**
3	20	41	15	31	7	14	5	10	2	4	0.2	2.8**
5	22	55	7	18	4	10	5	13	2	5	0.02	0.2
6	21	54	6	15	3	8	3	8	6	15	0.1	0.9
7	<u>20</u>	49	<u>7</u>	17	<u>4</u>	10	<u>3</u>	7	<u>7</u>	1	0.3	0.2
	97		43		28		20		21			

*Six months between pretest and posttest.

**Significant at the .01 level.

TABLE 2

ANALYSIS OF POSTTEST SCORES IN READING ON THE
METROPOLITAN ACHIEVEMENT TESTS

Grade	24 Months or More Behind*		11 to 23 Months Behind*		3 to 10 Months Behind		Within 2 Months of Grade Level and Above*		Posttest Level	City Wide Level	National Level
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent			
2	0	0	11	37	12	40	7	23	2.1	2.4	2.7
3	6	12	34	70	7	14	2	4	2.3	3.0	3.7
4	14	32	18	42	6	14	5	12	3.4	-	4.7
5	20	50	14	35	4	10	2	5	3.9	3.9	5.7
6	31	79	6	15	-	0	2	6	4.0	4.4	6.7
7	38	93	1	2	-	0	2	5	4.3	4.8	7.7

*Compared to National Norms.

In Table 2 a comparison was made between posttest levels of the pupils in Gideons School with both city-wide and national norms. The comparison to city-wide norms showed grades five, six, and seven were very close the city level. The comparison to national norms, showed a mean posttest level ranging from 1.4 years behind in the third grade to 3.4 years behind the seventh grade. The majority of pupils in the fifth, sixth, and seventh grades are two years or more behind the national norms. This level was much lower than is to be desired.

Evaluation of Longitudinal Data

This is an attempt to track pupil progress in the school. Table 3 shows grade level, gain, and rate of gain comparisons for 1970-71 and 1971-72 school years. Further analysis of reading scores was made on the basis of predicted achievement for each grade level. A regression equation employing factors of attendance, mobility, socio-economic status, pupil-teacher ratio, percentage of pupils passing, and pretest scores, formulated predictions of posttest scores, and resulting gains. A ratio of actual gain to predicted gain yielded a percentage described as a gain rate of effectiveness. Another ratio of the actual posttest score divided by the national norm for the respective grade level resulted in an index of acceptability.

TABLE 3
COMPARISON OF POSTTEST LEVEL, GAIN,
AND RATE OF GAIN FOR 1970-71 and 1971-72

	Grade					
	<u>Second</u>	<u>Third</u>	<u>Fourth</u>	<u>Fifth</u>	<u>Sixth</u>	<u>Seventh</u>
<u>Grade Level (Posttest)</u>						
1970-71	2.11	2.42	3.27	3.78	3.87	4.72
1971-72	2.11	2.32	3.35	3.90	4.04	4.28
<u>Gain (Pretest/Posttest)</u>						
1970-71	0.53	0.32	0.27	0.26	0.14	0.19
1971-72	0.50	0.17	-	0.02	0.12	0.03
<u>Rate of Gain</u>						
1970-71	0.80	0.50	0.40	0.40	0.20	0.30
1971-72	0.80	0.30	-	0.03	0.20	0.04

Table 4 shows the changes in the gain rate of effectiveness and the index of acceptability occurring over two years. The gain rate of effectiveness for 1971-72 was 14 points lower than the gain rate of effectiveness for 1970-71 school year. The average level for 1971-72 school year was 47. This is a very low overall level. Grades two and four were the only two grades with levels over 100. This is shown in Table 4. Index of acceptability is the same as the previous year. The index of 62 is much lower than is to be desired in Gideons Elementary School. The second grade had the highest index of acceptability and this was only 70.

XI. COST ANALYSIS

The data presented in Table 5 show the relative cost for a one grade unit of gain based upon the rate of gain for 1971-72 school year and the amount spent. In order to compute these costs expenditures were taken from the General Funds Report, June, 1972, and the Trust and Agency Report, June, 1972. From the figures estimates were made of the per pupil cost from general funds and special projects (compensatory funds). These data also show the cost of compensatory funds for each unit of effectiveness. Effectiveness as determined in the 1972 Effective? Acceptable? study. The reader is cautioned that these data are not exact or refined. Broad estimates were made based upon information obtained from the school staff relative to the utilization of resources. According to these data, the cost for a one grade unit of gain was not related to the funds spent. The second grade had the lowest cost, but the highest gain. The third and seventh grades had the highest costs and lowest gains. In relationship to effectiveness, there are no indications that funds spend influenced the effectiveness of the reading program.

TABLE 4
READING TEST DATA FOR 1971-72

Grade	Actual		Acceptable Posttest	Predicted Posttest	Gain		Gain Rate of Effectiveness		Index of Acceptability	
	Pretest	Posttest			Actual	Predicted	1971-72	1970-71	1971-72	1970-71
2	1.5	1.9	2.7	1.8	0.4	0.3	133	125	70	74
3	2.1	2.3	3.7	2.5	0.2	0.4	50	80	62	65
4	2.4	3.2	4.7	3.2	0.8	0.8	100	75	68	62
5	3.7	3.7	5.7	4.2	0.0	0.5	0	17	65	65
6	3.7	3.6	6.7	3.9	-0.1	0.2	- 50	0	54	51
7	3.7	3.9	7.7	4.1	0.2	0.4	50	67	51	56
					Average		47	61	62	62

TABLE 5

COST ANALYSIS OF READING GAINS BY GRADES TOTAL SCHOOL
 AVERAGE DAILY ATTENDANCE
 FOR GRADES K - 7 = 391

	Grades						Average
	Second	Third	Fifth	Sixth	Seventh		
Average Daily Attendance (ADA)	43	59	51	43	52		
<u>Per Pupil Cost</u>							
A. <u>General Funds</u>							
1. <u>Regular</u>							
a. Salary	\$ 688	\$ 688	\$ 688	\$ 688	\$ 688	\$ 688	\$ 688
b. Non-Salary	59	59	59	59	59	59	59
c. Total	\$ 747	\$ 747	\$ 747	\$ 747	\$ 747	\$ 747	\$ 747
2. <u>Comprehensive Instructional Program (CIP)</u>							
Non-Salary	\$ 1	\$ 1	\$ 1	\$ 1	\$ 1	\$ 1	\$ 1
3. <u>Total General Funds</u>							
a. Salary	\$ 688	\$ 688	\$ 688	\$ 688	\$ 688	\$ 688	\$ 688
b. Non-Salary	60	60	60	60	60	60	60
c. Total	\$ 748	\$ 748	\$ 748	\$ 748	\$ 748	\$ 748	\$ 748
B. <u>Compensatory Funds</u>							
1. <u>Model Cities</u>							
a. Salary	\$ 53	\$ 53	\$ 53	\$ 53	\$ 53	\$ 53	\$ 53
b. Non-Salary	4	4	4	4	4	4	4
c. Total	\$ 57	\$ 57	\$ 57	\$ 57	\$ 57	\$ 57	\$ 57
2. <u>Career Opportunities Program (COP)</u>							
Salary	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4

TABLE 5 (Cont'd)

	Grades					Average
	<u>Second</u>	<u>Third</u>	<u>Fifth</u>	<u>Sixth</u>	<u>Seventh</u>	
3. Emergency School Assistance Program (ESAP) Salary	\$ 1	\$ 1	\$ 1	\$ 1	\$ 1	\$ 1
4. Development of an Experiential Curriculum in Environmental Education (DECEE) Non-Salary	\$ 1	\$ 1	\$ 1	\$ 1	\$ 1	\$ 1
5. Title I Non-Salary	\$ 1	\$ 1	\$ 1	\$ 1	\$ 1	\$ 1
6. Education Professions Development Act (EPDA) Salary	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3
7. Total Compensatory Funds	\$ 61	\$ 61	\$ 61	\$ 61	\$ 61	\$ 61
a. Salary	6	6	6	6	6	6
b. Non-Salary	67	67	67	67	67	67
c. Total	\$ 747	\$ 748	\$ 748	\$ 748	\$ 748	\$ 748
C. <u>Total Per Pupil Cost</u>	67	67	67	67	67	67
1. General Funds	\$ 815	\$ 815	\$ 815	\$ 815	\$ 815	\$ 815
2. Compensatory Funds						
3. Total						
D. <u>Rate of Reading Gain</u> (Per Cent)	80	30	3	20	4	27
E. <u>Projected Cost For One Grade</u> <u>Unit of Gain</u>	\$ 935	\$ 2,493	\$ 24,933	\$ 3,740	\$ 18,700	\$ 10,452
1. General Funds	84	223	2,233	335	1,675	936
2. Compensatory Funds	\$ 1,019	\$ 2,716	\$ 27,166	\$ 4,075	\$ 20,375	\$ 11,388
3. Total						

TABLE 5 (Cont'd)

	<u>Grades</u>					<u>Average</u>
	<u>Second</u>	<u>Third</u>	<u>Fifth</u>	<u>Sixth</u>	<u>Seventh</u>	
<u>F. Gain Rate of Effectiveness</u>	133	50	0	-50	50	47
<u>G. Expenditure (Per ADA) of Compensatory Funds For Each Unit of Effectiveness</u>	\$ 0.50	\$ 1.34	-	-	\$ 1.34	\$ 1.11

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XII. CONCLUSIONS

Based on discussions with the principal and faculty and analysis of the data concerning pupils progress, the following conclusions were drawn:

- A. Overall gains were low and did not meet the objectives.
- B. The supportive programs, primarily the Model Cities Educational Component Programs, were of value to the total school program.
- C. Pupils performed favorably in certain grades in comparison to city-wide norms, but were far behind national norms. Further, the effectiveness of the program reading achievement was extremely low.
- D. The amount of funds spent did not relate significantly to the performance of the pupils.

XIII. RECOMMENDATIONS

The following recommendations are made as a result of the findings in this report:

- A. Concentration on reading skills, especially in the upper grades as preparation for middle school, because of their present low levels.
- B. Concentration on methods of raising the level of acceptability and effectiveness must be considered as part of a comprehensive instructional plan.
- C. Explore methods of showing individual pupil gains other than the Metropolitan Achievement Tests (MAT), because of the stress of individualized instruction on the part of the principal and faculty at the school.

R E S E A R C H A N D D E V E L O P M E N T R E P O R T

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1971-72

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I. INTRODUCTION

W. H. Crogman Elementary School is located in the Pittsburg Area of the Model Cities Neighborhood. Residents are primarily low-income apartment and rented home dwellers. Many homes in the area have been torn down and some of the residents are in temporary quarters and trailer homes provided by Model Cities. There is one government funded housing project in the area. The racial composition is almost completely black for there are only two whites enrolled in the school. Fifty-three per cent of the pupils come from families with incomes below \$2,000 per year. School population for the 1970-71 school year was 517 and for the 1971-72 school year it was 425. The school serves pre-kindergarten through sixth grade. The mobility rate has stabilized for the past two years, and it was 0.17 in 1970-71 and 0.27 in 1971-72.

Crogman School qualified, because of low-income levels, for funds and services from special projects to help the school meet the needs of the pupils and community. These included the Comprehensive Instructional Program (CIP), Career Opportunities Program (COP), Education Professions Development Act (EPDA), Title I, and the Model Cities Educational Component Programs. These resources were used in creating and sustaining activities designed to supplement the regular school activity at W. H. Crogman School.

II. NEEDS

The identified needs of the participants were the foundation for the development of the school year plan. The goals, behavioral objectives, and critical variables were determined from and were to satisfy the identified needs. The needs were as follows:

- A. For the pupils to acquire basic reading and communication skills.
- B. For the pupils to be exposed to various enrichment experiences.
- C. For the pupils to develop a more positive self-concept.
- D. For the pupils to improve their school attendance habits.

- E. For the pupils to have improved health care and proper diet.
- F. For working mothers to have day care facilities for their children.
- G. For parents to be more aware of and involved in school activities.

III. GOALS

The primary goals of Crogman School were to instill a feeling of self-worth in every child and to promote successful individual growth. The secondary goals were as follows:

- A. To improve the pupils' self-concept through individual academic growth.
- B. To improve the pupils' enrichment experiences with cultural and social development through exposure to activities and events.
- C. To provide day care services to those children whose parents work by extending the school hours and offering planned, supervised activities.
- D. To improve the home-school relationships and increase parental involvement through activities and events offered to both parents and pupils.
- E. To improve the pupils attendance habits through various activities offered by the school.
- F. To improve the pupils academic achievement through concentrated efforts on the part of the faculty and use of effective instructional programs.

IV. BEHAVIORAL OBJECTIVES

The following objectives were formulated to evaluate the extent to which the school was meeting the needs of the pupils and the goals of the school's program. The behavioral objectives to be met were as follows:

- A. The pupils in grades two, three, five, and six would increase their reading skills at a rate of one month for each month of instruction as measured by the Metropolitan Achievement Tests (MAT).
- B. The pupils in grades two, three, five, and six would increase their mathematics skills at a rate of one month for each month of instruction as measured by the Metropolitan Achievement Tests (MAT).
- C. Fifty per cent of the preschool population would show a 50 per cent increase in knowledge of basic learning and motor skills as measured by the Basecheck test.
- D. The per cent of attendance would increase by at least one per cent.
- E. Participation in enrichment activities would show a significant increase in pupils' attitude toward school.
- F. Fifty per cent of the pupils in grades one through four would complete the Comprehensive Instructional Program (CIP) diagnostic tests with 70 per cent accuracy.

Specific goals and objectives for the supportive projects are shown in Section VI, Supportive Projects.

V. CRITICAL VARIABLES

The critical variables that were observed and measured to reflect the desired changes were as follows:

- A. Reading Skills
 - 1. Vocabulary

2. Word Attack
 3. Comprehension
- B. Attendance Rate
 - C. Self-Concept
 - D. Parental Involvement
 - E. Pupil Attitude
 - F. Pupil Participation.

VI. SUPPORTIVE PROJECTS

The supportive projects as well as the existing educational program were directed towards satisfying the identified needs. At Croghan School the supporting programs were sponsored by the Comprehensive Instructional Program, Career Opportunities Program, The Model Cities Educational Component, and the Title I Program.

A. Comprehensive Instructional Program (CIP)

The CIP focused on diagnostic teaching of reading in grades one through three. The goal was to provide the pupils with skills in reading for educational growths. The objective was for each pupil to gain one month for each month of instruction.

B. Career Opportunities Program (COP)

The COP was a training program for selective paraprofessionals. The goal was to upgrade paraprofessionals to certified teachers. The goal would be met through training and availability of certain college courses to those aides in the program. The objective was to have those pupils being taught by the COP teams show a greater gain than similar pupils not being taught by a COP team.

C. Model Cities Educational Component

The Model Cities program offered, to schools in the Model Neighborhood Area (MNA), educational programs that would increase attendance and achievement of pupils, decrease dropouts, provide day care services, and lower adult illiteracy and unemployment. The community residents selected the programs which best suited the community needs. Croghan School participated in the following activities:

1. The Breakfast Program

The goals of the Breakfast Program was to provide a free nutritional breakfast to as many pupils as desired it. The objective was to help increase the attendance rate.

2. Extended Day Program

The Extended Day Program was directed toward the goals of providing enrichment activities and day care services for pupils before and after school. The objective of the program was to improve the pupils self-concept, to develop the pupils positive attitude toward school, and to instill academic confidence in the pupils.

3. Preschool Program

The Preschool Program goals were to provide educationally directed Day Care services to children of working mothers and to prepare the children for kindergarten and first grade. The objectives of the program were to teach the child basic learning and motor skills and develop good group play, social, and attendance habits.

4. Teacher-Pupil Service Program

The goals of Teacher-Pupil Service program was to help increase the attendance rate. The objective was to help improve home-school relationships. An attendance aide was used to help improve attendance

habits, attitudes toward school, teachers, and peers, and to involve parents in school activities. The social worker handled the referral cases from the attendance aide.

D. Title I Program

The Title I Program was designed to provide additional educational training to those pupils found to be educationally deprived.

1. Lead Teacher

The goal of the project was to train the classroom teacher in diagnosing, prescribing, and preparing instructional materials which would benefit the pupils. The project objective was to improve the reading skills of the educationally deprived.

2. Kindergarten

The goal of the kindergarten project was to provide the kindergarten teachers with aides to allow for more individualized instruction. The objective was to have the children better prepared for entry into the first grade.

E. Education Professions Development Act (EPDA)

The EPDA project was a cooperative effort of Atlanta Public School System and Atlanta University. The goal of the project was to provide the classroom teachers with the techniques and strategies of specialized education through special training. The objective was to provide the pupils with additional specialized instruction for educational growth.

VII. MANAGEMENT AND CONTROL

A. Administration

The teacher-pupil ratio at Crogman School for the 1971-72 school was one to twenty-six. The school emphasizes

a no-fail attitude among its faculty and pupils. It was a firm belief that everyone is able to achieve in some phase of life and that failing is only a part of the learning process. It was felt that to instill into the child a feeling of self-worth and to assure success in individual growth patterns was the most important thing that the faculty could do.

B. Instructional Organization

The pre-kindergarten unit through the third grade was organized in self-contained classrooms. The fourth, fifth, and sixth grades operated under a modified departmentalized program. Stress was put on the fact that no accomplishments by any pupil should be regarded as trivial and that all teachers should be exposed to current trends and developments in education.

VIII. PROCESS

In addition to the supportive programs and personnel as previously covered, examples of activities that were used to achieve the goals and behavioral objectives included the following.

- A. The Education Professions Development Act was used to organize and plan for the 1972-73 school year in a differentiated staffing model. Stress was placed on an innovative atmosphere in which teachers could create and experiment with new techniques.
- B. Operating Day -- This was an opportunity for each employee of the school including faculty and non-faculty personnel to discuss and explore their relationship to the total school program and the relationship of each employee to the other.
- C. Extensive use was made of the lead teacher for inservice training and reading for all teachers.
- D. Comprehensive Instructional Program (CIP) diagnostic test was used for constant monitoring and assessment for all in the reading program.

IX. EVALUATION PLAN

The projects and programs at Crogman were evaluated on the basis of goal achievement and behavioral objective attainment. The plan for evaluation was as follows:

Instruments

- A. Rate of gain in reading for pupils in grades two, three, five, and six was determined from differences in the pre and post tests scores on the Metropolitan Achievement Tests (MAT).
- B. Rate of gain in mathematics skills for pupils in grades two, three, five, and six was determined from differences in the pre and post tests scores on the Metropolitan Achievement Tests (MAT).
- C. Per cent of attendance improvement was determined from the school attendance records
- D. The pre and post tests scores on the Basecheck test was used to determine the learning and motor skills gains made by the preschool children.
- E. Breakfast program participation rate was determined from records of the daily meals served.
- F. Teacher-Pupil Service Program performance was determined from the monthly output measures for both the attendance aide and the social worker. The output measure showed attendance contacts made, referrals to other agencies, and parent contacts made.
- G. Cost Effectiveness was determined on a per pupil expenditure basis for each grade.
- H. Rate of achieved per cent of accuracy for the pupils in grades one through four was determined from the results of the Comprehensive Instructional Program (CIP) third scheduled tests.

Evaluation of the accomplishments for the 1971-72 school year took four approaches; (1) evaluation of Behavioral Objectives, (2) evaluation of Supportive Programs, (3) a review of test performance

in 1971-72, and (4) a longitudinal view of test data for 1970-71 and 1971-72 based on effectiveness and acceptability. Included are comparison of scores in reading against national norms, city-wide norms, and frequencies of gains and posttests scores.

X. FINDINGS

Evaluation of Behavioral Objectives

- A. The pupils in grades two, three, five, and six would increase their reading skills at a rate of one month for each month of instruction.

Thirty-eight per cent of the second grade, 14 per cent of the third grade, 39 per cent of the fifth grade, and 24 per cent of the sixth grade gained 0.6 or more. The highest mean gain was in grade two at 0.5. The majority of pupils in grade two, five, and six were below the 0.6 level. This is shown in Table 1.

- B. The pupils in grades two, three, five, and six would increase their mathematical skills at a rate of one month for each month of instruction (0.6).

Twenty-three per cent of the second grade, 31 per cent of the third grade, 31 per cent of the fifth grade, and 32 per cent of the sixth grade achieved the objective. The majority of pupils in grades five and six were below the 0.6 level. This is shown in Table 2.

- C. Fifty per cent of the preschool population would show a 50 per cent increase in knowledge of basic learning and motor skills.

One preschool unit did not start until January, because of late funding. Therefore, no measure was made of this group. The other preschool units had 90 per cent of the students completing the Basecheck test with at least 85 per cent accuracy. They exceeded the objective.

- D. The per cent of attendance will increase at least one per cent.

The attendance increased 0.3 per cent from 91.4 in 1970-71 to 91.7 in 1971-72. The objective was not achieved.

TABLE 1
 FREQUENCY OF READING GAIN MADE ON METROPOLITAN ACHIEVEMENT TESTS
 BETWEEN PRE AND POST TESTS*

Grade	Total No.	Negative -0		0.1 to 0.5		0.6 to 0.9		1.0 or More		Mean Gain
		No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	
2	48	3	6	27	56	12	25	6	13	0.5
3	52	16	31	29	56	6	12	1	2	0.2
5	59	27	46	10	17	11	19	12	20	0.3
6	46	20	43	15	33	7	15	4	9	0.2
	205	66	32	81	40	36	18	22	11	

*Six Month Period.

TABLE 2
 FREQUENCY OF MATH GAINS MADE ON METROPOLITAN ACHIEVEMENT TESTS
 BETWEEN PRE AND POST TESTS*

Grade	Total		Negative -0		0.1 to 0.5		0.6 to 0.9		1.0 or More		Mean Gain
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	
2	48		3	6	34	71	10	21	1	2	0.4
3	48		10	21	23	48	10	21	5	10	0.4
5**	58		19	33	21	36	10	17	8	14	0.2
6**	47		15	32	17	36	7	15	8	17	0.3
Totals	201		47	23	95	47	37	18	22	11	

* Six Month Period.

**Arithmetic Problem Solving Concepts.

- E. The pupils participating in enrichment activities would show a significant increase in their attitudes toward school. Because of testing difficulties it was not possible to measure the changes and attitude among the pupils who participated in the enrichment activities.
- F. Fifty per cent of the pupils in grades one through four would complete the Comprehensive Instructional Program diagnostic test with 70 per cent accuracy. Eighty-four per cent of the second grade, 68 per cent of the third grade, and 25 per cent of the fourth grade completed the CIP diagnostics with a 70 per cent accuracy rate. The objective was achieved.

Evaluation of Supportive Programs

The supportive programs each had a goal and/or objectives that was related to specific needs in the school. Each should be evaluated in the respect of its accomplishments in reaching this goal or objective.

A. Comprehensive Instructional Program (CIP)

CIP has an objective to have each pupil in grades two and three to gain one month in reading for each month of instruction. This would be a gain of 0.6 due to the six month pre-post test period.

The second grade had 38 per cent of the pupils gain 0.6 or more, with a mean gain of 0.5. The third grade had 14 per cent of the pupils gain 0.6 or more. The objective was not reached. This is shown in Table 1.

B. Career Opportunities Program (COP)

The objective was to have pupils taught by a COP team show greater gains than other pupils. Because the COP aides did not spend all of their time with one grade or group, it was possible to evaluate this objective.

C. Model Cities Educational Component

1. Breakfast Program

The goal was to provide a free nutritional breakfast to all children who desired it. The program started

in March and 175 pupils per day took part. The objective was to help reduce absenteeism, and for the year attendance increased by 0.3 per cent over the previous year. It is felt that the program helped achieve this gain.

2. Extended Day

The program had as its goal to provide enrichment activities and supervised day care to school age children before and after regular school hours. Approximately 150 pupils took part in this activity each day. The objective was to show a more positive attitude toward school. This could not be evaluated because of testing difficulties.

3. Preschool

The goal was to provide educationally directed day care for children of mothers who work and to prepare children for kindergarten. One class did not start until January and there were fifteen children enrolled. In this class no testing was done because of the short time period. The full year class had 90 per cent complete Basecheck with 80 per cent accuracy.

4. Teacher-Pupil Services

This program was designed to help increase the attendance rate through the use of attendance aides. There was an increase of 0.3 per cent over the previous year. Some of this gain was attributable to this program.

D. Title I

The Title I Lead Teacher concentrated on improving the teacher skills of all teachers in the area of reading. The aides worked in first, second, fourth, and sixth grades. The objective was to improve reading skills in these grades. There was no indication that there was significant gains made by the pupils involved in the Title I program. The kindergarten program used aides to help teachers better prepare pupils for first grade. No testing was done in the fall with the first

graders, so it is not possible to evaluate whether or not the program achieved its objective. There were two aides used in the kindergarten program.

Evaluation of Test Performance

With emphasis on the reading program at Crogman the Metropolitan Achievement Tests (MAT) can be used to gauge progress in reading. The data shown in Table 1 is far matched groups who took both the pre and post tests. The only grade that showed much gain was grade two with a gain of 0.5. All other grades were far below satisfactory gain levels. In Table 3 a comparison was made with city-wide norms and national norms. Grade five was the only grade above city-wide norms. Compared to national norms, the pupils ranged from 1.6 years behind in the third grade to 2.8 years behind in the sixth grade. Grade six had 44 pupils two years or more behind the national norms. The majority of the pupils in grades three, four, and five were one year or more behind national norms.

TABLE 3

ANALYSIS OF POSTTEST SCORES IN READING
ON METROPOLITAN ACHIEVEMENT TESTS

Grade	24 Months or More Behind		11-23 Months Behind*		3-10 Months Behind		Within 2 Months of Grade Level or Above		Post Level	City-Wide Level	National Level
	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent			
2	--	--	16	33	25	52	7	15	2.03	2.4	2.7
3	12	23	35	67	2	5	3	6	2.11	3.0	3.7
4	2	4	32	65	8	16	7	14	3.67	--	4.7
5	27	46	21	36	5	8	6	10	4.07	3.9	5.7
6	44	96	2	4	0	0	0	0	3.87	4.4	6.7
	85	33	106	42	40	16	23	9			

*Compared to National Norm.

Evaluation of Longitudinal Data

This is an attempt to track pupil progress in the school. Table 4 shows grade level, gain, and rate of gain comparison for 1970-71 and 1971-72.

TABLE 4
COMPARISON OF POSTTEST LEVEL, GAIN,
AND RATE OF GAIN, 1970-71 and 1971-72

Grade Level (Posttest)					
Grade	2	3	4	5	6
1970-71	1.84	2.20	3.61	3.67	4.16
1971-72	2.03	2.11	3.68	4.07	3.87

Gain (Pre-Post)					
Grade	2	3	4	5	6
1970-71	0.33	0.16	0.59	0.15	0.57
1971-72	0.53	0.16	--	0.31	0.19

Rate of Gain					
Grade	2	3	4	5	6
1970-71	0.50	0.30	0.90	0.30	0.90
1971-72	0.80	0.30	--	0.50	0.30

This Table shows comparisons by year for each grade. As an example, the fifth grade in 1970-71 had a posttest level of 3.67, and as sixth graders in 1971-72 only a 3.87 level. This was not much progress.

Further analysis of reading scores was made on the basis of predicted achievement for each grade level. A regression equation employing factors of attendance, mobility, socio-economic status, pupil-teacher ratio, percentage of pupils passing and

pretest scores formulated predictions of posttest scores in resulting gains. A ratio of actual gain to predicted gain yield a percentage described as a gain rate of effectiveness. Another ratio of the actual posttest score divided by the national norm for the respective grade level resulted in an index of acceptability. Table 5 shows the changes in the gain rate of effectiveness and the index of acceptability occurring over two years.

Gain rate of effectiveness decreased 20 points from 105 in 1970-71 to 83 points in 1971-72. This is partially due to the high level of the sixth grade in the 1970-71 year. Grades three and four did increase in the 1971-72 school year, but the overall level was lower than should be expected.

The index of acceptability changed very little. It is still lower than is to be desired. No grade was at the expected level grades three, four, and five were close to or at predicted posttest levels. Emphasis should be placed on increasing the index of acceptability to bring the pupils closer to both city-wide and national norms.

TABLE 5
EFFECTIVENESS AND ACCEPTABILITY BASED
READING TEST DATA FOR 1971-72

Grade	Actual		Acceptable		Predicted		Gain		Gain Rate of Effectiveness		Index of Acceptability			
	Pre	Post	Pre	Post	Pre	Post	Actual	Predicted	1971-72	1970-71	1971-72	1970-71		
2	1.5	1.8	2.7	2.7	1.9	1.9	0.3	0.4	75	75	67	67		
3	1.7	2.2	3.7	3.7	2.2	2.2	0.5	0.5	100	-	59	51		
4	1.8	3.4	4.7	4.7	2.9	2.9	1.6	1.1	145	80	72	70		
5	3.4	3.7	5.7	5.7	3.8	3.8	0.3	0.4	75	40	65	60		
6	3.6	3.7	6.7	6.7	4.1	4.1	0.1	0.5	20	350	55	61		
7	--	--	7.7	7.7	--	--	--	--	--	--	--	--		
Average											83	105	64	62



XI. COST ANALYSIS

The data presented in Table 6 showed a relative cost for a one grade unit of gain based upon the rate of gain for 1971-72 in the amount spent. In order to compute these costs expenditures were taken from the General Funds Report, June 1972, and the Trust and Agency Report, June 1972. From these reports estimates were made of the per pupil cost of General Funds and Special Projects (compensatory funds). These data also show the cost of compensatory funds for each unit of effectiveness. Effectiveness as determined in the 1972 Effective? Acceptable? study. The reader is cautioned that these data are not exact or refined. Broad estimates were made based upon the information obtained from the school staff relative to the utilization of resources. According to these data the cost for one grade unit of gain was not related to the funds spent. The sixth grade expenditures were extremely high, but the gain was low. All grades were at a high level of expenditure in relationship to effectiveness. There are no indications of funds spent influence the effectiveness of the reading program.

TABLE 6

COST ANALYSIS OF READING GAIN BY GRADE
TOTAL SCHOOL AVERAGE DAILY ATTENDANCE
FOR GRADES K-6 -- 398

Average Daily Attendance	Grade					Total
	Second	Third	Fifth	Sixth	Seventh	
Average Daily Attendance	53	61	66	50	--	
A. General Funds						
1. Regular						
a. Salary	\$ 759	\$ 759	\$ 759	\$ 759	\$ -0-	\$ 759
b. Non-salary	71	71	71	71	-0-	71
2. CIP						
a. Salary	\$ 1	\$ 1	\$ 1	\$ 1	\$ -0-	\$ 1
b. Non-salary	2	2	2	2	-0-	2
3. Total General Funds						
a. Salary	\$ 760	\$ 760	\$ 760	\$ 760	\$ -0-	\$ 760
b. Non-salary	73	73	73	73	-0-	73
c. Total General Funds	\$ 833	\$ 833	\$ 833	\$ 833	\$ -0-	\$ 833
B. Special Projects						
1. Model Cities						
a. Salary	\$ 197	\$ 197	\$ 197	\$ 197	\$ -0-	\$ 197
b. Non-salary	16	16	16	16	-0-	16
c. Total	\$ 213	\$ 213	\$ 213	\$ 213	\$ -0-	\$ 213
2. Atlanta University - EPDA						
a. Salary	\$ 28	\$ 28	\$ 28	\$ 28	\$ -0-	\$ 28
b. Non-Salary	7	7	7	7	-0-	7
c. Total	\$ 35	\$ 35	\$ 35	\$ 35	\$ -0-	\$ 35
3. ESAP						
a. Salary	\$ 1	\$ 1	\$ 1	\$ 1	\$ -0-	\$ 1
b. Non-salary	1	1	1	1	-0-	1
c. Total	\$ 2	\$ 2	\$ 2	\$ 2	\$ -0-	\$ 1
4. Title I						
a. Salary	\$ 54	\$ 54	\$ 54	\$ 54	\$ -0-	\$ 54
b. Non-salary	2	2	2	2	-0-	2
c. Total	\$ 56	\$ 56	\$ 56	\$ 56	\$ -0-	\$ 56
5. EPDA (Federal)						
a. Salary	\$ 1	\$ 1	\$ 1	\$ 1	\$ -0-	\$ 1
b. Non-salary	-0-	-0-	-0-	-0-	-0-	-0-
c. Total	\$ 1	\$ 1	\$ 1	\$ 1	\$ -0-	\$ 1
6. COP						
a. Salary	\$ 3	\$ 3	\$ 3	\$ 3	\$ -0-	\$ 3
b. Non-salary	-0-	-0-	-0-	-0-	-0-	-0-
c. Total	\$ 3	\$ 3	\$ 3	\$ 3	\$ -0-	\$ 3
7. Total Special Funds						
a. Salary	\$ 284	\$ 284	\$ 284	\$ 284	\$ -0-	\$ 284
b. Non-salary	26	26	26	26	-0-	26
c. Total Special Funds	\$ 310	\$ 310	\$ 310	\$ 310	\$ -0-	\$ 310
C. Total Per Pupil Cost						
1. General Funds	\$ 1,044	\$ 1,044	\$ 1,044	\$ 1,044	\$ -0-	\$ 1,044
2. Special Funds	89	89	89	89	-0-	89
3. Total Per Pupil Cost	\$ 1,143	\$ 1,143	\$ 1,143	\$ 1,143	\$ -0-	\$ 1,143
Rate of Reading Gain						
(Per Cent)	80	30	50	30	--	48
Projected Cost for One Grade Unit of Gain						
A. General Funds	\$ 1,041	\$ 2,777	\$ 1,666	\$ 2,777	\$ -0-	\$ 2,058
B. Special Projects	388	1,033	620	1,033	-0-	786
C. Total	\$ 1,429	\$ 3,810	\$ 3,286	\$ 3,810	\$ -0-	\$ 2,824
Gain Rate of Effectiveness						
	75	100	75	20	--	83
Expenditure (Per ADA) of Compensatory Funds						
for Each Unit of Effectiveness	\$ 4.13	\$ 3.10	\$ 4.13	\$ 15.50	\$ -0-	\$ 6.33

XII. CONCLUSIONS

Based on the findings of pupil progress, the following conclusions were drawn:

- A. Overall reading gains were not satisfactory.
- B. Math levels were not satisfactory.
- C. Posttest levels in reading were below both city-wide and national norms.
- D. The majority of students in grades three were one year or more behind national norms and in grades five and six the majority of pupils were two years or more behind national norms.
- E. The school was below both the effective and acceptable levels.
- F. The amount of funds spent did not relate significantly to the performance of the pupils.

XIII. RECOMMENDATIONS

The following recommendations are made as a result of the findings in this report.

- A. Concentration should be made to raise the level of acceptability of all pupils.
- B. Better use should be made of the aides, such as COP.
- C. Specific plans should be made to better utilize the supportive programs in relation to the needs of the pupils.
- D. Concentration should be made in the upper grade levels to prepare them for further schooling, especially in the area of reading.

- E. Specific objectives should be formulated by each teacher and individualization instructional procedures should be used.
- F. Plans should be developed and implemented which would promote a significant correlation between pupil achievement and expenditures.