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ABSTRACT

An evaluation of the Indianapolis Title I programs for fiscal year 1970 is presented. An effort was made to concentrate services on the students showing the most need. Finances limited the programs to grades kindergarten through sixth. Programs for programed remedial mathematics, remedial reading, tutorial reading, special education, student activity, instrumental music, teacher aides, summer school, inservice training, social service, food service, guidance, and neglected or delinquent students are discussed with reference to objectives, data, conclusions, costs, and pupils involved. All programs showed a gain in pupil ability and enthusiasm. Data summaries for the 1969-70 evaluation reports from the tutorial reading and tutorial mathematics programs, a summary of the Indianapolis 1969-70 Ginn I Program, charts, tables, and graphs are included. (BM)

Board of Education of the City of Indianapolis

Stanley C. Campbell, Superintendent of Schools

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Indianapolis, Indiana 46204

EVALUATION REPORT OF TITLE I ESEA PROGRAMS

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October 31, 1970

AN EFFECTIVE LARGE URBAN

READING PROJECT

THE INDIANAPOLIS BOARD OF SCHOOL COMMISSIONERS

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I N T R O D U C T I O N

The United States Office of Education has recently released an important Title I study which shifts much of the blame for the program's shortcomings from the Nation's educators to its lawmakers. In its third annual report to Congress on E.S.E.A. Title I, the Office of Education charges that the present fund allocation formula does not get the money to the schools and children who need it most in reasonable proportion to their needs.

The National report, which covers the 1967-68 school year, is the first effort to provide a National evaluation of Title I on data other than that supplied by the states. The United States Office of Education surveyed a National sample of 465 school districts of 300 children or more, scientifically selected to represent an accurate picture of the more than 10,000 districts with enrollments greater than 300. Although the report concedes that these data are still not complete or comprehensive, the new approach marks what the United States Office of Education says is "a considerable step toward the systematic and sophisticated accumulation of information required for a useful and authoritative assessment of Title I."

The Indianapolis Title I Program for FY 1970 took a different direction from that of past years. In keeping with State and Federal Guidelines, an effort was made to concentrate as many services as possible on those students showing the greatest needs. In addition, the major thrust of the academic programs and ancillary services was directed toward pupils in grades K-6. At the outset, it was quite obvious that reducing the size of the target area in a systematic manner would eliminate services to many children having a need. On the other hand, it was also obvious that there were not enough funds to concentrate all of the services available on all of the children who have academic, economic, or social needs.

To provide services for a selected group of children from a school population can be very difficult for several disciplines such as psychological and social services. The nature of the services performed and method of referrals make it extremely difficult to accept one case in preference to another; however, efforts were made to provide services where needed for those children participating in the remedial programs. Another more difficult problem is that of attempting to assess the individual impact of each ancillary service on changes in achievement. It is assumed that by providing certain ancillary services, some of the causal factors affecting achievement can be removed. Keeping these factors in mind, the evaluation of this year's program is based on achievement test results in the grade-one Tutorial Program, Remedial Reading and Programmed Math Projects in grades 4, 5, and 6.

Title I personnel who provide the various ancillary services were made aware of the participants in each of these programs, and an effort was made to provide the services of the various disciplines for these selected children who exhibited the need.

The first two rows of the table below indicate the percentage of students participating in both Remedial Reading and Remedial Math. The remainder of the table shows the degree of concentration of our ancillary services on those students who participated in our 3 major academic programs.

	Remedial Reading N=668	Remedial Math N=1254	Tutorial Reading N=1201
Remedial Reading	-	26.6%	NA
Remedial Math	40%	-	NA
Social Service	74%	75%	82%
Psychological Services	1%	1.7%	4%
Guidance (6 Schools)	86%	56%	-
Food Service (17 Schools)	21%	25%	22%

Community Service is recorded as a social service.

Health Service funded under Title I was provided at one school only.

The figures in the above chart for Ancillary Services do not reflect the total number of children served. They show only the percentage of those who participated in one of the 3 academic programs.

P R O G R A M M E D R E M E D I A L M A T H

INTRODUCTION

The programmed math project initiated in September, 1969, in 20 Intensified-Education Area Schools was designed to improve the computation skills of pupils in grades 4, 5, and 6 who were achieving one year or more below grade level. The basic purpose of the program is to provide an atmosphere where each participant can work at his present level of achievement and progress at his own rate of speed in groups small enough to allow for maximum individual attention.

One thousand three hundred seventy-eight (1,378) pupils participated in the program. They were under the direct supervision of a teacher aide who had been trained in the use of SULLIVAN PROGRAMMED materials during a one-week summer workshop. Pupils were scheduled in to the aide on a daily basis for the entire school year.

OBJECTIVE

To provide the basis for normal academic success in the developmental sequence

SUMMARY OF DATA — MEAN GAIN BY GRADE

GRADE 4 EXPERIMENTAL
Pre-test Norm 4.0
Post-test Norm 4.7

		Arithmetic Computation		Mean Gain	Total Average		Mean Gain
		Pre	Post		Pre	Post	
All Schools	H	4.2	7.7		4.1	6.7	
No. Pupils 326	Md	2.4	4.3	1.9	2.3	3.8	1.5
Mn I.Q. 87	L	0	1.5		0	1.7	

GRADE 5 EXPERIMENTAL
Pre-test Norm 5.0
Post-test Norm 5.7

		Arithmetic Computation		Mean Gain	Total Average		Mean Gain
		Pre	Post		Pre	Post	
All Schools	H	6.0	6.8		6.5	5.9	
No. Pupils 333	Md	3.3	4.1	.8	3.5	4.1	.6
Mn I.Q. 85	L	2.0	2.0		.7	1.9	

GRADE 5 COMPARISON

		Arithmetic Computation		Mean Gain	Total Average		Mean Gain
		Pre	Post		Pre	Post	
All Schools	H	6.0	6.6		6.5	8.2	
No. Pupils 454	Md	3.8	4.5	.7	3.8	4.5	.7
Mn I.Q. 92	L	1.9	2.0		2.1	1.6	

GRADE 6 EXPERIMENTAL
Pre-test Norm 6.0
Post-test Norm 6.7

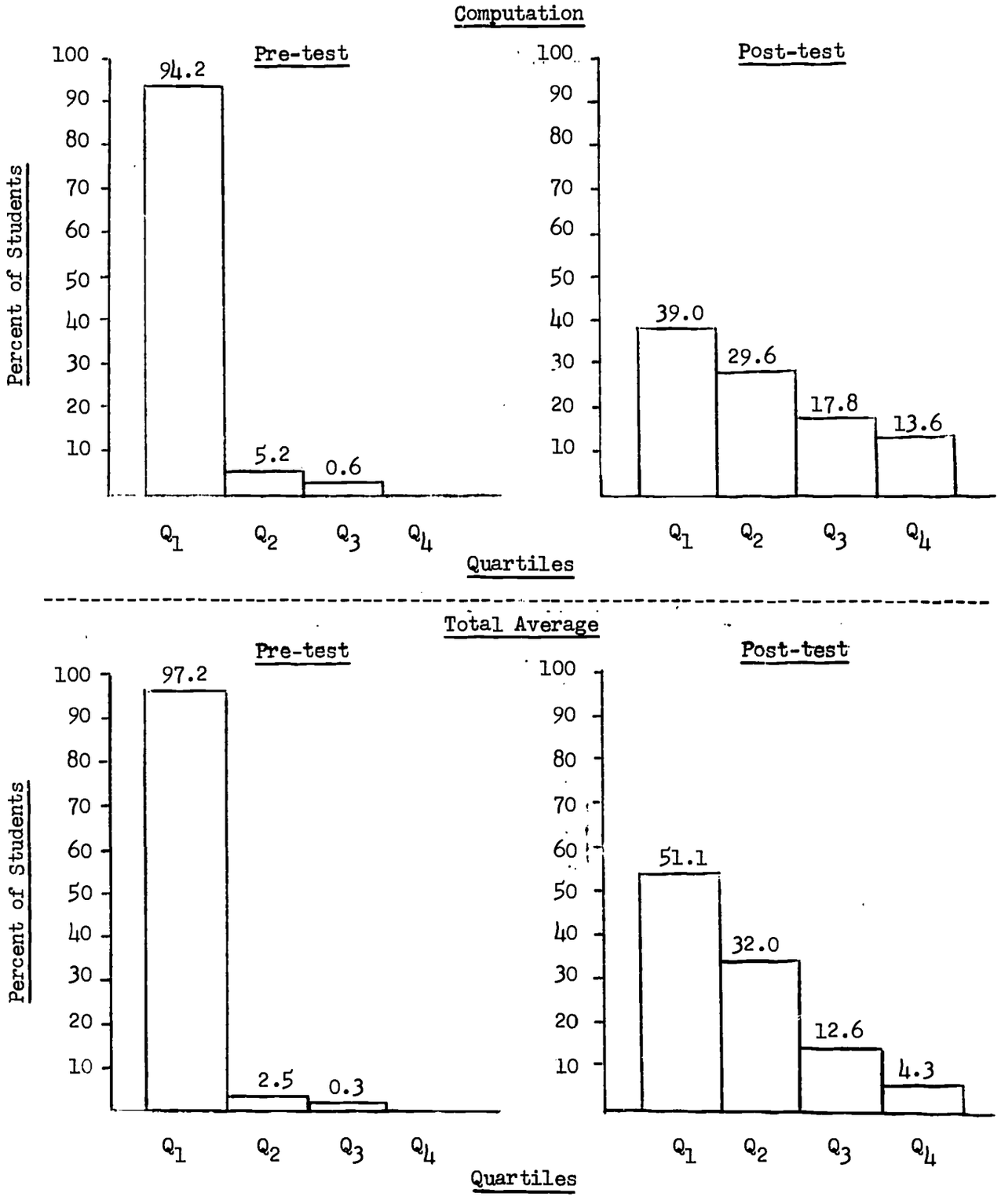
		Arithmetic Computation		Mean Gain	Total Average		Mean Gain
		Pre	Post		Pre	Post	
All Schools	H	6.0	6.6		5.4	6.5	
No. Pupils 242	Md	3.7	4.4	.7	3.8	4.2	.4
Mn I.Q. 82	L	0	2.0		.9	2.4	

SUMMARY OF DATA Cont'd.

Quartile Change
Remedial Math

HISTOGRAM SHOWING MOVEMENT WITHIN QUARTILES AFTER SEVEN MONTHS OF EXPOSURE

Grade 4 (N=324)



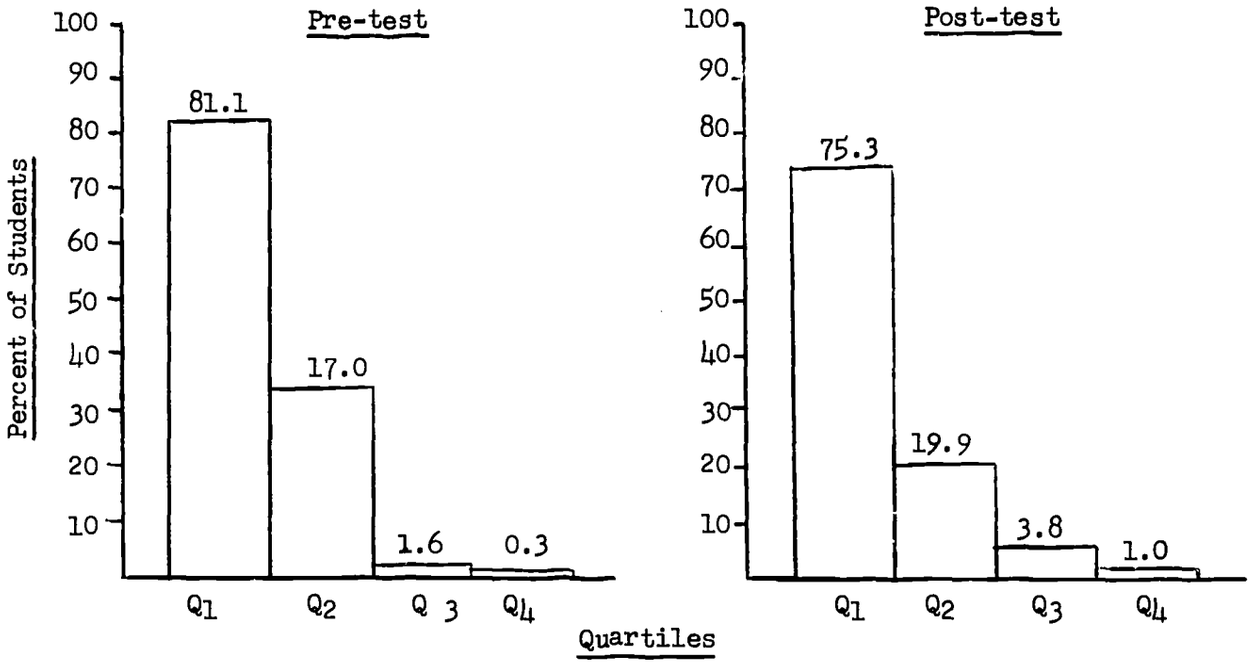
SUMMARY OF DATA Cont'd.

Quartile Change
Remedial Math

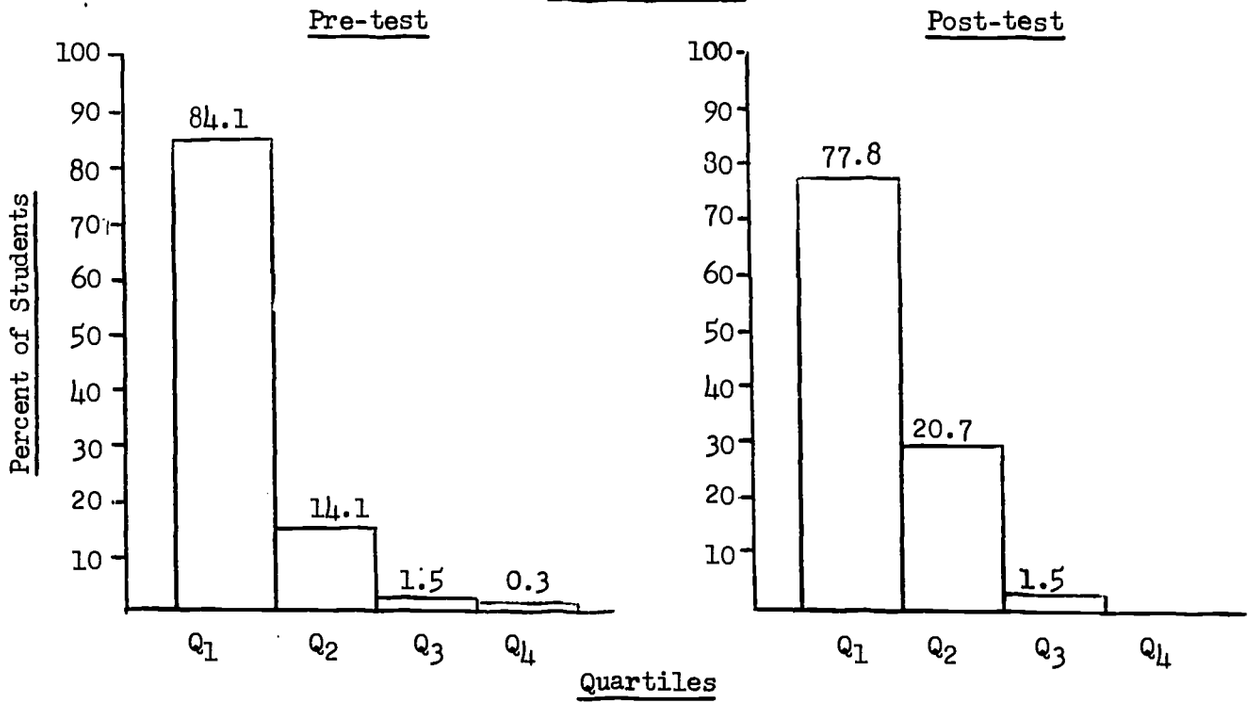
HISTOGRAM SHOWING MOVEMENT WITHIN QUARTILES AFTER SEVEN MONTHS OF EXPOSURE

Grade 5 (N=333)

Computation



Total Average



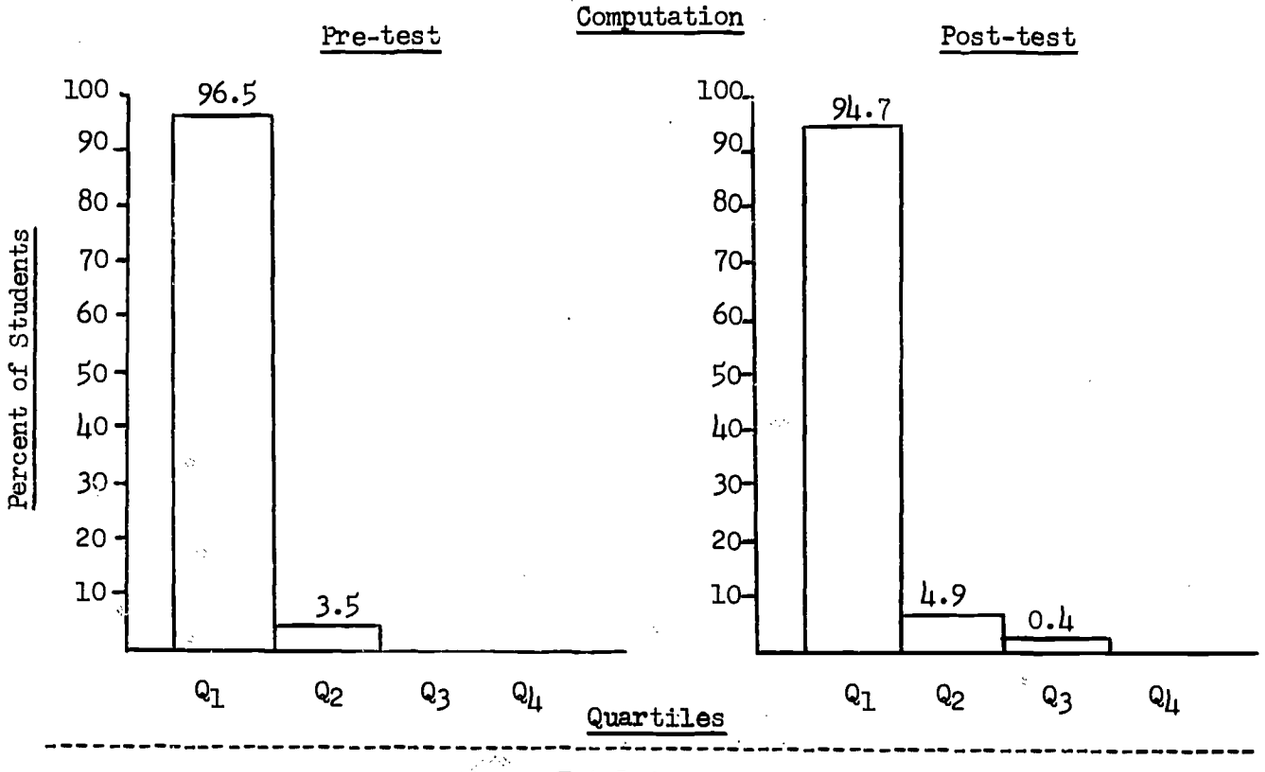
SUMMARY OF DATA Cont'd.

Quartile Change
Remedial Math

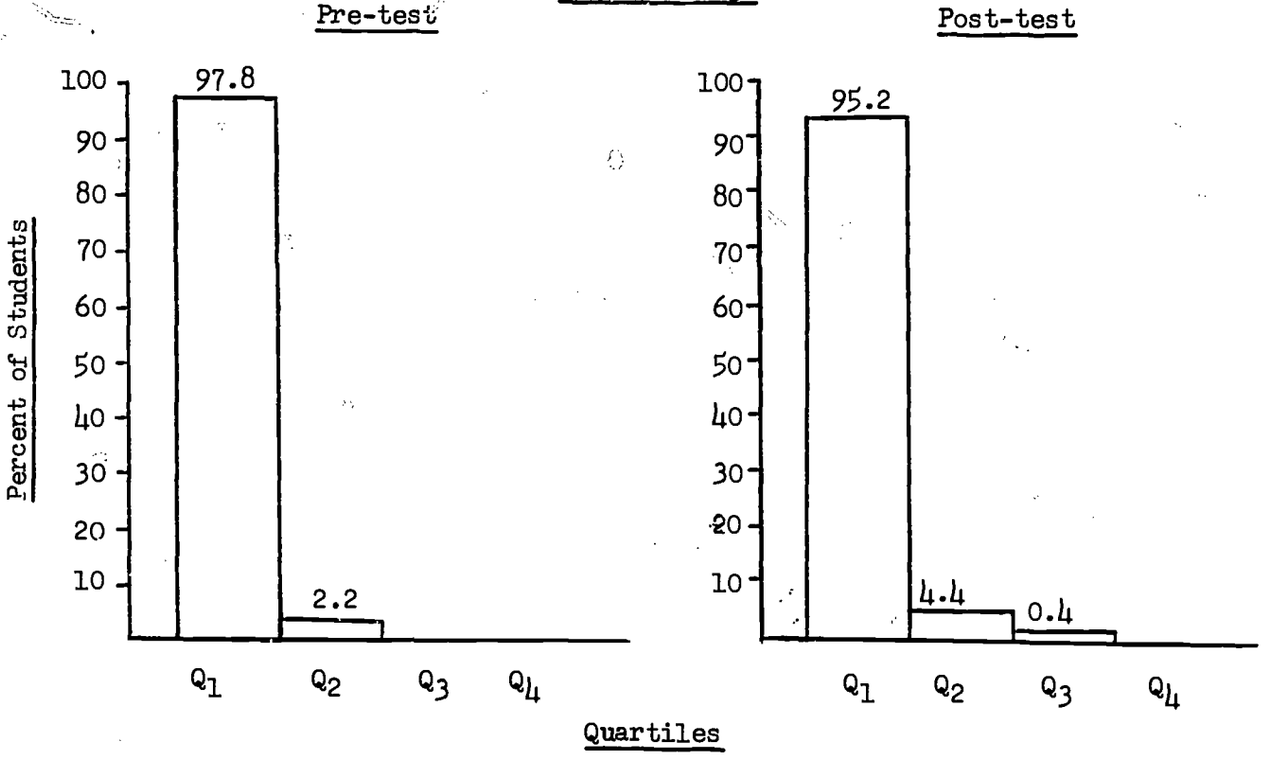
HISTOGRAM SHOWING MOVEMENT WITHIN QUARTILES AFTER SEVEN MONTHS OF EXPOSURE

Grade 6 (N=227)

Computation



Total Average



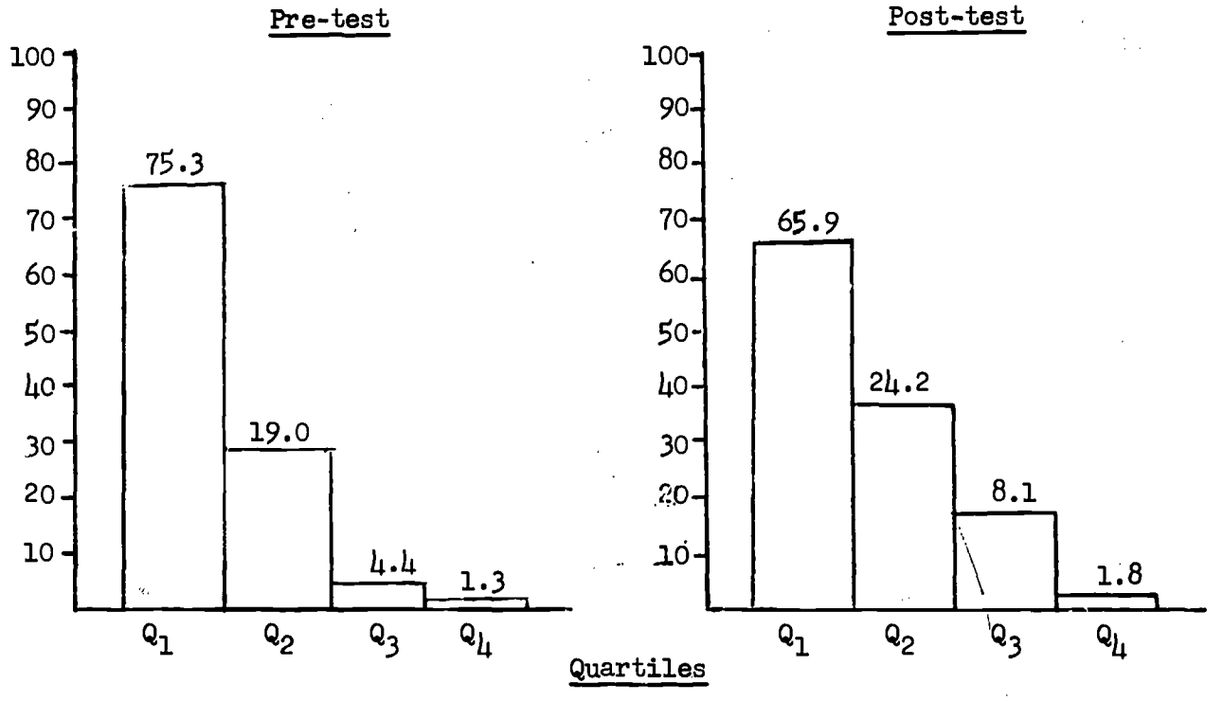
SUMMARY OF DATA Cont'd.

Quartile Change
Nonparticipants in Remedial Math

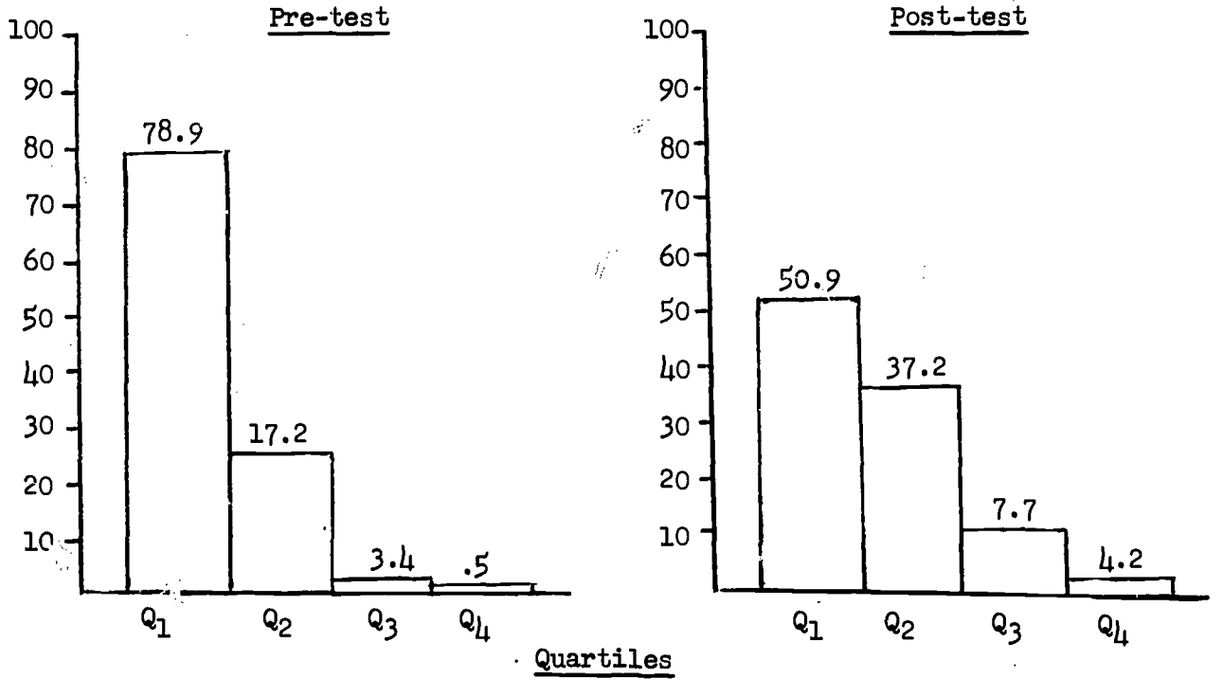
HISTOGRAM SHOWING MOVEMENT WITHIN QUARTILES AFTER SEVEN MONTHS OF EXPOSURE

Grade 5 (N=454)

Computation



Total Average



DISCUSSION OF DATA

The initial selection of students to participate in the program was on teacher opinion of those students who were achieving one year or more below grade level. All 5th-graders were tested to facilitate selection for the coming year and to compare gains of a group of participants opposed to a group that was not serviced by the program. The group of non-participating 5th-graders is not a control group in the sense that they are matched in any way. Many of these nonparticipants can be assumed to be achieving at or near grade level because they were not selected by their teacher to participate.

A comparison of the histograms of Participants (page 6) with that of Nonparticipants (page 8) shows a greater percentage of the Nonparticipants moving into the 3rd and 4th quartile. This should be expected if our assumption that many of them were achieving at or near grade level is correct. On the other hand, when we inspect the mean gain of the two 5th-grade groups (page 4), we see no difference in the progress made for the 7 months of exposure.

The most significant results of the program are reflected in the tables showing the mean gain by grade (page 4). Although a large portion of these students are still functioning below grade level, the fact that they have achieved at the normal expectancy for perhaps the first time in their school careers indicates quite an accomplishment for the program. The 4th-grade results are more than were hoped for. The lesser degree of success in grades 5 and 6 follows a pattern that has been established within this system over a period of years.

An analysis of the data using the t test for significance shows the results for all grade levels to be significant at the 5% level of confidence or better.

CONCLUSIONS

In light of the stated objective, the program was successful. It would appear that, provided the necessary individual attention and the opportunity

CONCLUSIONS Cont'd.

to work at his own level of achievement, the deprived child can show significant progress and that paraprofessionals with a minimum amount of training can provide the necessary supervision to produce positive change at those grade levels.

Total Cost of Program	$77,494.00
Number of Participants	1,378
Per Pupil Cost	$56.23

R E M E D I A L R E A D I N G P R O J E C T S

INTRODUCTION

The Remedial Reading Project consists of two separate programs. Two consultants provide teacher and pupil services at the intermediate level, and 7 remedial reading specialists provide individualized instruction for underachievers at the intermediate level.

The focus of the Consultant Service was increasing student performance by improving the instructional competency of teachers. It took the form of demonstration teaching; teacher observations and critique; building meetings; in-service workshops; student, individual, and group diagnostic service; and selection and use of materials at the determined instructional level. Another phase of the program was the provision of special remedial instruction for a limited number of underachievers in the reading laboratory.

The Reading Specialist Program was initiated this year with emphasis being placed on individualized instruction in small groups. Seven teachers served 20 buildings with each teacher having 2, 3, or 4 buildings, depending on the size of the buildings to which they were assigned. The minimum number per class was 6, and at no time were there to be more than 10 in a group. Students were exposed to the program for 2 one-hour sessions per week. The teachers screened the students to participate in the program by administering the Individual Reading Inventory, the Ginn Graded Word List, and the Wide Range Achievement Tests. Upon completion of the screening, diagnostic instruments were used to establish the instructional level and identify areas of strengths and weaknesses in order to plan a program. Instruments used included the Stanford Diagnostic Reading Test, a Phonics Inventory, and the Durrell Analysis of Reading Difficulty. There were approximately 700 pupils enrolled in the program and 572 were in the program at the end of the year.

OBJECTIVES (Consultant Service)

1. To increase teacher diagnostic competence
2. To improve teacher instructional skills
3. To increase teacher knowledge and application of the instructional level concept
4. To provide diagnostic services
5. To provide remedial services in the reading laboratory for a limited number of children with special reading problems

OBJECTIVES (Reading Specialist)

1. To identify, diagnose, and give remedial help to pupils whose reading achievement is substantially below their measured intellectual capacity
2. To develop the essential skills, abilities, and attitudes of pupils by adapting materials and techniques to the level and needs of the pupils, insuring success in the classroom

EVALUATION TECHNIQUE

Students provided remedial services by consultants were administered pre- and post-Metropolitan Elementary Reading Tests.

Subjective evaluation of services performed by consultants

Remedial specialist administer pre- and post-Stanford Diagnostic Test

SUMMARY OF DATA (Consultant Service)

149 demonstration lessons

208 teacher observations

40 building meetings

12 area meetings

77 teachers serving in 8 buildings

SUMMARY OF DATA Cont'd.

RESULTS OF METROPOLITAN ELEMENTARY READING TEST

ADMINISTERED TO STUDENTS SERVED IN READING LABORATORY

Length of Exposure: 7 Months

		Pre-Test Mean		Post-Test Mean	Mean Gain
Grade 4	N=13	2.9	N=10	3.6	+.7
Grade 5	N=21	2.7	N=17	3.7	+1.0
Grade 6	N=11	2.4	N=5	4.0	1.6

RESULTS OF STANFORD DIAGNOSTIC TEST

ADMINISTERED TO STUDENTS SERVED BY 7 READING SPECIALISTS

Length of Exposure: 8 Months

		Pre-Test Mean		Post-Test Mean	Mean Gain
Grade 4	N=225	2.3	N=198	2.9	.6
Grade 5	N=234	2.9	N=207	3.5	.6
Grade 6	N=190	3.2	N=168	3.7	.5

DISCUSSION OF DATA

The gains made by the students served by the consultants in the reading laboratory are significant at the 5% level of confidence. The gains made by the students served by the reading specialists were not significant. The lack of more impressive results can probably be partially attributed to the erroneous use of a diagnostic test to measure gains in achievement. Another factor may be that the reading specialists are spread too thin and are not able to

DISCUSSION OF DATA Cont'd.

devote enough time to each student to bring about any significant change.

Total Cost of Program	$114,908.00
Number of Participants	745
Per Pupil Cost	$154.23

T U T O R I A L R E A D I N G

INTRODUCTION

The Tutorial Reading Project was the first project funded unded Title I in 1965. The service aspects of the project (personnel and materials) have continued to be funded through Title I; however, a grant from Ford Foundation to Indiana University has been used to finance the research aspects of the program.

This year for the first time, there was tutoring in both first and second grades. Tutoring at the second-grade level was started in order to continue work with those pupils who have not yet developed their reading skills to the point where they can cope with their peers.

The statistical data and complete report are compiled and disseminated by Dr. Ellson, of Indiana University. The information included here is all that was available at the time this report was prepared.

OBJECTIVES

To provide individual instruction in reading as a supplement to classroom instruction in first- and second-grade classes

To obtain information concerning the effectiveness of the tutoring procedures and the optimum conditions for their use

EVALUATION TECHNIQUE

Before and After with Control Group
Metropolitan Readiness Pretest, Metropolitan Achievement Posttest
Ginn Recall Pre- and Posttest
Alphabet Pre- and Posttest
Ginn Pre-Primer, Primer, and First Reader Posttest

SUMMARY OF DATA

	Pretest			Posttest		
	Exper.	Control	Mean Diff.	Exper.	Control	Mean Diff.
Metropolitan.	19.32	19.79	- .47	83.83	64.64	19.19
Ginn Recall	.38	.90	- .52	10.96	6.08	4.88
Alphabet.	4.25	4.18	.07	22.76	16.69	6.07
Ginn Pre-Primer				24.50	18.44	6.06
Ginn Primer				47.77	33.13	14.64
Ginn First Reader				54.57	40.44	14.13
Ginn Pre-Primer and Primer Total Score . . .				72.27	51.56	20.71
Ginn Pre-Primer, Primer, and First Reader Total Score				126.84	92	34.84

N=100 for Experimental Group
N=33 for Control Group

DISCUSSION OF DATA

The effectiveness of the matching procedure is indicated by the Pre-test Mean Difference. The effectiveness of the tutoring is reflected in the Post-test Mean Difference. The significance of these differences will be reported when all the data are compiled by Dr. Ellson, of Indiana University.

Total Cost of Program	$255,123
Number of Participants	1,201
Per Pupil Cost	$212.42

S P E C I A L E D U C A T I O N

INTRODUCTION

Title I funding of the Special Education Program consists of providing consultant services to teachers in the areas of Trainable Mentally Retarded and the Emotionally Disturbed. In addition, 5 special education teachers and 2 speech and hearing therapists provided corrective measures in their discipline. The speech and hearing therapists provided services in 5 public and 3 parochial schools. Since the populations that comprise the categories are different in regard to need and methods of treatment, they will be discussed separately.

OBJECTIVES

1. To remove some of the causal factors affecting the achievement of the emotionally disturbed by placing more emphasis on health, social, and psychological services with the ultimate aim of returning the student to the regular classroom
2. To offer programs which capitalize on the interest of the trainable mentally retarded to provide them with activities designed to prepare them for gainful employment

EVALUATION TECHNIQUE

1. Pre- and post-Metropolitan and Stanford Achievement Tests for the emotionally disturbed and a count of the number of students returned to their regular classroom
2. Evaluation for the trainable mentally retarded with tools of a survey nature: Evaluation of perceptual, sensory-motor, and language development achieved through the use of survey tools developed within the program.

SUMMARY OF DATA

Number of Students Served

	Public Schools	Non-Public Schools	Total
Trainable Mentally Retarded. . . .	30	--	30
Emotionally Disturbed.	40	--	40
Speech and Hearing	164	55	219
	234	55	289

TRAINABLE MENTALLY RETARDED

The I.Q. range of this group, 35 to 55, clearly indicates their limited potential. The purpose of the program is to transform these students into contributing members of the community with the appropriate types of training. The curriculum developed for these students is very basic, providing units on the family, communications, physical development, socialization, recreational interest, skills, and preparation for work-oriented activities. Thirty children participated in this program.

PROGRAM FOR THE EMOTIONALLY HANDICAPPED

Title I funds have been applied in both regular school year programming and in a special summer program. The classes were bused to School #5 which houses special equipment necessary to teach the emotionally handicapped child.

The average program length for the children in the classes for the emotionally handicapped was 8 months. There were 40 children enrolled in the program during the year. Of the 40 children, 13 were returned to their home school, 3 recommended for residential treatment due to the severity of their problems, and 24 will return to the classes for the emotionally handicapped for continued assistance during the 1970-71 school year.

PROGRAM FOR THE EMOTIONALLY HANDICAPPED Cont'd.

An in-service training program which began in September, of 1969, was provided for the teachers. The program was designed to give concrete methods and techniques on dealing with behavioral and educational problems of these children. It consisted of the following elements:

1. Well organized lectures by psychiatrists, psychologists, special educators, speech and language pathologists, and social workers
2. Extensive reading to supplement the lectures
3. Discussions of the techniques used in dealing with actual behavioral or educational problems seen in the classrooms

The staff in this program had the continuing task of providing information, direction, in-service training, lectures, and workshops to organizations, schools, individuals, and administrators in the development of teaching approaches and program structure in the area of emotionally handicapped.

Personnel in the program developed and presented special techniques and approaches used in the program to teachers, consultants, social workers, and psychologists, at a conference during the Indiana State Teachers Convention. Presentations were made within Marion County and in other surrounding counties concerning the special programming within the emotionally handicapped area.

EVALUATION TECHNIQUE

Metropolitan Achievement Tests

Stanford Achievement Tests

SUMMARY OF DATA

Ungraded Level	Pretest	Posttest	Gain	Expected Gain
Primary I (6 Students)	1.6	2.5	.9	.8
Primary II (9 Students)	2.6	3.7	1.1	.8
Elementary I (8 Students)	3.0	3.9	.9	.8
Elementary II (8 Students)	2.3	3.2	.9	.8
Elementary III (8 Students)	4.4	5.4	1.0	.8

DISCUSSION OF DATA

The above table speaks for itself. In every case, the actual Gain is more than the Expected Gain. It should be remembered that these students are ones who, because of some emotional problem, do not achieve normally in the regular classroom. To produce such gains as those exhibited can only affirm the success of this program.

SPEECH AND HEARING THERAPY

This program is designed to service those students in need of corrective measures in either speech or hearing. The following table gives an indication of the extent of the services needed and provided.

Speech Therapy Report

		Parochial Schools (3)	Public Schools (5)
(1)	Screening Tests for Speech.	142	667
(2)	Speech Tests Administered	88	261
(3)	No. of Students Under (2) Who Were Enrolled .	55	164
(4)	No. of Students Under (2) Who Were Put on the Waiting List	9	94
(5)	No. of Students Under (2) Who Were Given Class Help.	4	0
(6)	Breakdown of Problem Areas		
	Articulation	48	137
	Rhythm	6	16
	Delayed Language	0	7
	Cerebral Palsy	0	0
	Cleft Palate	0	1
	Voice.	0	0
	Hearing.	1	3
	Other.	0	0
	Total Enrolled	55	164
(7)	No. of Speech and Hearing Problems Corrected.	25	34
	No. of Students Transferred	2	28
	No. of Students Dropped	2	22
	No. of Students To Be Continued	26	83

Total Cost of Program	$83,046.00
Number of Participants	289
Per Pupil Cost	$287.35

S T U D E N T A C T I V I T Y

INTRODUCTION

This project provided services in two academic areas: music and a science oriented outdoor education program. This phase of the report will deal only with the Outdoor Education Program. The music phase of the project will be reported under Instrumental Music.

This was the third year for the Outdoor Education Program at Bradford Woods. Twelve groups totaling 363 sixth-grade students from 11 schools were provided a 4-day camping experience. Resource persons from the community, local schools, surrounding colleges and universities provided a well planned program of instruction. Classes were held morning, afternoon, and often in the evening. Nature appreciation, health, art, music, language arts, social studies, rocks and fossils, prehistoric life, air and water pollution, entomology, soil, trees, flowers, fish, reptiles, and wildlife were among the many class offerings.

OBJECTIVE

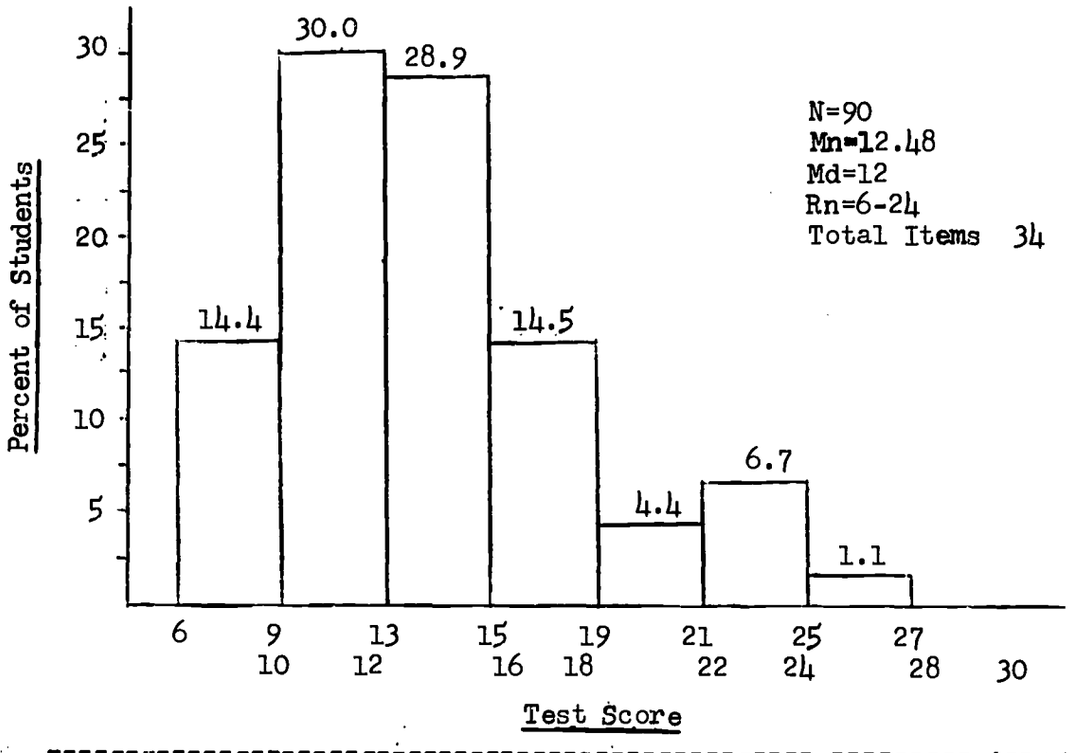
To provide the inner-city student with educational and social experiences outside his local community

EVALUATION TECHNIQUE

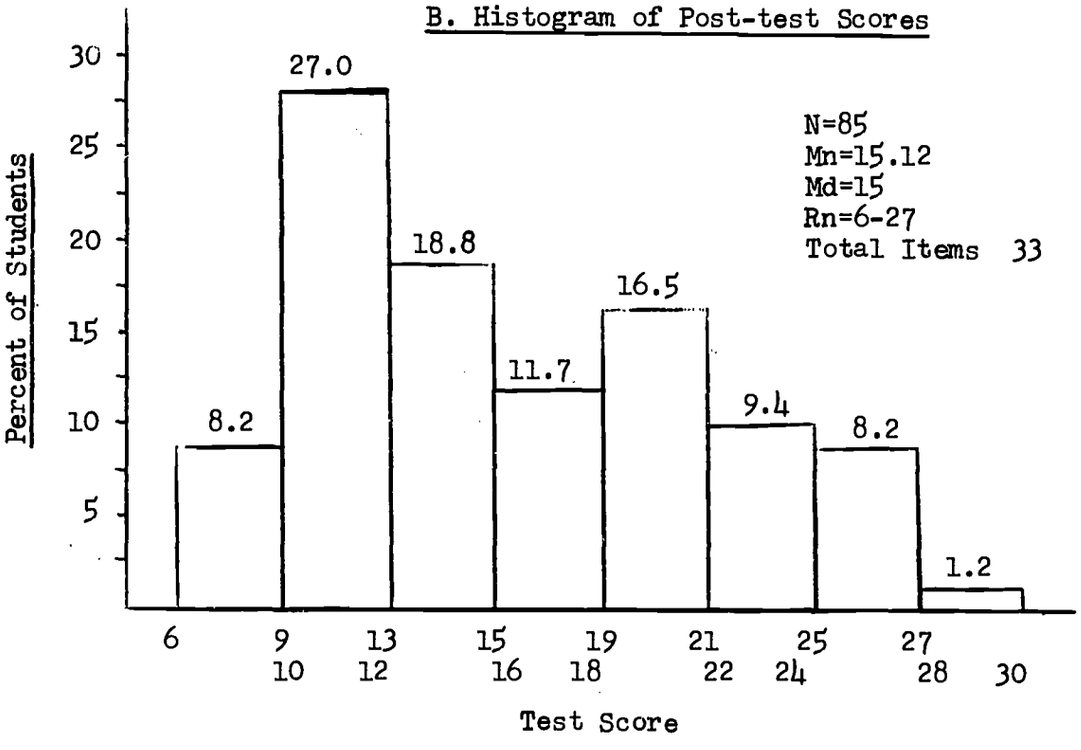
Locally constructed science oriented pre- and posttest administered to a random sample of 3 of the 12 groups

SUMMARY OF DATA

A. Histogram of Pre-test Scores



B. Histogram of Post-test Scores



DISCUSSION OF DATA

Academic success is not the primary objective of this program; however, an endeavor to measure change in achievement in the area of science is perhaps the most valid objective means we have of evaluating the project.

Inspection of the histogram shows a significant shift to the right indicating a larger percentage of students received a higher score as a result of the camping experience. The post-test median score shows a 25% increase over the pre-test median score. In addition, analysis of the data using the t test for significance reveals that the difference is significant at the 5% level of confidence.

The degree of consistency in the range of scores with each administration of the test would tend to indicate that the tests are reliable.

CONCLUSIONS

The gain in knowledge, coupled with observed enthusiasm and classroom displays prepared by students on their return to their home schools would seem to indicate that use of the camping medium to motivate the inner-city youngster is well worth the small cost of financing such a project.

Total Cost of Project	$8,317.00
Number of Participants	363
Per Pupil Cost	$22.91

I N S T R U M E N T A L M U S I C

INTRODUCTION

In addition to the Young Audiences Project, Summer School, and furnishing Band Camp Scholarships to inner-city children, Title I underwrote a "Making Music Relevant" pilot project in one of the inner-city schools this year. Although the Young Audiences Project and Band Camp Scholarships are budgeted in the Student Activity Project, it is reported here along with all other music activities.

OBJECTIVES

To develop an appreciation of music as an art

To provide those children with potential and interest in music the opportunity to further develop this potential

SUMMARY OF DATA

72 concerts by ensembles of professional musicians from the Indianapolis Symphony were given in 22 public schools during the month of May.

20,000 public school pupils participated.

10 teachers conducted summer school classes in 10 schools.

4 guitar specialists provided instruction in 9 schools during the summer.

441 students participated in the summer school program.

168 students participated in the guitar instruction.

70 guitars were provided for the program.

26 students received scholarships to the Music Band Camp.

DISCUSSION OF DATA

The production phase of "Making Music Relevant" was begun in late spring so that materials produced could be field tested prior to the beginning of summer school. Two professional musicians with teaching experience wrote music and produced the material.

DISCUSSION OF DATA Cont'd.

The direction and points of emphasis of the project were as follows:

1. Most of the music chosen was suggested as having a special appeal to inner-city children.

   There are examples of sacred, rock, jazz, blues, and country and western music; and the format allows for the use of music of many more types including traditional tunes which will be added later.

2. Arrangements have a strong rhythmic background in piano, guitar, bass, and drums.

3. Piano parts have been made as easy as possible while retaining interest - e.g., only two notes in the right hand and one in the left.

4. Chord progressions, indicated by letter names and notated also for a sustained chord background, keep attention and interest on the structure of the music and provide a basis for the creative experience of improvisation as well as more class involvement in orchestration.

5. Cassette recordings of the rhythmic and harmonic background of the numbers add aural demonstrations to the visual materials provided. It is usually agreed that music is learned largely by the imitative method.

The limited trial of this project at School #4 indicates that the above emphases meet the needs of the students involved. One number by this group was featured at the Summer Instrumental Music Festival and was well received by the audience.

The project continued through the summer school period with the addition of 2 guitar specialists and expanded to 9 schools for the 6-week period. The 70 guitars provided served 2 or more of the 168 participants. Approximately

DISCUSSION OF DATA Cont'd.

40 of the students in this program participated in the Instrumental Music Festival along with 1,200 pupils from the regular summer school classes.

Per Pupil Cost "Making Music Relevant"	$28.95
Per Pupil Cost Young Audiences	$.35
Per Pupil Cost Band Camp Scholarships	$74.23
Per Pupil Cost Summer School	$20.79
Total Music Expenditure	$23,974.00

T E A C H E R A I D E S

OBJECTIVES

To relieve the classroom teacher of certain routine tasks so that the teacher may spend this time for planning or actual teaching

To provide a classroom assistant to carry out non-technical classroom duties under the direct supervision of the teacher

DESCRIPTION OF THE PROGRAM

Over the past 3 years this program has experienced continuous growth and broad acceptance throughout the Intensified Education Area. With the reduction in the size of the target area, we have been able to assign from 2 to 7 aides to a building. With more aides in the buildings, their services have not been spread so thin, and the aide has been more effective.

During the school year, 121 aides were employed to fill 111 slots. Ten aides resigned during the year. Four of the 10 were unhappy with the job; and the others left due to illness, maternity, or other personal reasons. The amount of turnover has continued to decrease each year, and the applicants seeking these positions have continued to increase.

This year 2 additional job descriptions were established for para-professionals: math aide and community aide. Thirty-five of the aides employed worked in these capacities. A description of the duties of these aides is discussed under the math program and social service program respectively.

Past evaluations have revealed how aides were being used and areas where training would be helpful. More recent evaluation has indicated that over 90% of the aides have been good to very efficient in the performance of assigned tasks. Current evaluation is an individual rating of each aide on performance.

DESCRIPTION OF PROGRAM Cont'd.

They are rated in their building during the regular school year and by their instructor in the summer in-service workshop. Excellent ratings from both sources qualify the aide for a merit pay raise which is built into the para-professional pay schedule. At the close of the 1970 summer workshop, 31 aides qualified for the merit raise. For the previous school year, 13 aides earned the raise. This should be some indication of the quality of the aides in the opinion of those with whom they work.

Cost of Program	$206,582.00
Number of Participants	14,543
Per Pupil Cost	$14.20

S U M M E R S C H O O L

The summer school programs are an extension of programs conducted during the regular school year with the exception of S.M.A.R.T. This is a program of an enrichment nature for some above average 5th- and 6th-grade pupils.

Summer programs supported by Title I during 1970 included the following:

7 classes of grade-one students in Tutorial Reading Program

5 classes of parochial students in Tutorial Reading Program

14 classes of Special Education

14 music teachers in 10 buildings

3 social workers in the NYC Program

1 social worker in the Learning Center

10 social workers serving S.M.A.R.T., Tutorial Program, and all other students in target-area summer school

3 teachers and aides at Fletcher Place Community Center

1 Industrial Arts class

42 teacher aides

5 teachers and one consultant in S.M.A.R.T.

10 student aides in S.M.A.R.T. Program

5 buses with drivers and attendants

OBJECTIVE OF S.M.A.R.T. (Summer Motivation, Acceleration, Reinforcement, Training)

To create a program which will challenge the pupils' abilities and permit them to expand their creativity in the areas of their interests

DESCRIPTION OF S.M.A.R.T.

For the past 2 years, 5 classes of 5th- and 6th-grade students from inner-city schools who have average potential or better have been provided the opportunity to participate in this special program. One hundred students from 29 inner-city schools were bused in to a central location where they attended classes and/or participated in special educational activities for 4 to 6 hours per day. Each class consisted of at least one teacher, one male and female student aide, and 20 students. With the exception of one, the student aides were obtained from the 4 high schools in the target area. Two full-time social workers were assigned to the project. A week prior to the beginning of the program, a cadre of 13 social workers visited the home of every participant to meet parents, answer questions, and to assure enrollment of the child. Transportation was provided for all children and breakfast was served at school.

The students were encouraged to pursue activities in which they were particularly interested, and the teachers correlated these activities to related areas of the curriculum. Though every group functioned differently, they were offered the opportunity to attend any or all of several general sessions of a specialized nature. These sessions included speakers from NASA, Pakistan, Nigeria, Hawaii, and "On Being an Artist."

Numerous trips were made, followed by related activities. Some of the places visited were as follows: Heiken Puppet Workshop, Children's Museum, Conner-Prairie Farm, Indiana State Museum, Soldiers and Sailors Monument, Museum of Indian Heritage, Central Library, Eli Lilly Center, Scottish Rite Cathedral, Riley Home, Harrison Home, Hendricks House, Water Plant, Hook's Historical Drug Store, Indianapolis Zoo, and Glendale Shopping Center.

A variety of projects and activities were pursued. They included puppetry, astronomy projects, language practice with tape recorders, vocabulary study, individual and committee study using audio-visual equipment, practice

DESCRIPTION OF S.M.A.R.T., Cont'd.

in using the Thirteen Thinking Skills, refining questioning techniques, Man: A Course of Study, science projects, Festival of Man, dramatization, speeches and debates, arts and crafts, composition, conservation study, and projects to increase skills in modern math and in research techniques.

The children were also provided the opportunity to experience a variety of eating styles. This included the quick "hamburger-type" lunch, the more formal dining room dinner, and the planning and preparation of a picnic or party-type meal.

The social worker met with the parents, teachers, and children from each group. The pupils gave demonstrations and answered questions about the various projects in which they were involved.

As a culminating activity, the parents were invited to meet the Assistant Superintendent of Curriculum and Supervision and the Assistant Superintendent of Special Services. The topic of discussion was, "The Parent's Role in Continuing Motivation at Home." An exhibit and tour of the "Operation S.M.A.R.T. School" was also provided at this time. Over 80 parents and 70 children were in attendance.

Total Cost of Summer School	$119,657.00
Number of Students Served	1,883
Per Pupil Cost	$63.54

I N - S E R V I C E T R A I N I N G

OBJECTIVES

1. To acquaint new teachers assigned to Intensified-Education Area Schools with the special problems faced by inner-city children so that they may better meet the needs of these children through improved personal relationships
2. To train teacher aides to perform non-teaching tasks so that they may provide more efficient and effective assistance to the classroom teacher
3. To train teachers in the use of reading diagnostic tools in an effort to enable them to better serve the individual needs of children with reading problems
4. To acquaint counselors with types of jobs readily available and the current employment practices and procedures of local industries

DESCRIPTION OF PROGRAMS

A 3-week workshop for 15 teachers to be used as reading resource teachers for their respective buildings was conducted during the month of June. These teachers are to serve as liaison between the consultant and new teachers or any teacher having very little training in the teaching of reading.

A 3-week workshop for 61 teachers new to the system and assigned to inner-city schools was conducted in August, 1970. The purpose of the workshop was to acquaint the teachers with physical facilities and characteristics of the students they would be working with. In addition, instruction in lesson planning, special methods and techniques, and class organization were presented.

A one-week workshop was conducted for 101 teacher aides in August, 1970. Aides were trained to make a variety of teaching aids which can be used for small group reinforcing instruction. They were also trained to print script and cursive writing and to operate all types of audio-visual equipment.

DESCRIPTION OF PROGRAMS Cont'd.

The 7 counselors visited 44 industries during the summer. Their purpose was to learn firsthand the employment policies and job opportunities of the businesses and industries within the metropolitan area.

Special Education staff arranged in-service workshops for teachers of Trainable Mentally Retarded and Emotionally Disturbed children at various times during the school year and in August, of 1970.

Cost of Program $34,223.00

A N C I L L A R Y S E R V I C E S

INTRODUCTION

As was pointed out in the INTRODUCTION to the program, it is extremely difficult to try to assess the individual impact of Social Service, Psychological Service, Food Service, or Counseling on change in achievement patterns. The objective evaluation of the 3 major academic programs is made on the assumption that each of these services made some contribution to whatever changes were made. This report, then, will deal only with the numbers of students served and the types of services provided by the various ancillary services.

SOCIAL SERVICE

OBJECTIVES

1. To help improve attendance, modify behavior patterns, improve or strengthen motivation, develop self-confidence, and strengthen self-image
2. To intensify work with parents toward achievement of a more meaningful home/school relationship
3. To strengthen the co-ordination and co-operation between the school and community agencies which have a bearing on the child's educational opportunities

SUMMARY OF DATA

9,477 students received social services.

95 group meetings held with parents (865 parents involved).

402 group meetings held with students (1,988 students involved).

6,893 visits to homes were made.

8,760 casework interviews were made with students.

SUMMARY OF DATA Cont'd.

6,080 casework interviews were made with parents.

1,276 casework interviews were made with others.

12,381 collaborative interviews were made with school personnel.

52 referrals to Marion County Juvenile Court were made.

1,666 referrals were made to other community agencies.

51 case conferences were held with other community agencies.

2,162 contacts were made with workers from other agencies.

100 students from 5 parochial schools received social services.

The Title I Social Service Staff Consists Of:

2 Consultants

12.6 Social Workers

3 Clerks

5 Area Social Workers

15 Community Aides

DISCUSSION OF DATA

Though the amount of Social Service available to the inner-city schools has doubled since the advent of Title I, emphasis has not been placed on doubling the number of cases but on working more intensively with the cases already opened. This approach enabled the worker to perform preventively as well as remedially with the school, family, and community factors which affect the child's progress in the education process and the parents' position in the process.

This year we employed 15 paraprofessional community aides who worked under the direct supervision of the social worker. In most cases this was a parent from the school community. The program proved to be of great value in that it provided many more contacts with families than would have been possible otherwise.

DISCUSSION OF DATA Cont'd.

The number of group meetings with parents increased; and, although none of the groups were large, they were helpful to the parents. The parents who participated seemed to benefit greatly; and, for every parent involved in a group meeting, the the lives of several children were involved since usually the parent had more than one child in the school.

The school social workers continued to encounter a heavy workload in the area of economic need. Expended effort, with resultant strain on field and office staff, was seen in meeting the demands for extra services in relation to the "packaged lunch" program. As the program developed in the target area during the year, large numbers of children were screened to determine their eligibility.

The area social worker program continued to operate satisfactorily. The 5 area workers functioning in the district handled a high volume of environmental-type situations which permitted a higher concentration of effort on more demanding problems by the regular school social worker.

This year 5 catholic elementary schools received social work services. Besides direct services to children and their families, consultation in relation to problems of the children and their parents was also given to the staff of the schools.

An additional service was initiated this year by the Social Services Department. The Learning Center, offering classes for pregnant school-age girls, was opened at the local YWCA, January 5, 1970, with 9 students enrolled. It is reported here because Title I funds were used in the social service aspect of the program. The plan was to provide a flexible classroom experience for a limited number of girls on a pilot basis with the expectation of expanding the program when possible. The primary goal is reducing the large

DISCUSSION OF DATA Cont'd.

number of "dropouts" and/or academic failures prevalent in this group of students, as well as formalizing a multl-disciplinary approach on a community-wide basis to the complicated problems inherent in unwed pregnancy, especially in the school-age group including those in elementary and secondary grades.

Total Cost of Program	$255,390.00
Number of Participants	9,477
Per Pupil Cost	$26.94

FOOD SERVICE

OBJECTIVE

To improve punctuality, attendance, attitudes, and achievement by removing the frustration of hunger

SUMMARY OF DATA

17 public elementary schools served breakfast.

5 parochial schools served breakfast.

Food Service Staff

1 Supervisor

1 Clerk

35 Food Handlers (Part time, 1 1/2 - 3 hours daily)

Number of Participants

2,201 Public Elementary Students

309 Parochial Elementary Students

2,510 Total

1,912 Average Daily Attendance

94% of the participants are in grades K - 6 and Special Education.

DISCUSSION OF DATA

The food service program has been in operation since the spring of 1966. Though the number of schools served has been reduced in our efforts to concentrate services, the percentage of students being served in the eligible schools has increased slightly. One new parochial school was added to the list of those serving breakfast.

The expenditures for food charged against the Title I account do not reflect the actual expenditure for that account. The State Department reimburses Title I 15 cents per meal from funds provided through the Department of Agriculture. This is approximately 80% of the cost of food. Included in our expenditures is the food cost, $2,967, for students in the Outdoor Education Program for two weeks in the fall and two weeks in the spring. The per pupil cost of the program reported below is based on the actual expenditures from both sources.

Previous evaluation of the program, which was performed by administering questionnaires to students, teachers, and principals, indicated that punctuality, attendance, and achievement were improved in the opinion of teachers and principals. A majority of the students indicated they no longer got hungry during the morning and their attitude toward school personnel in positions of authority (teacher, principal) had changed.

The breakfast consists of cereal, a sweet roll, 4 ounces of orange juice, and 1/2 pint of milk. The menu cannot be altered very much because we must have a disposable, packaged-type service; however, the nutritional value is adequate. The major problem confronting the program still is space. In some cases the stage is used; in one instance, the basement hall is used with the children standing to eat.

The program will continue next year, and an effort will be made to initiate the program in the 3 schools that are not currently participating.

Total Program Cost	$94,587.60
Number of Participants	2,510
Cost Per Pupil	$37.68

GUIDANCE

OBJECTIVES

1. To help meet the physical, social, emotional, and educational needs of all children
2. To develop an awareness and orient the administrative staff, teachers, and parents of the role of the guidance counselor
3. To provide guidance services for both individuals and groups
4. To assist pupils in broadening their understanding of their natural curiosity in the world of work
5. To work in close co-operation with the community and other social agencies to help with individual needs
6. To encourage pupils to develop good habits of attendance, punctuality, neatness, and study skills
7. To work in close co-operation with the classroom teacher to better understand the individual child
8. To involve teachers, parents, administrators, social workers, and psychologists through individual and group conferences to provide a better understanding of problems confronting the individual child

SUMMARY OF DATA

- 7 counselors placed in 7 buildings
- 5,735 students served
- 1:819 counsel pupil ratio
- 4,874 student conferences
  - 69 principal conferences
  - 150 social worker conferences
  - 70 parent conferences
  - 249 teacher conferences
  - 143 student group conferences
  - 62 other conferences

DESCRIPTION OF PROGRAM

The focus of the Guidance Program took a somewhat different direction during the past year. Rather than concentrate on vocational guidance in grades 6, 7, and 8, the counselors provided general guidance for the entire population of the schools they were assigned to.

It was anticipated that problems might arise in the adjustment of school personnel, other disciplines, and the counselor to a new, full-time guidance person in the building. However, the counselor in each school was able to adjust his/her duties to the administrative structure of the school and develop meaningful guidance activities. The conferences listed above illustrate the scope of the counseling services. These conferences do not reflect each contact made by the counselors but represent regularly scheduled conferences only.

During the summer, the counselors visited 44 business and industrial firms in the local area over a 7-week period and used one week in a special workshop to share experiences.

As in the past, representatives of local business and industry were very receptive and voiced high praise for the summer visitation program.

Total Cost of Program	$79,259.00
Number of Students Served	5,735
Per Pupil Cost	$13.82
Summer In-Service	$17,951.00

N E G L E C T E D P R O G R A M

In 1966, funds were provided under P.L. 89-10, Title I, to support Neglected and Delinquent Institutions. The funds are made available to the institutions through the public schools. The school system is responsible for the administration of the funds and has accepted some responsibility in providing personnel to staff their programs. The institutions to receive Title I support and the amount allocated to all the institutions combined is determined by the State.

Initially, one Delinquent Institution (Marydale) and 3 Neglected Institutions (Lutherwood, General Protestant Home, and Marion County Children's Welfare Home) were designated as those to receive support through the Indianapolis Public Schools. Marydale closed at the end of the 1967-68 school year. In FY 1970, the Indianapolis branch of the United Methodist Home was added to our Neglected Institutions to receive support.

The types of programs or ways of spending their allocation is left pretty much to the discretion of the superintendent of each institution. The only restriction is that the funds must be used to supplement their budget and cannot be used to supplant budget items.

Uses made of the funds during this year are as follows:

United Methodist Home provided individual tutoring two evenings per week during the regular school year. Excess money after salaries was used to purchase recreation equipment for their two Indianapolis homes.

Lutherwood provided a licensed teacher two evenings per week to supervise and assist girls in their evening study hour. In addition, they provided a licensed teacher to work with small groups in reading and math for 8 weeks during the summer. An industrial arts teacher also conducted classes for 6 weeks during the summer period. A backstop was constructed for their ball diamond.

Protestant Home used a licensed teacher as recreational director for 10 hours per week during the regular school year. This is a supplement to their budget. During the summer, he worked full time (8 hours daily) and had a female paraprofessional assisting him. A licensed teacher worked with small groups of children in the academic subjects for 3 hours daily for 8 weeks during the summer. Three sets of World Book Encyclopedias and 2 dictionaries were purchases.

Marion County Children's Welfare Home used their total allocation during the summer. A full-time social worker, recreation director, and female paraprofessional worked through August 28, 1970. A licensed teacher worked with small groups of children for 3 hours daily for an 8-week period.

Total Cost of Program	$18,310.00
Number of Participants	152
Per Pupil Cost	$120.46

TITLE I ANNUAL EVALUATION REPORT

Name of Project Tutorial Reading Program

Total Cost of Project $272,000.00 Number of Participants 1621

Date Started Sept. 1969 Date Ended July, 1970 Will it be Continued Yes

I. What type and age of children are participating in the project? Indicate grade levels, public and/or non-public, dropouts, and preschoolers when appropriate.

The children who took part in the first grade program were chosen from the lower third of their first grade enrollment on the basis of a predictive index which combines the teacher's prognosis with scores on the Metropolitan Readiness Test given at the end of the kindergarten year.

The children who took part in the second grade program were chosen in three ways. Children who were tutored in the first grade were placed in Group I. Children who transferred from other schools were placed in Group II. Teachers selected other children having reading problems and were placed in Group III. Out of Groups I and II, one half were selected for the experimental group and one half were selected for a control group. Children in Group III were placed in the Service group. Each child selected for tutoring was tutored by the same tutor for a scheduled 15 minutes each day throughout the school year.

II. Describe the projects. Give a brief narrative description highlighting their unique or outstanding features.

The objectives of the project are two-fold; first, service, to provide individual instruction in reading and math as a supplement to classroom instruction in first and second grade classes, and second, evaluation, to obtain information concerning the effectiveness of the tutoring procedures and the optimum conditions for their use.

Programed Tutorial Reading is a plan of teaching based on established principles of learning and on the technique of programed instruction, to provide individual help in reading at the first and second grade levels. The tutoring procedures are systematically programed, and are specified in great detail so that tutors with limited education and work experience can be trained to a high degree of effectiveness in a few hours.

During the 1969-70 school year 14 schools included in the Tutorial Reading Project used the Ginn Basal Reader Series and 6 schools used the Macmillan Basic Reader Series. Tutoring in the schools using the Ginn series utilized the Ginn Tutorial Kit. In accord with the program prescribed by Ginn Tutorial, sight-reading was tutored from the basal reader series, which was also being used in the classrooms. Comprehension and word analysis was tutored from books included in the Ginn Tutorial Kit. In schools using the Macmillan Series, tutors utilized the Macmillan Tutorial Kit. Sight-reading was tutored from the readers, comprehension and word analysis from books included in the Macmillan Tutorial Kit.

Described from the point of view of service, the 1969-70 project provided tutoring for 1621 children. When any of the 1265 originally chosen children left the school during the year, others were tutored for part of the year on the recommendations of teachers.

III. What is the total number of children who are involved in your Title I program? Count a child only once regardless of how many programs he participates in.

Participants in the program were selected from the lower 1/3 of the school first grade enrollment based on the Metropolitan Readiness Test given at the end of the kindergarten year from twenty selected inner-city schools.

Participants in the second grade program were selected from previously tutored children, from transferred children, and from teacher selected 'service' children.

First Grade Program

Experimentals (Using Ginn Materials in Classroom Plus Tutoring): 564
Controls (Using Ginn Materials in Classroom only) 154
Experimentals (Using Macmillan Materials in Classroom Plus Tutoring): 177
Controls (Using Macmillan Materials in Classroom Only) 50
Total First Grade Experimentals: 741
Total First Grade Controls: 204
First Grade Service: 80

Second Grade Program

Experimentals (Using Ginn Materials in Classroom Plus Tutoring): 444
Controls (Using Ginn Materials in Classroom only) 223

Service Children tutored part of the year: 356

Parochial Program:

Experimentals: 117

IV. (a) Have you used any state funds to augment your Title I program? If so, describe the programs involved giving data such as: objectives, number of participants, and level of funding.

No.

(b) Have you coordinated your Title I program with other federally funded programs?

Yes.

(c) What were these programs and what agencies were involved?

Cooperation with school social workers and community aides in having meetings with the parents of children in the Tutorial Reading Program. A film showing tutoring procedures and an opportunity for parents to observe their own children being tutored were interesting points made at each school. Follow-up meetings were arranged at the request of the parents at most schools.

Psychological Service Department has cooperated in testing problem children at an early age.

The Breakfast Program and School Lunch Program improves Childrens' learning abilities and attention span. A child who is not hungry will respond and progress in his tutoring session as well as in the classroom.

V. What effect has the Title I program had on the administrative structure of educational practice in your school system?

We were the first program in this school system using paraprofessionals. This program has brought about the greater use of paraprofessionals in other programs.

VI. What evidence is there that the projects have been effective?

This program has been a controlled experiment with a control group. Each year the experimental group has shown a significantly greater gain in all aspects of testing than the control group.

The following tests are used in making the evaluation:

First Grade

1. Pre-Tests
   Metropolitan Readiness Test - Form A
   Pre-Ginn (or Macmillan) Vocabulary Test
   Pre Alphabet Test

2. Post Tests
   Metropolitan Achievement Test - Primary I - Form B
   Alphabet Post Test
   Ginn (or Macmillan) Post Vocabulary Test
   Ginn (or Macmillan) Pre-Primer Test
   Ginn (or Macmillan) Primer Test
   Ginn (or Macmillan) 1st Reader Test

2nd Grade

1. Pre-tests
   Second Grade Metropolitan Readiness Test

2. Post Tests
   Ginn (or Macmillan) Second Reader I Achievement Test
   Ginn (or Macmillan) Second Reader II Achievement Test

VII. Can you cite specific success stories; for example, a specific child or children who benefited from the project? Describe briefly. Names are not requested, but use the child's age or grade.

The overall effect of tutoring upon class assignment was significant at the .05 level (χ^2 = 7.62, df = 2). Tutoring resulted in a 43 o/o increase in the proportion of children who were consistently promoted, a 25 o/o reduction in the proportion retained at the end of the first or second grade, and a 42 o/o reduction in the proportion assigned to special education classes.

The effect of tutoring upon class assignment (promotion vs. retention) was significant at the .01 level (χ^2 = 10.8, df = 1). Tutoring resulted in an increase of 31 per cent in the proportion of children promoted and a reduction of 46 per cent in the proportion of children retained in the first grade.

VIII. Describe any training program involving both teachers and teacher aides. (tutors). What was the total number of participants in each project? What was the general pattern or activity involved?

Special in-service meetings were held with teachers and principal in each school to better understand each child.

Special reports on each child's progress are exchanged between the tutor and the teacher with copies of the reports being used as a measure of the child's progress.
Tutors receive eighteen hours pre-training. In-service workshops are conducted as needed throughout the year.

IX. Parent Participation

Parent meetings are conducted in each school with a film showing tutoring procedures and an opportunity to see their own children being tutored.

X. Please submit supportive materials and newsclips of your Title I project.

Note: See following supportive materials enclosed.

XI. Any additional statements by the LEA in the evaluation for fiscal year 1970 are encouraged.

(See attached information for 1970 - 1971 Tutorial Math Program.)

TUTORIAL PROGRAMS - Math
Dec. 15, 1970

A tutorial mathematics program is being introduced in nine inner-city schools in the first grade. Evaluation of this program will require three groups: the first will involve programs similar to our reading tutorial program, designed to teach both mathematical concepts and a technical language of new math. (Programed Tutorial Mathematics). The second group will utilize games and similar exercises designed to teach mathematical concepts through practice with concrete objects and activities but with little or no emphasis on the technical language (Mathematical Games); and the third, a control group will receive no tutoring.

SELECTION

In each of nine schools, forty-five children in the Tutorial Mathematics Program will be selected from the over-all first grade enrollment. Two tutors will be assigned to each of these nine schools. Each tutor will tutor 15 children every day. One group of 15 children will be assigned to Programed Mathematics, 15 children will be assigned to Mathematical Games Program, and 15 children will be assigned to the Mathematical Control group.

EVALUATION

All children will be Pre-tested and Post-tested. Their progress throughout the year will be charted in the recording procedures.

INDIANA UNIVERSITY
Department of Psychology
PSYCHOLOGY BUILDING
BLOOMINGTON, INDIANA 47401

1820
150
1970

December 30, 1970

Enclosed are data summaries of the Indianapolis 1969-70 Ginn I Program. A report covering this program is at present not anticipated. However, the following data are comparable to the "Report of Results of Tutorial Reading Project, Indianapolis Public Schools, 1968-69," Tables 2 and 3 (Parts A only), a copy of which is enclosed.

The tables which follow are adapted from an evaluation form provided by the Indianapolis Public Schools. The score distributions are copies of the distributions used for the analyses presented in "Indianapolis 69-70 Ginn I Test Score Results" (enclosed). All these data are internal documents of the Programed Tutorial Project (D.G. Ellson, Professor of Psychology; P.L. Harris, Director, Programed Tutoring) and have not as yet been written up for publication or distribution.

David Field

David Field
Programed Tutoring Statistical Clerk

David Field
John Stubbins
July 21, 1970

INDIANAPOLIS 69-70 GINN I TEST SCORE RESULTS

Pre-test means and t's:

Test	Means Exp.	Means Cont.	Diff.	t	p	% Chance* Scores Exp.	% Chance* Scores Cont.	Chance** Score	Total Possible
N	100	39							
Metropolitan Reading Readiness (1-4)	19.3	19.8	-0.5	0.3	N.S.	51.0	51.3		
Alphabet	4.3	4.2	0.1	0.1	N.S.				
Ginn Recall	0.4	0.9	-0.5	1.3	N.S.				

Post-test means and t's:

N	100	39							
Alphabet	22.8	16.7	6.1	3.3	$<.01$				
Ginn Recall	11.0	6.1	4.9	5.6	$<.001$				
Pre-primer	24.5	18.4	6.1	4.4	$<.001$	1.0	15.4	9	36
Primer	47.8	33.1	14.7	4.9	$<.001$	3.0	30.8	21	75
First Reader	54.6	40.4	14.2	4.5	$<.001$	12.0	23.1	29	105
Pre-primer + Primer Total	72.3	51.6	20.7	5.1	$<.001$	1.0	15.4	30	111
Pre-primer, Primer, and First Reader Total	126.8	92.0	34.8	5.1	$<.001$	1.0	15.4	59	216
Metropolitan Achievement Test Total (1-4)	83.8	64.6	19.2	3.7	$<.001$				

* "% Chance Scores" is the number of subjects whose score is less than or equal to that score which would be gotten if every question had been answered by guessing, divided by the number of subjects in the group.

** "Chance Score" is that score which would be gotten (in the "long run") if every question had been answered by guessing only, e.g., for a 100 question test, each question with four alternatives, the chance score would be 25.

Indianapolis Ginn I, 1969-1970

TABLE A TEST SCORE RESULTS

Name of Test or Subtest	Test Form	Grade Level	Length of Project in Months
Metropolitan Readiness Test Total of subtests 1-4 (Pre-test)	A	Given in Kindergarten	9 months

OBJECTIVE

See cover letter

Number of Subjects	Date of Pretest	Date of Post Test
Experimental group = 100 Control group = 39	Given in Kindergarten, May, 1969	

Experimental Mean	Experimental Standard Deviation	Control Mean	Control Standard Deviation	Difference Between Means of Experimental and Control Groups
19.32	7.60	19.79	7.43	(E-C) = -.47

Experimental Median	Control Median	Quartile Deviation
19	19	Experimental = 4.5, Control = 4.0

Number of Experimental Subjects in Control Quartiles	Quartile 1	Quartile 2	Quartile 3	Quartile 4
Local Norms x National Norms ____ (Indicate which norms used)	(lowest)			(highest)
Experimental Subjects	30	21	27	22
Control SUbjects	10	10	9	10

Indianapolis Ginn I, 1969-1970

TABLE B TEST SCORE RESULTS

Name of Test or Subtest	Test Form	Grade Level	Length of Project in Months
Alphabet (Pre-test) *			9 months

OBJECTIVE
See cover letter.

Number of Subjects	Date of Pretest	Date of Post Test
Experimental group = 100 Control group = 39	September, 1969	

Experimental Mean	Experimental Standard Deviation	Control Mean	Control Standard Deviation	Difference Between Means of Experimental and Control Groups
4.25	5.79	4.18	5.74	(E-C) = 0.07

Experimental Median	Control Median	Quartile Deviation
6	6	Experimental = 3.0, Control = 3.0

Number of Experimental Subjects in Control Quartiles	Quartile 1	Quartile 2	Quartile 3	Quartile 4
Local Norms X National Norms ____ (Indicate which norms used)	(lowest)			(highest)
Experimental Subjects	26	25	22	27
Control SUbjects	10	10	9	10

* This test was constructed by the Programed Tutorial project.

Indianapolis Ginn I, 1969-1970

TABLE C TEST SCORE RESULTS

Name of Test or Subtest	Test Form	Grade Level	Length of Project in Months
Alphabet (Post-test) *			9 months

OBJECTIVE

See cover letter

Number of Subjects	Date of Pretest	Date of Post Test
Experimental group = 100 Control group = 39		May, 1970

Experimental Mean	Experimental Standard Deviation	Control Mean	Control Standard Deviation	Difference Between Means of Experimental and Control Groups
22.76	6.92	16.69	10.55	(E-C) = 6.07

Experimental Median	Control Median	Quartile Deviation
26	20	Experimental = 3.5, Control = 8.5

Number of Experimental Subjects in Control Quartiles	Quartile 1	Quartile 2	Quartile 3	Quartile 4
Local Norms __X__ National Norms _____ (Indicate which norms used)	(lowest)			(highest)
Experimental Subjects	7	18	39	36
Control SUbjects	10	10	9	10

* This test was constructed by the Programed Tutorial project.

Indianapolis Ginn I, 1969-1970

TABLE D TEST SCORE RESULTS

Name of Test or Subtest	Test Form	Grade Level	Length of Project in Months
Ginn Recall (Pre-test) *			9 months

OBJECTIVE
See cover letter

Number of Subjects	Date of Pretest	Date of Post Test
Experimental group = 100 Control = 39	September, 1969	

Experimental Mean	Experimental Standard Deviation	Control Mean	Control Standard Deviation	Difference Between Means of Experimental and Control Groups
0.38	0.91	0.90	2.31	(E-C) = 0.52

Experimental Median	Control Median	Quartile Deviation
0	0	Experimental = 0.0, Control = 0.0

Number of Experimental Subjects in Control Quartiles	Quartile 1	Quartile 2	Quartile 3	Quartile 4
Local Norms X National Norms ____ (Indicate which norms used)	(lowest)			(highest)
Experimental Subjects	26	26	23	25
Control SUbjects	10	10	9	10

* This test was constructed by the Programed Tutorial project.

Indianapolis Ginn I, 1969-1970

TABLE E TEST SCORE RESULTS

Name of Test or Subtest	Test Form	Grade Level	Length of Project in Months
Ginn Recall (Post-test) *			9 months

OBJECTIVE

See cover letter.

Number of Subjects	Date of Pretest	Date of Post Test
Experimental group = 100 Control group = 39		May, 1970

Experimental Mean	Experimental Standard Deviation	Control Mean	Control Standard Deviation	Difference Between Means of Experimental and Control Groups
10.96	3.64	6.08	4.85	(E-C) = 4.88

Experimental Median	Control Median	Quartile Deviation
12	5	Experimental = 2.5, Control = 5.6

Number of Experimental Subjects in Control Quartiles	Quartile 1	Quartile 2	Quartile 3	Quartile 4
Local Norms X National Norms ____ (Indicate which norms used)	(lowest)			(highest)
Experimental Subjects	2	10	24	64
Control SUbjects	10	10	9	10

* This test was constructed by the Programed Tutorial project.

Indianapolis Ginn I, 1969-1970

TABLE J TEST SCORE RESULTS

Name of Test or Subtest	Test Form	Grade Level	Length of Project in Months
Ginn Pre-primer Achievement Test*	100 Edition	Grade 1	9 months

OBJECTIVE
See cover sheet

Number of Subjects	Date of Pretest	Date of Post Test
Experimental group = 100 Control = 39		May, 1970

Experimental Mean	Experimental Standard Deviation	Control Mean	Control Standard Deviation	Difference Between Means of Experimental and Control Groups
24.50	5.15	18.44	7.91	(E-C) = 6.06

Experimental Median	Control Median	Quartile Deviation
24	19	Experimental = 3.5, Control = 5.5

Number of Experimental Subjects in Control Quartiles	Quartile 1	Quartile 2	Quartile 3	Quartile 4
Local Norms X National Norms ____ (Indicate which norms used)	(lowest)			(highest)
Experimental Subjects	3	9	41	47
Control SUbjects	10	10	9	10

*Post-test

Indianapolis Ginn I, 1969-1970

TABLE K TEST SCORE RESULTS

Name of Test or Subtest	Test Form	Grade Level	Length of Project in Months
Ginn Primer Achievement Test (Post-Test)	100 Edition	Grade one	9 months

OBJECTIVE

See cover letter

Number of Subjects	Date of Pretest	Date of Post Test
Experimental group = 100 Control group = 39		May, 1970

Experimental Mean	Experimental Standard Deviation	Control Mean	Control Standard Deviation	Difference Between Means of Experimental and Control Groups
Mean = 47.77	S. D. = 14.78	Mean = 33.13	S. D. = 15.98	(E-C) = 14.64

Experimental Median	Control Median	Quartile Deviation
48	29	Experimental=11.0, Control=11.5

Number of Experimental Subjects in Control Quartiles	Quartile 1	Quartile 2	Quartile 3	Quartile 4
Local Norms x National Norms ____ (Indicate which norms used)	(lowest)			(highest)
Experimental Subjects	2	13	23	62
Control SUbjects	10	10	9	10

Indianapolis Ginn I, 1969-1970

TABLE L TEST SCORE RESULTS

Name of Test or Subtest	Test Form	Grade Level	Length of Project in Months
Ginn First Reader Achievement Test (Post-test)	100 Edition	Grade one	9 months

OBJECTIVE

See cover letter

Number of Subjects	Date of Pretest	Date of Post Test
Experimental group = 100 Control group = 39		May, 1970

Experimental Mean	Experimental Standard Deviation	Control Mean	Control Standard Deviation	Difference Between Means of Experimental and Control Groups
Mean = 54.57	S.D. = 20.14	Mean = 40.44	S.D.= 14.71	(E-C) = 14.13

Experimental Median	Control Median	Quartile Deviation
52	36	Experimental=16.5, Control=7.5

Number of Experimental Subjects in Control Quartiles	Quartile 1	Quartile 2	Quartile 3	Quartile 4
Local Norms X National Norms ____ (Indicate which norms used)	(lowest)			(highest)
Experimental Subjects	12	14	14	60
Control SUbjects	10	10	9	10

Indianapolis Ginn I, 1969-1970

TABLE M TEST SCORE RESULTS

Name of Test or Subtest	Test Form	Grade Level	Length of Project in Months
Ginn Pre-primer + Ginn Primer Total Scores (Post-test)	100 Edition	Grade One	9 months

OBJECTIVE

See cover letter

Number of Subjects	Date of Pretest	Date of Post Test
Experimental group = 100 Control group = 39		May, 1970

Experimental Mean	Experimental Standard Deviation	Control Mean	Control Standard Deviation	Difference Between Means of Experimental and Control Groups
72.27	18.27	51.56	22.61	(E-C) = 20.71

Experimental Median	Control Median	Quartile Deviation
72	46	Experimental = 13.0, Control = 15.0

Number of Experimental Subjects in Control Quartiles	Quartile 1	Quartile 2	Quartile 3	Quartile 4
Local Norms X National Norms ____ (Indicate which norms used)	(lowest)			(highest)
Experimental Subjects	3	7	30	60
Control SUbjects	10	10	9	10

Indianapolis Ginn I, 1969-1970

TABLE N TEST SCORE RESULTS

Name of Test or Subtest	Test Form	Grade Level	Length of Project in Months
Ginn Pre-Primer, Primer, and First Reader Scores (Post-test)	100 Edition	Grade one	9 months

OBJECTIVE

See cover letter

Number of Subjects	Date of Pretest	Date of Post Test
Experimental group = 100 Control group = 39		May, 1970

Experimental Mean	Experimental Standard Deviation	Control Mean	Control Standard Deviation	Difference Between Means of Experimental and Control Groups
126.84	37.05	92.00	35.84	(E-C) = 34.84

Experimental Median	Control Median	Quartile Deviation
126	81	Experimental = 30.0, Control = 28.0

Number of Experimental Subjects in Control Quartiles Local Norms X National Norms (Indicate which norms used)	Quartile 1 (lowest)	Quartile 2	Quartile 3	Quartile 4 (highest)
Experimental Subjects	2	10	30	58
Control SUbjects	10	10	9	10

Indianapolis Ginn I, 1969-1970

TABLE 0 TEST SCORE RESULTS

Name of Test or Subtest	Test Form	Grade Level	Length of Project in Months
Metropolitan Achievement Test (Post-test)	B	Grade one	9 months

OBJECTIVE

See cover letter

Number of Subjects	Date of Pretest	Date of Post Test
Experimental group = 100 Control group = 39		May, 1970

Experimental Mean	Experimental Standard Deviation	Control Mean	Control Standard Deviation	Difference Between Means of Experimental and Control Groups
83.83	26.47	64.64	27.59	(E-C) = 19.19

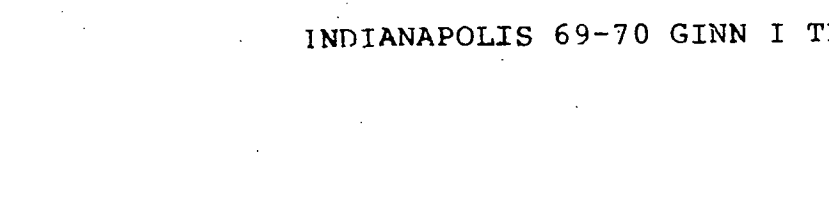
Experimental Median	Control Median	Quartile Deviation
80	61	Experimental = 17.0, Control = 20.5

Number of Experimental Subjects in Control Quartiles	Quartile 1	Quartile 2	Quartile 3	Quartile 4
Local Norms X National Norms ____ (Indicate which norms used)	(lowest)			(highest)
Experimental Subjects	4	14	34	48
Control SUbjects	10	10	9	10

INDIANAPOLIS 69-70 GINN I TEST SCORE DISTRIBUTIONS

GRAPH 1

Quartile Deviation = 4.5
Quartile 1: Σ =237, n=25, mean=9.48
Quartile 2: Σ = 431, n=25, mean=17.24
Quartile 3: Σ =540, n=25, mean=21.60
Quartile 4: Σ =724, n=25, mean=28.96



EXPERIMENTAL
METROPOLITAN READING READINESS TEST

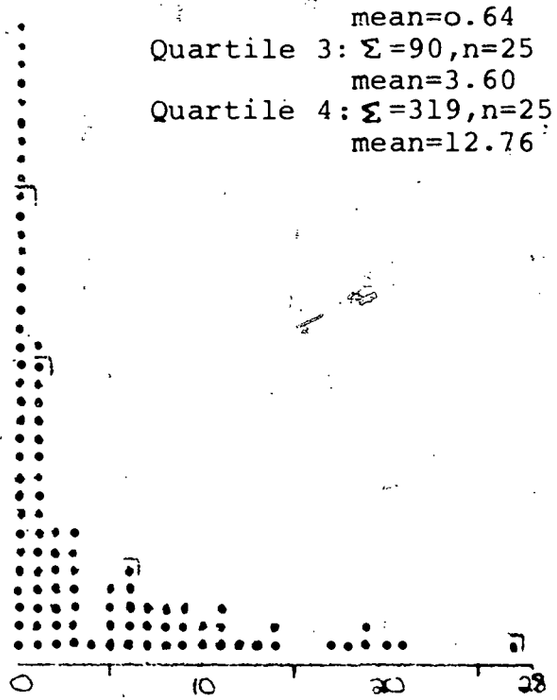
GRAPH 2

Quartile Deviation = 4.0
Quartile 1: Σ =102, n=10, mean=10.20
Quartile 2: Σ =179, n=10, mean=17.90
Quartile 3: Σ =203, n=9, mean=22.56
Quartile 4: Σ =288, n=10, mean=28.80

CONTROL
METROPOLITAN READING READINESS TEST

GRAPH 3

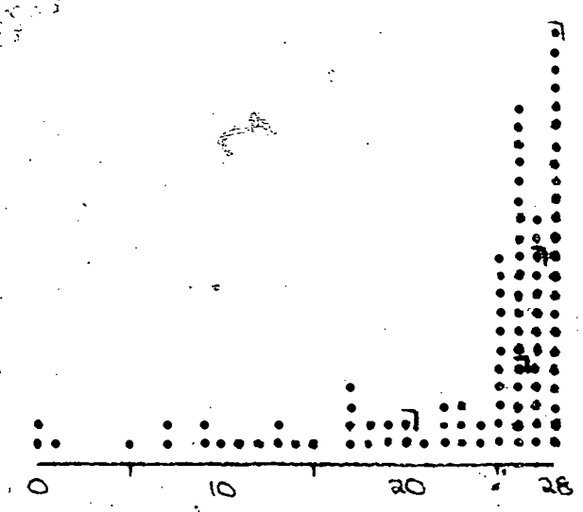
Quartile Deviation = 3.0
Quartile 1: Σ=0, n=25
mean=0
Quartile 2: Σ=16, n=25
mean=o.64
Quartile 3: Σ=90, n=25
mean=3.60
Quartile 4: Σ=319, n=25
mean=12.76



EXPERIMENTAL
ALPHABET PRE-TEST

GRAPH 4

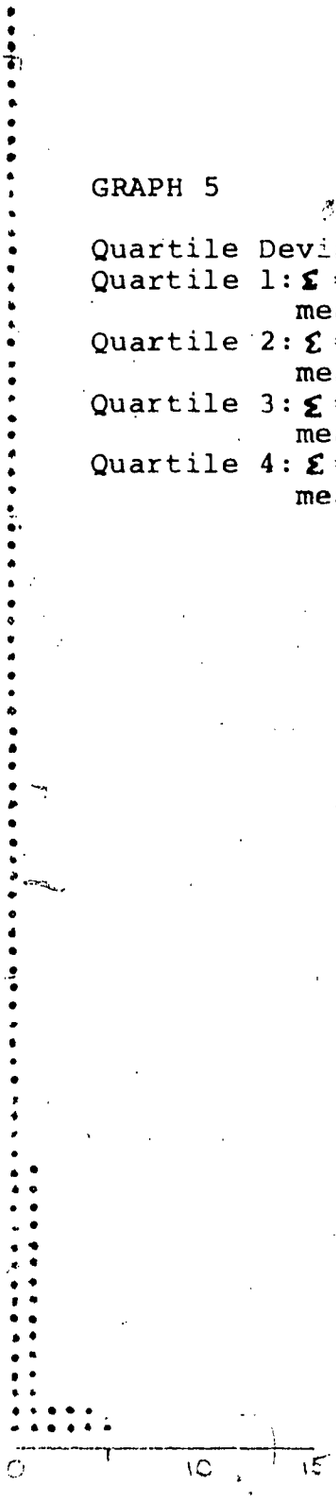
Quartile Deviation = 3.5
Quartile 1: Σ=308, n=25
mean=12.32
Quartile 2: Σ=609, n=25
mean=24.36
Quartile 3: Σ=661, n=25
mean=26.44
Quartile 4: Σ=698, n=25
mean=27.92



EXPERIMENTAL
ALPHABET POST-TEST

GRAPH 5

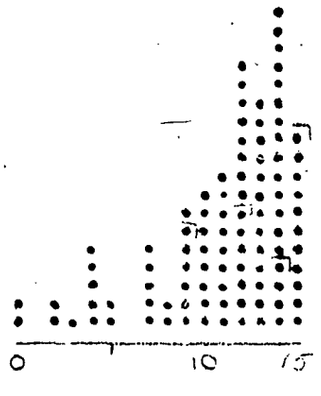
Quartile Deviation = 0.0
Quartile 1: Σ =0, n=25
mean=0
Quartile 2: Σ =0, n=25
mean=0
Quartile 3: Σ =0, n=25
mean=0
Quartile 4: Σ =38, n=25
mean=1.52



EXPERIMENTAL
GINN RECALL
PRE-TEST

GRAPH 6

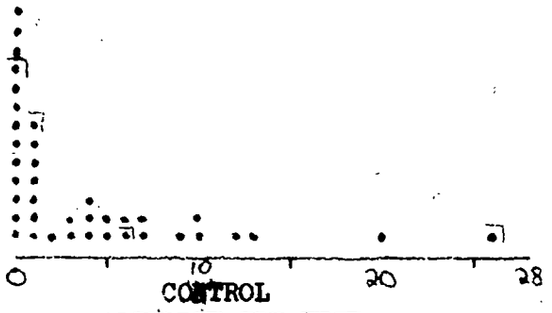
Quartile Deviation = 2.5
Quartile 1: Σ =142, n=25
mean=5.68
Quartile 2: Σ =272, n=25
mean=10.88
Quartile 3: Σ =321, n=25
mean=12.84
Quartile 4: Σ =361, n=25
mean=14.44



EXPERIMENTAL
GINN RECALL
POST-TEST

GRAPH 7

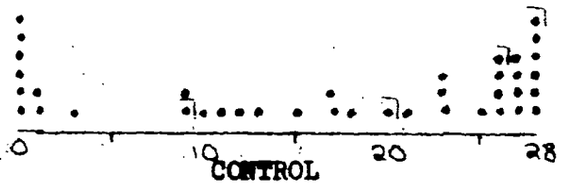
Quartile Deviation = 3.0
Quartile 1: Σ =0, n=10
mean=0.00
Quartile 2: Σ=7, n=10
mean=0.70
Quartile 3: Σ =36, n=9
mean=4.00
Quartile 4: Σ =120, n=10
mean=12.00



ALPHABET PRE-TEST

GRAPH 8

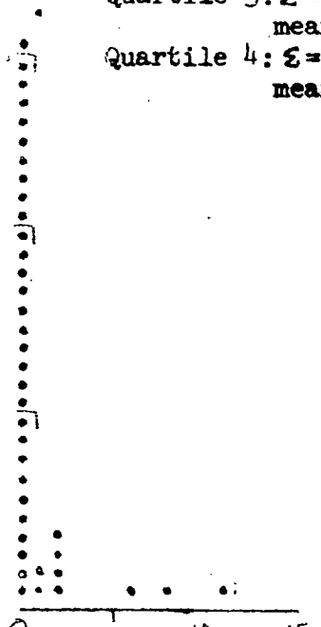
Quartile Deviation = 8.5
Quartile 1: Σ =14, n=10
mean=1.40
Quartile 2: Σ =142, n=10
mean=14.20
Quartile 3: Σ =219, n=9
mean=24.33
Quartile 4: Σ =276, n=10
mean=27.60



ALPHABET POST-TEST

GRAPH 9

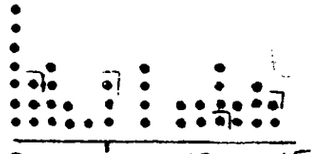
Quartile Deviation = 0.0
Quartile 1: Σ=0, n=10
mean=0.00
Quartile 2: Σ=0, n=10
mean=0.00
Quartile 3: Σ=0, n=9
mean=0.00
Quartile 4: Σ=35, n=10
mean=3.50



CONTROL
GINN RECALL
PRE-TEST

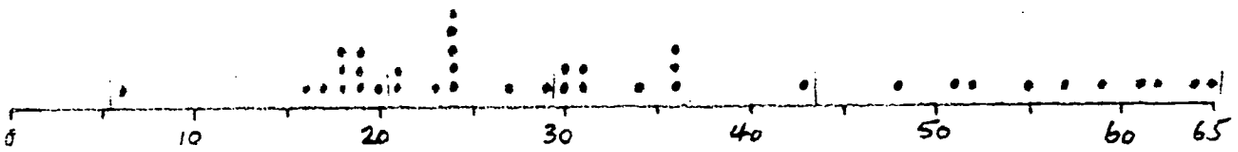
GRAPH 10

Quartile Deviation = 5.0
Quartile 1: Σ=3, n=10
mean=0.30
Quartile 2: Σ=33, n=10
mean=3.30
Quartile 3: Σ=77, n=9
mean=8.56
Quartile 4: Σ=124, n=10
mean=12.40



CONTROL
GINN RECALL
POST-TEST

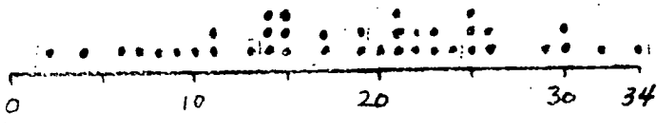
GRAPH 13



CONTROL PRIMER

Quartile Deviation = 11.5
Quartile 1: Σ =170, n=10, mean=17.00
Quartile 2: Σ =241, n=10, mean=24.10
Quartile 3: Σ =307, n=9, mean=34.11
Quartile 4: Σ =574, n=10, mean=57.40

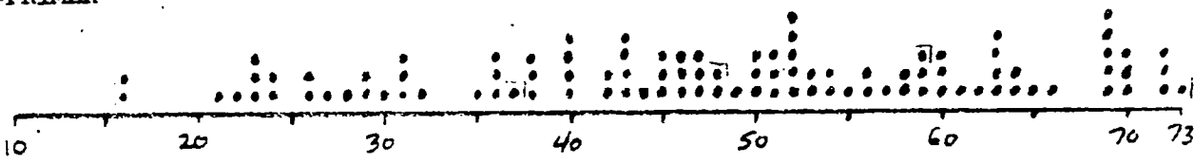
GRAPH 11



CONTROL PRE-PRIMER

Quartile Deviation = 5.5
Quartile 1: Σ =81, n=10
mean=8.10
Quartile 2: Σ =159, n=10
mean=15.90
Quartile 3: Σ =197, n=9
mean=21.89
Quartile 4: Σ =282, n=10
mean=28.20

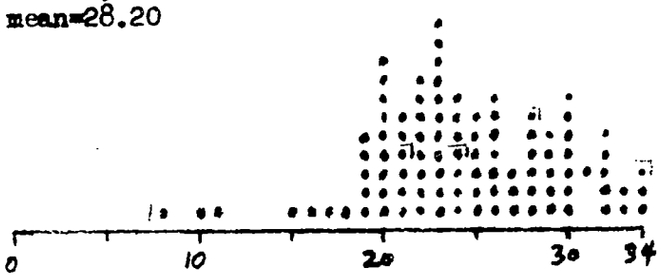
GRAPH 14



EXPERIMENTAL PRIMER

Quartile Deviation = 11.0
Quartile 1: Σ =692, n=25, mean=27.68
Quartile 2: Σ =1084, n=25, mean=43.36
Quartile 3: Σ =1343, n=25, mean=53.72
Quartile 4: Σ =1658, n=25, mean=66.32

GRAPH 12

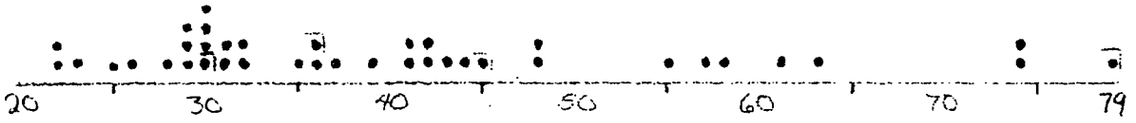


EXPERIMENTAL PRE-PRIMER

Quartile Deviation = 3.5
Quartile 1: Σ =454, n=25, mean=18.16
Quartile 2: Σ =567, n=25, mean=22.68
Quartile 3: Σ =653, n=25, mean=26.12
Quartile 4: Σ =776, n=25, mean=31.04

GRAPH 15

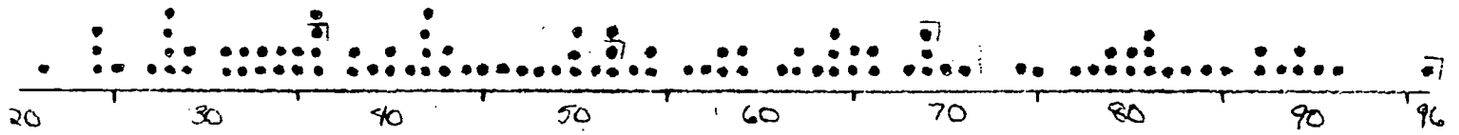
Quartile Deviation = 7.5
Quartile 1: Σ =263, n=10, mean=26.30
Quartile 2: Σ =323, n=10, mean=32.30
Quartile 3: Σ =374, n=9, mean=41.56
Quartile 4: Σ =617, n=10, mean=61.70



CONTROL FIRST READER

GRAPH 16

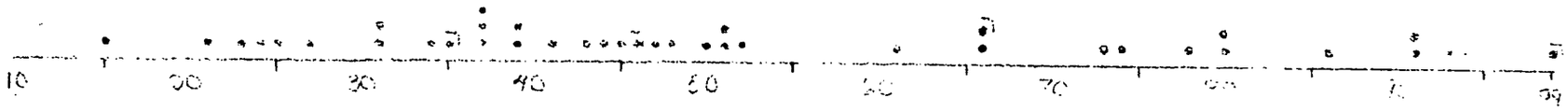
Quartile Deviation = 16.5
Quartile 1: Σ =753, n=25, mean=30.12
Quartile 2: Σ =1110, n=25, mean=44.40
Quartile 3: Σ =1537, n=25, mean=61.48
Quartile 4: Σ =2057, n=25, mean=82.28



EXPERIMENTAL FIRST READER

GRAPH 17

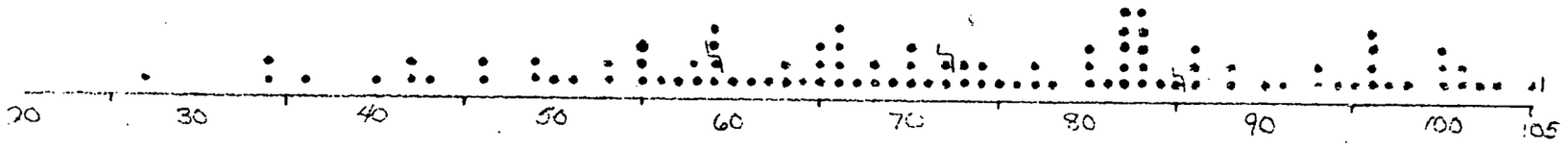
Quartile Deviation = 15.0
Quartile 1: Σ =266, n=10, mean=26.60
Quartile 2: Σ =408, n=10, mean=40.80
Quartile 3: Σ =492, n=9, mean=54.67
Quartile 4: Σ =845, n=10, mean=84.50



CONTROL PRE-PRIMER AND PRIMER

GRAPH 18

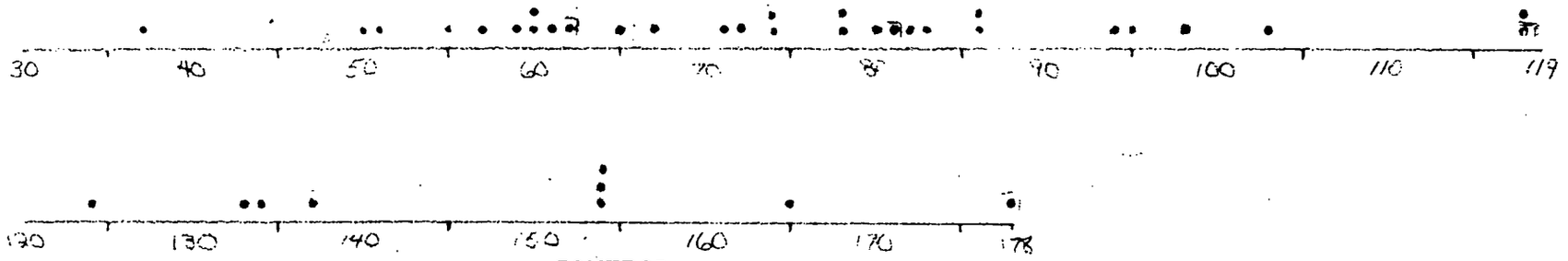
Quartile Deviation = 13.0
Quartile 1: Σ =1207, n=25, mean=48.28
Quartile 2: Σ =1647, n=25, mean=65.88
Quartile 3: Σ =1992, n=25, mean=79.68
Quartile 4: Σ =2381, n=25, mean=95.24



EXPERIMENTAL PRE-PRIMER AND PRIMER

GRAPH 19

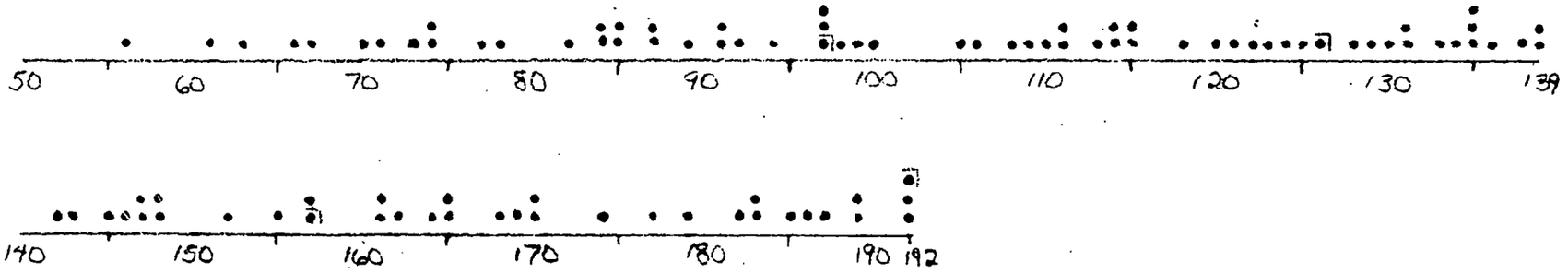
Quartile Deviation = 28.0
Quartile 1: Σ =552, n=10, mean=55.20
Quartile 2: Σ =740, n=10, mean=74.00
Quartile 3: Σ =845, n=9, mean=93.89
Quartile 4: Σ =1451, n=10, mean=145.10



CONTROL
PREPRIMER, PRIMER, AND FIRST READER

GRAPH 20

Quartile Deviation = 30.0
Quartile 1: Σ =1978, n=25, mean=79.12
Quartile 2: Σ =2801, n=25, mean=112.04
Quartile 3: Σ =3503, n=25, mean=140.12
Quartile 4: Σ =4402, n=25, mean=176.08



EXPERIMENTAL
PREPRIMER, PRIMER, AND FIRST READER

From:
News Bureau
Indiana University
306 N. Union St.
Bloomington, Ind. (47401)

FOR RELEASE SUNDAY,
MAY 24, 1970

TUTORING PROGRAM TERMED A SUCCESS

BLOOMINGTON, Ind.--Slowly and deliberately Isidore struggled through the story, reading aloud. He paused several times, but doggedly kept pushing ahead until he stumbled on a tiny word--as.

His young face twisted in concentration. The word still eluded him--and there it was twice! Finally, Peg Zimmer, his tutor, prompted; the light dawned in Isidore's eyes. Grinning, he read the whole sentence, obviously understanding that the old sled was "as good as new."

Isidore is a first grader in an inner-city school in Indianapolis. He is being given special tutoring because he started the year in the bottom third of his class in reading readiness. He is one of hundreds of first and second graders in 45 school systems in Indiana and the nation who are being helped by a special tutoring program developed by psychologists at Indiana University.

In Indiana, Programed Tutoring is being carried on in schools in Bedford, Bloomington, Columbus, Ellettsville, Indianapolis, Kendallville, Lowell, Mishawaka, Muncie, New Albany, Pekin, Rensselaer, Spencer, and Warsaw.

Started in 1964 on an experimental basis, Programed Tutoring has had impressive results helping children with reading difficulties. Developer Douglas Ellson, professor of psychology, and his I.U. associates have subjected the method to many tests and have met with satisfying success.

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2--Programed Tutoring

In Indianapolis, the tutoring program reduced the proportion of children assigned to special education classes by 41 per cent, Dr. Ellson said. The number of pupils failing to pass on to second grade was reduced by 45 per cent. (In Kinston, N.C., the first grade failures dropped by a startling 70 per cent.)

The National Advisory Council on the Education of Disadvantaged Children cited the Indianapolis program last year as one of the most "successful compensatory education programs" in the nation.

The tutoring technique shows real promise as an aid for children in economically deprived areas because it does not involve expensive equipment or highly paid special education teachers. Tutors with limited educations can be trained in a few days to administer the program, which uses a few books and some printed materials.

In some schools there is a special reading tutoring room with cubicles for each teacher-pupil session. In other buildings, the tutors work in crowded hallways surrounded by duplicating machines and other students. But wherever they are, the youngsters seem to be able to concentrate on the task of learning to read.

The program is intended to supplement, not replace, regular classroom instruction in reading. Tutors, often drawn from the neighborhood around the school, follow a scheduled program which spells out exactly what they are to teach and how to do it. Children progress through the materials at their own speed.

During daily 15-minute tutoring sessions, the children learn about letters and their sounds, words and their meanings--and they read, read, read. Tutors take a positive approach, emphasizing success with priase. Mistakes are not ignored, but incorrect work is matter-of-factly repeated until it is right. Pupils must not only

-more-

read but must understand what they have read.

Classroom teachers applaud the program and do not mind the small disruptions of children going and coming from the sessions. Many teachers wish that more of their pupils could be included in the program.

Patricia Butler, first grade teacher at Indianapolis Public School 45, said her tutored pupils have made "tremendous progress" in reading. She welcomes the extra help. In addition to its other assets, the program results in two persons reaching out to assist a child, she said, and makes the chances of success much greater.

Jean Adams, social worker at Indianapolis Public School 38, also has praise for the program. She pointed out that four children at that school, who started the year in the tutorial program, have now advanced to the top reading group in their class. Mrs. Adams encourages mothers to visit school and see their children being tutored. She tries to interest parents in providing reading materials at home to encourage reading.

At present, the program in Indianapolis--and most other places--is limited to schools which are eligible for federal funds under Title I of the 1965 Elementary and Secondary Education Act, which supports educational programs in low-income areas. But Mary Nelson, supervisor of the Indianapolis program, said she is constantly getting calls asking about the chances of expanding the program.

Next year some Indianapolis schools are planning to start their own programs using volunteer tutors. There is hope, Mrs. Nelson said, that Programed Tutoring can spread to all the elementary schools in the city. Meanwhile, Indianapolis personnel have helped

train tutors for several other projects in Indiana.

Plans are also under way to try the Programed Tutoring technique in other areas of study, like mathematics, Mrs. Nelson said. The technique can perform no miracles, she cautioned, but its success in helping disadvantaged children develop their fullest potential is impressive. For example: Isidore can read!

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