DOCUMENT RESUME

ED 137 460 UD 016 843

AUTHOR Seiferth, John C.
TITLE Guggenheim Museum Children's Program; Learning to Read Through the Arts, Summer, 1975.
INSTITUTION New York City Board of Education, Brooklyn, N.Y. Office of Educational Evaluation.
PUB DATE 75
NOTE 33p.; For related documents see ED 108 149 and UD 016 842; New York City Board of Education Function No. 09-61635

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS *Art Education; Arts Centers; Cocurricular Activities; *Elementary Education; Field Trips; Grade 4; Grade 5; Grade 6; Museums; Parent Participation; *Program Evaluation; *Reading Programs; Remedial Mathematics; Remedial Reading; *Summer Programs
IDENTIFIERS *Elementary Secondary Education Act Title I; ESEA Title I; *New York (New York)

ABSTRACT

During the summer of 1975 the program "Learning to Read Through the Arts" had as its target population 130 Elementary Secondary Education Act Title I eligible children ages 10 to 12 who were performing at least two years below grade level in reading. The students were divided into homogeneous reading groups based on standardized achievement test scores. The same groups also received instruction, on a limited basis, in mathematics. The program focused on the improvement of reading skills through motivating pupil interests. Supplementary workshops in the arts (dance, theater, music, painting, sculpture, mixed media, drawing, printmaking, puppetry, crafts, film making etc.), were closely correlated with the reading program. Weekly field trips supplemented the instructional program. Parents attended an orientation session and were provided opportunities to participate in workshops taught by an arts and crafts instructor and/or the social worker. Parents also participated on the advisory council of the program. The various components of the program were competently coordinated, supervised and administered. The pupils who completed the program exceeded anticipated outcomes. Positive growth gains were recorded on the McGraw-Hill Precriptive Reading and the Prescriptive Mathematics inventories. (Author/JM)

EVALUATION REPORT

Function No. 09-61635

GUGGENHEIM MUSEUM CHILDREN'S PROGRAM: LEARNING TO READ THROUGH THE ARTS, SUMMER 1975

John C. Seiferth

An Evaluation of the New York City school district educational project funded under Title I of the Elementary and Secondary Education Act of 1965 (PL 89-10) performed for the Board of Education of the City of New York, for the summer 1975

DR. ANTHONY J. POLEMENI, DIRECTOR

BOARD OF EDUCATION OF THE CITY OF NEW YORK
OFFICE OF EDUCATIONAL EVALUATION
110 LIVINGSTON STREET, BROOKLYN, N. Y. 11201

TABLE OF CONTENTS

LIST OF TABLES

PROGRAM ABSTRACT

The Title I program "Learning To Read Through The Arts" is a centrally coordinated program conducted by the New York City Board of Education. The basic goal of the program was to improve the reading abilities of children reading two or more years below grade level. Limited objectives in Mathematics were also included. The program exposed participants to a broad range of cultural field trips, various workshops in the arts conducted by artist-instructors backed up by intensive reading and mathematics instruction with highly qualified professional teachers. The various components were competently coordinated, supervised and administered.

The pupils who completed the program exceeded anticipated outcomes of 70% of pupils achievement of one instructional objective. Eighty-two percent of the pupils mastered at least 1 of 4 possible instructional objectives in Mathematics and 100% of the pupils mastered at least 1 of the 42 instructional objectives in Reading which they had not mastered prior to participation in the program.

Generally positive growth gains were recorded on the McGraw-Hill Prescriptive Reading and Prescriptive Mathematics Inventories, criterion reference tests.

Periodic on-site classroom visitations, observation of faculty in-service meetings and interviews with participants, teachers, artist-instructors, specialists, supervisory and administrative personnel revealed high morale, enhancing climate and well organized goal directed activities.

All components of the program were implemented as designed.

CHAPTER I

THE PROGRAM

DESCRIPTION OF THE PROGRAM

During the summer of 1975 the program "Learning to Read Through the Arts" had as its target population 130 Title I eligible children ages 10 to 12 who were performing at least two years below grade level in reading. The program took place daily, five days a week from 9 to 2:30 for a period of eight weeks, July 1st through August 22nd, 1975. Children from 52 Title I schools in 24 districts were recommended to the program by guidance counselors, art and classroom teachers. The students selected were divided into homogeneous reading groups based on standardized achievement test scores sent from their home schools. The same groups also received instruction on a limited basis in mathematics. The program focused on the improvement of reading skills through motivating pupil interests in the arts. Supplementary workshops in the arts: dance, theater, music, painting, sculpture, mixed media, drawing, printmaking, puppetry, crafts, super 8 filmmaking, animation, photography, and art and the people were closely correlated with the reading program. Each pupil participated in two art workshops, three times a week for a total of six hours in addition to attending the special reading sessions. Weekly field trips broadened the pupils experiences and supplemented the instructional program. Children visited museums, galleries, art studios, libraries, theater and art and film performances in addition to trips to the Guggenheim Museum. Parents attended an orientation session and were provided opportunities to participate in workshops taught by an arts and crafts instructor and/or the social worker. Parents also participated on the advisory council to the program. The program was to be evaluated utilizing

the Prescriptive Reading and Mathematics Inventories published by McGraw-Hill. The results of pupils mastery were to be recorded on the Class Evaluation Record. It was anticipated that every child would master at least one instructional objective during the summer period.

CHAPTER II

EVALUATIVE PROCEDURES

OBJECTIVES OF THE PROGRAM

The primary objective of the program was to help pupils achieve mastery of instructional objectives in reading as measured by the Prescriptive Reading Inventory (PRI) criterion referenced test published by McGraw-Hill. Limited ancillary objectives in mathematics were to be measured by the Prescriptive Mathematics Inventory.

Evaluation Objective No. 1 was to determine if as a result of participation in the program 70% of the pupils mastered at least one instructional objective which prior to the program, they did not master. All participants in the program were given as a pre-test selected criterion referenced tests from the Prescriptive Reading Inventory and the Prescriptive Mathematics Inventory to ascertain individual instructional objectives for each child. For each instructional objective diagnosed as requiring remediation (as determined by pre-test failure) a post-test was administered to each individual at the end of the students participation in the program. For each instructional objective results of passing and failing on both the pre-test and post-test were recorded on the Class Evaluation Record (C.E.R.).

Evaluation Objective No. 2 was to determine as a result of participation in the program the extent to which pupils demonstrated

mastery of instructional objectives. The Prescriptive Reading Inventory and the Prescriptive Mathematics Inventory were administered as a pre-test and as a post-test. A considerable amount of time was consumed in administering the Prescriptive Reading and Mathematics Inventories. The fact that a few pupils did not complete the program or took vacation time, tended to create difficulty in administering the tests. Individual arrangements had to be made. The length of the tests caused fatigue on the part of test takers. The tests were machine scored. Two forms of the answer sheets were used. When the tests were sent to Iowa for scoring 45 cases on one form were not scored due to the fact that there had been a change-over in the scoring process by McGraw-Hill. These had to be shipped to Monterey, California. The machine scoring caused delay. The use of two forms of the answer sheet caused additional delay. The P.R.I. was not used for diagnostic purposes as required in design objective #1.

Evaluation Objective No. 3 was to determine extent of implementation. The program was closely monitored by the evaluator through continuous contact with the director and site visits during the operational aspects of the program. Classroom visitations to the reading and arts workshops, interviews with administrative, supervisory, clerical personnel and selective classroom and workshop teachers were conducted. Supplementary personnel were also interviewed such as the parent workshop leaders in arts and crafts, the social worker and museum personnel involved in raising funds and coordinating efforts with the Director of the program. Attendance records of specific classes in reading and the arts workshops were examined as well as the general attendance. Literature published by the project director relating to recruitment of students, employment of staff and in-service development of staff was perused.

Visitations were made to the parent workshops as well as the in-service faculty meetings conducted by the social worker and the Director of the program.

CHAPTER III

FINDINGS

Evaluation Objective No. 1 for Mathematics was to determine if, as a result of participation in the program, 70% of the pupils mastered at least one instructional objective which prior to the program they did not master.

To assess Objective No. 1 in Mathematics the percentage of participants demonstrating mastery or non-mastery of each instructional objective was tabulated at initial testing and final testing.

Table 5EM indicated that 20 or 18% of pupils failed to achieve mastery of any instructional objectives. Thus 82% achieved one or more objectives exceeding Objective No. 1 of 70% of the pupils achieving at least one objective in Mathematics.

Evaluation Objective No. 2 for Mathematics was to determine, as a result of participation in the program, the extent to which pupils demonstrated mastery of instructional objectives. The following tables provide that data. Table 3CM showing the distribution of the percentage of Instructional Objectives achieved and Table 5EM showing the distribution of percentage of pupils achieving various levels of mastery are particularly significant.

MATH - TABLE 1AM

Distribution of Pupil Non-Mastery on Pre-Test and no Follow up Post-test.

No. of Instructional Objectives Failed	No. of Pupils	Percentage of Pupils
4	1	.79
3	0	.00
2	5	3.96
1	0	.00
	6	4.75

According to Table 1A Math, six pupils, five of which failed 2 objectives and 1 failed 4 objectives in Math at initial testing were not present at final testing. This constitutes 4.75% of the total population of 126 who took the P.M.I.

MATH - TABLE 2BM

Distribution of Pupil Mastery of Instructional Objectives Prior to Instruction.

Percentage of Mastery		No. of Pupils	Percentage of Pupils
100	4 objectives	0	.0
75	3 objectives	3	2.4
50	2 objectives	20	16.0
25	1 objectives	18	14.0
		41	32.4%

Prior to instruction 41 pupils or 32.4% had mastered one or more objectives. Therefore, 68% had not mastered a single objective prior to participation.

MATH - TABLE 3CM

Distribution of Pupil Mastery by Instructional Objectives as a Result of Instruction.

Instructional Objectives	Ratio # Pupils Achieving Mastery over # Pupils Attempting Mastery	Percentage of Mastery
1 - Area	59/95	62
2 - Volume	56/107	52
3 - Non Stand. Units	33/113	29
4 - Measured Objects	42/123	34

As a result of instruction 62% achieved the first instructional objective. Fifty-two percent, 29% and 34% achieved the 2nd, 3rd and 4th instructional objective respectively they had not mastered prior to instruction.

MATH - TABLE 4DM

Distribution of the number of Instructional Objectives Mastered after Instruction.

No. of Instructional Objectives Mastered	No. of Pupils	Percentage of Pupils
0	20	18
1	31	28
2	32	28
3	21	19
4	8	7
4	112	100%

A glance at Table 4DM indicates 20 or 18% of the pupils participating failed to achieve at least one objective. Therefore, 82% did achieve one or more objectives. In fact, 28% achieved one objective. Twenty-eight percent achieved two objectives and 19% three objectives, while 7% achieved all four objectives possible.

The following table appears similar to the preceding because there were only four Objectives of the P.M.I. which were used.

MATH - TABLE 5EM

Distribution of Percentage of Pupils Achieving Various Levels of Mastery of Instructional Objectives.

Percentage of Mastery of Instructional Objectives	No. of Pupils	Percentage of Pupils
100	8	7
75	21	19
50	32	28
25	31	28
0	20	18
	112	100%

Table 5EM confirms the percentage of pupils achieving one or

more objectives at 82% and clearly indicates the success of the participants on the P.M.I. exceeding the goal of 70% pupil mastery of achieving at least one objective as a result of participation.

The following tables present data relative to reading.

Evaluation Objective No. 1 for Reading called for 70% of the pupils achieving mastery of at least one instructional objective which prior to the program they did not master. To assess Objective No. 1 in reading the percentage of participants demonstrating mastery or non-mastery was tabulated at initial and final testing. Table 9DR clearly indicates that 100% of the participants achieved at least one instructional objective they had not mastered prior to instruction.

Evaluation Objective No. 2 for Reading was to determine as a result of participation in the program the extent to which pupils demonstrated mastery of instructional objectives. The following tables 6AR through 11FR show that data.

READING - TABLE 6AR

Distribution of Pupil Non-Mastery on Pre-test and no Follow up Post-test.

No. of Instructional Objectives Failed	No. of Pupils	Percentage of Pupils
40	2	1.50
39	4	3.03
38	1	.75
36	2	1.50
35	1	.75
34	2	3.03
33	1	.75
32	1	.75
31	1	.75
30	1	.75
29	1	.75
26	2	1.50
12	19	15.81%

Nineteen pupils or 16% of the initial pipulation either dropped out or were not present for final testing on the P.R.I.

READING - TABLE 7BR

Distribution of Pupil Mastery of Instructional Objectives Prior to Instruction.

Percentage of Mastery of Instructional Objectives	No. of Pupils	Percentage of Pupils
90-100	1	.75
80-89	0	.00
70-79	0	.00
60-69	3	2.27
50-59	2	1.50
40-49	10	7.57
30-39	14	10.60
20-29	30	22.72
10-19	45	34.09
1- 9	27	20.45
	132	100%

Prior to instruction 54% of the pupils had mastered from 1 to 19% of the instructional objectives on the P.R.I. The data from table 7BR will be utilized and further explicated in making comparisons later in this report following table 10ER.

READING - TABLE 8CR

Distribution of Pupil Mastery by Instructional Objectives as a Result of Instruction.

Instructional Objectives	Ratio # Pupils Achieving Mastery over # Pupils Attempting Mastery	Percentage of Mastery
1. Event Sequence	19/113	17
2. Story Setting	23/103	22
3. Story Detail-Recall or Descr Words	25/101	25
4. Story Detail-Recall by Parts	27/112	24
5. Story Detail-Identify True Statements	17/125	14
6. Cause or Effect	3/131	2
7. Inference	22/116	19
8. Conclusion-Formation	16/111	14
9. Predicting Future Action	24/117	21
10. Main Idea-Summary, Title or Theme	7/127	6
11. Character Analysis-Descr Words Traits	17/118	14
12. Descriptive Words & Phrases	19/113	17
13. Sensory Imagery	27/98	28
14. Idioms or Figures of Speech	23/120	19
15. Simile	17/126	13
16. Metaphor	8/124	6

17.	Mood	15/122	12
18.	Time Span & Period	17/116	15
19.	Literary Forms-Fable	14/121	12
20.	Reality & Fantasy	20/122	16
21.	Reality & Fantasy-Possibility	18/106	17
22.	Author Purpose	10/119	8
23.	Silent Letters	39/61	64
24.	Variant Vowel Sounds-Diagraph, Dipht.	32/78	41
25.	Phonetic Parts-Variant Sounds	24/89	27
26.	Phonetic Parts-Blending	43/85	51
27.	Pronouns-Referent	27/119	23
28.	Compounds-Forming	22/41	54
29.	Sentence Bldg-Phrase Select.	28/96	29
30.	Phrase Information	18/106	17
31.	Affixes-Identifying Prefixes,Suffixes	45/91	49
32.	Affixes-Building Words	36/115	31
33.	Defining Affixed Words	37/72	51
34.	Punctuation-Exclamation Point	33/87	38
35.	Meaning of Related Words in Context	19/83	23
36.	Most Precise Word in Context	28/89	31
37.	Word Definition in Context	25/83	30
38.	Word Definition in Isolation	23/97	24
39.	Multi-Meaning Words & Synonyms	24/78	31
40.	Synonyms-Selection	32/74	43
41.	Antonyms-Selection	39/107	36
42.	Homonym Pairs-Selection	40/98	41

Table 8CR gives the ratio and the percentage of pupils achieving mastery of the instructional objectives as a result of instruction. The numbers of pupils who had achieved mastery on the pre-test are excluded from this tabulation. The range of success on each objective ran from a low of 2% on the objective, Cause or Effect obviously the most difficult for this population, to 64% success on Silent letters.

READING - TABLE 9DR

Distribution of the Number of Instructional Objectives Mastered After Instruction.

No. of Instructional Objectives Mastered	No. of Pupils	Percentage of Pupils
1-5	28	25
6-10	56	50
11-15	15	13
16-20	9	7
21-25	2	2
26-30	2	2
31-35	1	1
	113	100%

Table 9DR presents a picture of the distribution of the number and the percentage of pupils achieving mastery as a result of instruction.

READING - TABLE 10ER

Distribution of the Percentage of Pupils Achieving Various Levels of Mastery of Instructional Objectives.

Percentage of Mastery of Instructional Objectives	No. of Pupils	Percent Prior Instruction	Percentage of Pupils
90-100	0	(.75)	.00
80-89	1	(.00)	.89
70-79	1	(.00)	.89
60-69	4	(2.27)	3.54
50-59	8	(1.50)	7.08
40-49	11	(7.57)	9.73
30-39	26	(10.60)	23.01
20-29	23	(22.72)	20.35
10-19	26	(34.09)	23.01
1- 9	13	(20.45)	11.50
	113	100%	100%

Table 10ER shows the distribution of pupil mastery of instructional objectives as a result of instruction. A comparison of this table with Table 2BR indicates that the achievement level has moved upward as a result of instruction. See the figures in parenthesis for pre-test. The bulk of the change has occurred below and within the 50th percentile. On the post-test 34% achieved mastery between the first and 19th percentile while pre-test results found 54% of the pupils achieving mastery in these same percentiles. Achievement of mastery levels remained about the same within the 20-29th percentile. However, on the post-test the percentage of those achieving mastery increased to 33% in the 30-49th percentile as compared with 18% on the pre-test. Two factors are not included in this comparison. One is the scores of the 16% of the population which did not participate in the final test. The number who regressed will be treated in Table 11FR.

READING - TABLE 11FR

Number and Ratio of Regressions over Gains in Three Homogeneous Groupings on Instructional Objectives.

Achievement Levels	Ratio of Regressions Over Gains	Regression Percentage
Higher Group	197/346	57
Middle Group	124/292	42
Lower Group	112/367	30
	433/1000	43%

Although positive gains were made in the achievement of instructional objectives there were instances of regression. The table above summarizes these regressions by homogeneous class groupings. The higher achievement group had the highest regression ratio 57% while the lower achievement group had the lowest ratio or 30%. 1005 achievements of instructional Objectives were offset by 433 regressions or a ratio of 43%. This regression factor should not be considered a negative evaluation measure of the program under review. It may be more a function of the P.R.I. test itself which attempts to measure various degrees of mastery, review and non mastery. An under achieving population sample can be expected to add to such marginal fluctuations. Furthermore, the test was developed as a diagnostic instrument. "The P.R.I. does not provide a means for comparing students to a standardization sample or norm group."[1]

As more and more data from Criterion Reference tests become available evaluative judgements may be attempted if and when the elements involved in such evaluations are relatively isomorphic.

Evaluation Objective No. 3 for Reading. The program was observed to be servicing the needs of the specific target population for which it was designed; students two or more years below grade level in reading. The program appeared well designed and competently administered. Philosophical and psychological rationale were evidenced

[1] Interpretive Handbook of the P.R.I., McGraw-Hill, N.Y., p7

in implementation and practice. Learning experiences utilizing the arts proceeded from the concrete to the abstract with concepts from these experiences practically applied to reading skill instruction.

The facilities appeared to be adequate at Public School # 198 although there was evidence that there was some confusion over shipping and unpacking all of the specialized material and supplies moved from Westbeth the site of the 10-month program to Public School #198. The normal problems inherent in terminating a program in the last week of a summer school operation at the same time that evaluation tests are administered, and preparing for a final museum presentation are compounded by repacking material and supplies to be moved again. Security guards were added to the program after four teachers including the Director had been held up and one teacher stabbed.

Several recommendations had been made in the Summer 1974 evaluation report:

1. It was recommended that the program be expanded to service more children. This was not done.
2. It was recommended that children have the option of enrolling in a program more than once. This was carried out on a limited basis.
3. It was recommended that the volunteer apprentices continue to participate and assist in the program and be invited to the special reading oriented arts workshops and reading workshops. The apprentices were continued and invited to the workshops.
4. It was suggested that consideration be given to changing the program schedule to five hours per day of instruction five days per week for seven weeks from the current four

hours per day five days per week over an eight week period. The staff and Director rejected this recommendation.

5. It was suggested that workshops be continued with the parents. This recommendation was followed.
6. The Prescriptive Reading Inventory used for pre- and post-testing was not recommended for the short seven or eight week summer program, due to the testing time required. The P.R.I. was recommended for diagnostic purposes during the regular academic year and not for purposes of program evaluation. This recommendation was not followed. The Evaluation Objectives called for the use of the PRI and the P.M.I. for evaluation purposes. The test scores were not returned on time to use them as diagnostic instrumentation in the short eight week period.
7. An increase in Title I funds was to be made to meet the increased cost of materials and higher salaries. This was done.

This program has had an impact on the New York City Public School System. The Director has served as a consultant to colleagues. Concepts and components of the program have been adapted to similar programs such as Improving Reading Through the Arts: District 6 Public Schools, The Cloisters Museum Workshop Program and Title III Program Improving Visual Perception Skills in Art Classes in High Schools (Reading Improvement Through Art). Aspects of the program are to be integrated into the Curriculum of the new Roosevelt Island Schools Complex during the Fall of 1975. The Program has serviced its specific target population and was implemented, as designed.

CHAPTER IV

SUMMARY OF MAJOR FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Summary of Major Findings

1. The major objective of having 70% of participants achieving at least one instructional objective was reached in both reading and math. In reading 100% of the pupils so achieved. There were 42 objectives. In mathematics 82% reached the major objective with only four instructional objectives as possible targets.
2. An analyses of the tables indicate extensive gains in achieving reading and mathematics instructional objectives on the P.R.I. and the P.M.I. over a relatively short instructional period. It should be noted that there was also some regression on some of the instructional objectives. Criterion Reference tests can be expected to produce marginal fluctuations in both directions. Overall the gains were in a positive direction.
3. The selected target population was reached. The proposal was executed as designed.

Conclusions

1. The positive findings indicated that the program achieved its mission.
2. The idea of utilizing concrete experiences in the arts to broaden knowledge and understanding of abstract concepts thereby increasing the development of linguistic and mathematic skills helps most children to make significant learning gains.

Recommendations

1. The program should be recycled during the summer of 1976. The fact that attendance on a voluntary basis from all over the five boroughs of New York City averaged 80% excluding two extremely bad weather days during a summer period for disadvantaged Title I children, alone justifies it continued existence. The positive achievement gains provided conclusive evidence of the success of the enterprise.
2. Historically the success of the program would suggest that several components should be incorporated into the regular school programs. The existing administrative, supervisory and teaching structure of this exemplary award-winning program should be utilized as an in-service training center whereby local district personnel are retrained and recycled into regular public school programs throughout the City of New York.
3. The supplementary and complimentary functions and services of the Guggenheim Museum (or other local museums) and the artists-instructors workshops should be expanded and incorporated into the regular school programs of the local school districts of the City of New York where feasible and practical.
4. Certain aspects of the program should be reevaluated before continuation. Continuing the parent workshops for arts and crafts during the summer should be reconsidered due to light attendance. The attendance figures would indicate similar consideration for the social worker workshop. However, the social worker's effectiveness in working with

problem pupils, assisting teachers individually and co-operating with the in-service aspects of the program deserves consideration. Other methods and procedures involving the social worker in screening, selection, case study and in-service utilization over an extended period of time should be considered. Attendance in the Sculpture, and Art and the People workshops tended to fall off slightly more than the attendance in the other workshops and should be re-evaluated, possibly merged with other workshop offerings.

5. The entire Prescriptive Reading Inventory (PRI) test should not be used during a short seven or eight week summer program for evaluation purposes. Approximately three to three and one half weeks are required for the pre and post administration of the PRI for a population of 130 pupils. This is further complicated by administering the PRI on an individual basis to students who are either vacationing or leaving the program early. This only leaves approximately two to four weeks between testing sessions and reduces the instructional time available in the reading-math workshops. The PRI and the PMI could be retained for use in the regular academic year program. The PRI and the PMI should be used only as diagnostic instruments for selective instructional objectives. Consideration could be given to hand-scoring therefore making the results more immediately available to teachers for diagnostic purposes. Consideration might be given to the McGraw-Hill (C.O.R.E.) Cumulative Objectives Referenced Evaluation program which pertains to

documentation of a students base line level of performance and a series of subsequent reports that show changes in performance from month to month and from year to year. If the P.R.I. or other criterion reference tests are used as a measure of evaluation, a regression factor should be considered in designing the evaluations.

6. The administration and the reading teachers might consider the practicality and desirability of developing a more detailed diagnostic form to accompany the recommendation-application of students coming into the program.
7. The program might be expanded to include an experimental component of able and gifted children who might be utilized as assistant-tutorial instructors along with the regular staff of the program. This component part of the program would have to be financed out of sources other than Title I Funds, perhaps through the museums or newer federal sources earmarked for gifted children.
8. Title I funds should be increased to provide additional monies for the increased cost of materials and the higher salaries which are a normal outgrowth of inflationary pressures.
9. Consideration should be given to evaluating the summer programs on a longitudinal basis. This could be accomplished by provision for funding in the next grant and/or including the possibility of evaluating the efficacy of the program by researching on a expost facto basis matching students from the early years of the summer school programs. The objective would be to determine their

reading status three or more years after exposure or non-exposure to the summer experience.

10. Permanent secure facilities would enhance the stability, and maintain the prestige of the program and should be provided.

11. The program should be expanded to include a larger population.

30. Criterion Referenced Test Results: In the table below, enter the requested information about criterion referenced test results used to evaluate the effectiveness of short treatments (less than 60 hours) in reading or mathematics. Use the instructional objective codes provided on pp.2-4 of the instruction manual. Provide only those instructional objective codes which were addressed by the treatment and provide separate data for each test used and each level tested. Use additional sheets if necessary. Record in columns 2, 3 and 4 only those participants who completed both tests.

Code	Instructional Objective	Publisher	Level	Component Code 1/	Subgroup 2/	Pretest No. of Pupils		Posttest	
						Passing	Failing	No. of Pupils from Col. 2 Passing	No. of Pupils from Col. 2 Failing
						(1)	(2)		
1307	Area		Grades 4-6	60914		31	95	59	36
1307	Volume		"	60914		19	107	56	51
1301	Non Standard Units		"	60914		13	113	33	80
1301	Measure Objects		"	60914		3	123	42	81
2409	Event Sequence		"	60814		19	113	19	94
2412	Story Setting		"	60814		29	103	23	80
2404	Story Detail-Recall or Descr. Words		"	60814		31	101	25	76
2404	Story Detail-Recall by Parts		"	60814		20	112	27	85
2404	Story Detail-Identify True Statements		"	60814		7	125	17	108
2403	Cause or Effect		"	60814		1	131	3	128
2403	Inference		"	60814		16	116	22	94
2408	Conclusion-Formation		"	60814		21	111	16	95
2408	Predicting Future Action		"	60814		15	117	24	93

1/ Indicate the component code used in previous sections of this report used to describe treatment and population.

2/ Provide data for the following groups separately: Neglected (code as N), Delinquent (code as D), Bilingual code as B) and Handicapped (code as H). Place the indicated code letter in the last column to signify the subgroup evaluated.

30. Criterion Referenced Test Results: In the table below, enter the requested information about criterion referenced test results used to evaluate the effectiveness of short treatments (less than 60 hours) in reading or mathematics. Use the instructional objective codes provided on pp.2-4 of the instruction manual. Provide only those instructional objective codes which were addressed by the treatment and provide separate data for each test used and each level tested. Use additional sheets if necessary. Record in columns 2, 3 and 4 only those participants who completed both tests.

Code	Instructional Objective	Publisher	Level	Component Code 1/	Subgroup 2/	Pretest No. of Pupils Passing (1)	Pretest No. of Pupils Failing (2)	Posttest No. of Pupils from Col. 2 Passing	Posttest No. of Pupils from Col. 2 Failing
2406	Main Idea-Summary, Title or Theme		Grades 4-6	60814		5	127	7	120
2412	Character Analysis-Descr. Words, Traits		"	60814		14	118	17	101
2412	Descriptive Words & Phrases		"	60814		19	113	19	94
2411	Sensory Imagery		"	60814		34	98	27	71
2707	Idioms or Figures of Speech		"	60814		12	120	23	97
2412	Simile		"	60814		6	126	17	109
2412	Metaphor		"	60814		8	124	8	116
2412	Mood		"	60814		10	122	15	107
2412	Time Span & Period		"	60814		16	116	17	99
2410	Literary Forms-Fable		"	60814		11	121	14	107
2401	Reality and Fantasy		"	60814		10	122	20	102
2401	Reality and Fantasy-Possibility		"	60814		26	106	18	88
2411	Author Purpose		"	60814		13	119	10	109
2109	Silent Letters		"	60814		71	1	39	22

1/ Indicate the component code used in previous sections of this report used to describe treatment and population.

2/ Provide data for the following groups separately: Neglected (code as N), Delinquent (code as D), Bilingual code as B) and Handicapped (code as H). Place the indicated code letter in the last column to signify the subgroup evaluated.

30. Criterion Referenced Test Results: In the table below, enter the requested information about criterion referenced test results used to evaluate the effectiveness of short treatments (less than 60 hours) in reading or mathematics. Use the instructional objective codes provided on pp.2-4 of the instruction manual. Provide only those instructional objective codes which were addressed by the treatment and provide separate data for each test used and each level tested. Use additional sheets if necessary. Record in columns 2, 3 and 4 only those participants who completed both tests.

Code	Instructional Objective	Publisher	Level	Component Code 1/	Subgroup 2/	Pretest No. of Pupils Passing (1)	Pretest No. of Pupils Failing (2)	Posttest No. of Pupils from Col. 2 Passing	Posttest No. of Pupils from Col. 2 Failing
2107	Variant Vowel Sounds-Diagraph Diphthong		Grades 4-6	60814		54	78	32	46
2105	Phonetic Parts-Variant Sounds		"	60814		43	89	24	65
2105	Phonetic Parts-Blending		"	60814		47	85	43	42
2207	Pronouns-Referent		"	60814		13	119	27	92
2201	Compounds-Forming		"	60814		91	41	22	19
2207	Sentence Bldg-Phrase Select.		"	60814		36	96	28	68
2207	Phrase Information		"	60814		26	106	18	88
2204	Affixes-Identifying Prefixes Suffixes		"	60814		41	91	45	46
2204	Affixes-Building Words		"	60814		17	115	36	79
2204	Defining Affixed Words		"	60814		60	72	37	35
2208	Punctuation-Exclamation Point		"	60814		45	87	33	54
2305	Meaning of Related Words in Context		"	60814		49	83	19	64
2305	Most Precise Word in Context		"	60814		43	89	28	61
2305	Word Definition in Context		"	60814		49	83	25	58

29

1/ Indicate the component code used in previous sections of this report used to describe treatment and population.

2/ Provide data for the following groups separately: Neglected (code as N), Delinquent (code as D), Bilingual code as B) and Handicapped (code as H). Place the indicated code letter in the last column to signify the subgroup evaluated.

30. Criterion Referenced Test Results: In the table below, enter the requested information about criterion referenced test results used to evaluate the effectiveness of short treatments (less than 60 hours) in reading or mathematics. Use the instructional objective codes provided on pp.2-4 of the instruction manual. Provide only those instructional objective codes which were addressed by the treatment and provide separate data for each test used and each level tested. Use additional sheets if necessary. Record in columns 2, 3 and 4 only those participants who completed both tests.

Code	Instructional Objective	Publisher	Level	Component Code 1/	Subgroup 2/	Pretest No. of Pupils Passing (1)	Pretest No. of Pupils Failing (2)	Posttest No. of Pupils from Col. 2 Passing	Posttest No. of Pupils from Col. 2 Failing
2305	Word Definition in Isolation		Grades 4-6	60814		35	97	23	74
2304	Multi-Meaning Words & Synonyms		"	60814		54	78	24	54
2304	Synonyms-Selection		"	60814		58	74	32	42
2301	Antonyms-Selection		"	60814		25	107	39	68
2303	Homonym Pairs-Selection		"	60814		34	98	40	58

29

1/ Indicate the component code used in previous sections of this report used to describe treatment and population.

2/ Provide data for the following groups separately: Neglected (code as N), Delinquent (code as D), Bilingual code as B) and Handicapped (code as H). Place the indicated code letter in the last column to signify the subgroup evaluated.

OFFICE OF EDUCATIONAL EVALUATION - DATA LOSS FORM
(attach to MIR, item #30) Function # 09-61635

In this table enter all data loss information. Between MIR, item #30 and this form, all participants in each activity must be accounted for. The component and activity codes used in completion of item #30 should be used here so that the two tables match. See definitions below table for further instructions.

Component Code	Activity Code	(1) Group I.D.	(2) Test Used	(3) Total N	(4) Number Tested/ Analyzed	(5) Participants Not Tested/ Analyzed		(6) Reasons why students were not tested, or if tested, were not analyzed	
						N	%		Number/ Reason
60814	715	14	P.R.I.	132	113	19	16%	Absent for testing	6
								Did not complete program	13
60914	715	14	P.M.I.	126	112	14	15%	Absent for testing	8
								Did not complete program	6

(1) Identify the participants by specific grade level (e.g., grade 3, grade 9). Where several grades are combined, enter the last two digits of the component code.
(2) Identify the test used and year of publication (MAT-70, SDAT-74, etc.).
(3) Number of participants in the activity.
(4) Number of participants included in the pre and posttest calculations found on item #30.
(5) Number and percent of participants not tested and/or not analyzed on item #30.
(6) Specify all reasons why students were not tested and/or analyzed. For each reason specified, provide a separate number count. If any further documentation is available, please attach to this form. If further space is needed to specify and explain data loss, attach additional pages to this form.