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ABSTRACT

IDENTIFIERS

The Remedial Program in Reading and Mathematics for Homebound Children served 470 children who were provided tutorial instruction within their homes from Pebruary through June, 1975. It was funded under the Elementary and Secondary Education Act, Title I. Twenty-nine teachers provided sessions with each child for two or more sessions per week. The children were two or more years behind in reading and mathematics and were designated as eligible for homebound instruction due to physical handicaps, hospitalization, school phobic responses, and other reasons. The youths who participated in the program were from Manhattan, the Bronx, Brooklyn, and Queens. About one third of the youth were from families in which Spanish was the dominant language spoken in the home. There were three times as many boys in the program as girls. The age range was from seven to seventeen. The Wide Range Achievement Test was used on a pre-post testing basis. The results were analyzed in terms of a one way analysis of variance to determine if the gain or loss in reading and mathematics varied by the number of tutorial sessions held. The results of the analysis of the data for 202 youths revealed that the gain or loss in reading and mathematics did not vary with the number of tutorial sessions held and was not statistically significant. Recommendations for refunding the program included provisions for longer programs with more lead time and more diagnostic and background information available regarding each child prior to program operation. Implementation of these recommendations would enable the teachers to develop strategies for prescriptive teaching. (Author/AM).

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Function No. 09-58 616

REMEDIAL PROGRAM IN

READING AND MATHEMATICS

FOR HOMEBOUND CHILDREN

U S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE NATIONAL INSTITUTE OF EDUCATION

STANLEY SOLES, Ed.D.

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An evaluation of a 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 1974,75 school year.

Dr. Anthony J. Polemeni, Director

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



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Function # 09 - 58616

REMEDIAL PROCRAM IN READING AND MATHEMATICS FOR HOMEBOUND CHILDREN

Abstract of the Program

The Remedial Program in Reading and Mathematics for Homebound Children served 479 Title I children who were provided tutorial instruction within their homes from February through June, 1975. Twenty-nine teachers provided sessions with each child for two or more sessions per week. The children were two or more years behind in reading and mathematics and were designated as eligible for homebound instruction due to physical handicaps, hospitalization, school phobic responses, and other reasons. The youths who participated in the program were from Manhattan, Bronx, Brooklyn and Queens. About one third of the youth were from families in which Spanish was the dominant language spoken in the home. There were three times as many boys in the program as girls. The age range was from seven to seventeen.

There were two evaluation objectives. First, to assess the extent to which children in the program demonstrated statistically significant differences in reading and mathematics between real post test scores and anticipated post test scores. This objective was modified to determine whether any statistically significant differences in reading and mathematics pre-post test scores were related to the number of sessions held with students.

The second objective was an analysis of the discrepancy between the program as described and the actual observations as observed.

The Wide Range Achievement Tests (WRAT) was used on a pre-post testing basis. The results were analyzed in terms of a one way analysis of variance to determine if the gain or loss in reading and mathematics varied by the number of tutorial sessions held. Informal evaluation procedures included observations and interviews by the evaluator.

The results of the analysis of the data for 202 youths revealed that the gain or loss in reading and mathematics did not vary with the number of tutorial sessions held and was not statistically significant. The discrepancy analysis revealed that the program did deliver the services to the youth as described in the program proposal.

The greater frequency of tutorial sessions per se with the varied group of homebound children was not sufficient to assure significant changes in reading and mathematics. Recommendations for refunding the program included provisions for longer programs with more lead time and more diagnostic and background information available regarding each child prior to program operation, therefore enabling the teachers to develop various strategies for prescriptive teaching.



I. PROGRAM DESCRIPTION

The Remedial Program in Reading and Mathematics for Homebound Children was designed to serve 500 Title I eligible children who were taught in their homes, or where the homebound instruction was designated. The program began in February of 1975 due to the delay in funding. The program began with an orientation meeting on administrative matters, followed by the first two-and-one-half month cycle, and some participants continued until June 30. The second cycle with another group of students began April 16, and ended June 30. There were 29 teachers selected for the program.

The instruction was conducted at the usual site of the homebound child. Sessions were conducted in Manhattan, Queens, the Bronx, and Brooklyn. The new program was designed to enrich and to supplement the regular homebound tax levy program. Each teacher was expected to teach a minimum of eight children per week in homes or at designated places for the homebound instruction. The concentrated periods occurred two or more sessions per week for an hour and fifteen minutes each. The teacher's work day began at 8:40, and lasted until 3 p.m.

Title I eligible pupils were drawn from the four above-named boroughs. They ranged in age from seven to seventeen years. The Title I children were selected for this program from among those currently provided regular homebound instruction. Other criteria included: teacher's estimate of individual need, and two or more years below grade level in reading and mathematics. After a review of pupil records, informal diagnostic procedures, and the standardized individual



testing done at a previous time, the program participants reported by the Program Coordinator's Office numbered 479 girls and boys. The range of characteristics presented by homebound pupils included those who have physical handicaps, and included a range of those youth with recent hospitalization, some who had school phobic response and had difficulty working in the regular school environment.

Nearly all of the students were behind in grade level in one or more subject areas. The assessment by the <u>Wide Range Achievement Test</u> (WRAT) revealed that many of the youth were behind two or more grades in math. Many of the youths were two or more grades behind in reading. In terms of social and language background, nearly one third of all students were from families in which Spanish was the native and dominant language spoken in the home.

In the program, there was a constant change of visit schedules as students were sent to hospitals or sent back to school. The fluidity of this program change made for some difficulty in scheduling.

The program was limited in focus to reach the youth in remedial skills in the cognitive areas of reading and mathematics.

Total youth served by the program were 171 from Brooklyn, 59 from Queens and 114 from Manhattan and 133 from The Bronx, or a total of 479 students. There were 357 boys and 122 girls in the program. This indicates that there were three times more boys than girls in the program. The ages of the youth ranged from seven to seventeen years.



II, EVALUATION OBJECTIVES AND PROCEDURES

The <u>evaluation objectives</u> for the remedial homebound program were as follows:

First, to assess the extent to which the children who participated in the homebound remedial program have demonstrated, statistically significant differences in reading and math between real posttest scores and anticipated posttest scores.

The second objective was to determine the extent to which the program in remedial reading and math for homebound children was actually carried out as described in the project proposal. This refers to the discrepancy analysis, the difference between the program as described and actual operations as observed.

The evaluation <u>procedures</u> and instruments used in the assessment of the remedial program for homebound children included the following:

To assess the changes in reading and math the <u>Wide Range Achievement</u>

Test (WRAT) was administered on a pre-post test basis, for each cycle of the program. The pretests were administered shortly after the beginning of the cycle and were completed by March 7. The posttests were completed when youth left the program or on the first and second weeks in June.

The design stipulated that the results of the WRAT were to be analyzed in terms of the correlated \underline{t} tests indicating differences between anticipated posttest scores and actual posttest scores.

A modification in the evaluation design was made after discussion with the Office of Educational Evaluation. It was realized that the



use of the correlated t test was inappropriate for a number of reasons. First, the amount of prior schooling could not be accurately determined for many of the youngsters. Secondly, a comparable ratio could not be estimated for the time of the program in terms of months of the school year since this was a tutorial program for which the number of sessions with each respective youth varied from ten or less to over forty. It was decided that one of the ways to assess the objectives for changes in reading and math would be through the use of a one analysis of variance rather than the correlated t test, and this modification was approved by the Office of Educational Evaluation. The criterion variable or dependent variable was the gain or loss in reading (and math) for varying numbers of tutorial sessions with the homebound teachers. This is a fixed effect model or mixed-effect model with some factors fixed and others random. The Scheffe test was used to analyze the relationship for any F ratios found to be significant.

Additional evaluation instruments that were developed in the program included:

Evaluation procedures not only included the formal testing with the Wide Range Achievement Test (WRAT) for the reading and math, but a series of observations based upon the program's operation. This included the recruitment of teachers, the staff, the orientation and the preparation of teachers for their visits, the staff development meetings, the review of instructional materials and the staff meetings.

In addition, the Wide Range Achievement Test was administered as a pre- and posttest. Informal diagnostic procedures such as informal



textbook tests, inventories of basic reading skills, and informal evaluation of reading grade levels were used to pinpoint areas of weaknesses. The Durell Analysis of Reading Difficulty and the Key Math Diagnostic Arithmetic Tests were used with those children who needed a more formal diagnosis.

A major technique of assessment was carried out by the evaluator visiting during the teaching sessions in the actual homes in order to evaluate the scope, the regularity and quality of the delivery of services by the teachers to the homebound youngers participating in the program.



III. FINDINGS

OBJECTIVE 1

To assess the extent to which the children who participated in the homebound remedial program have demonstrated statistically significant differences in reading and math between pretest scores and posttest scores in terms of the number of sessions.

Students in the homebound program who took WRAT Level I were separated from those who took Level II. The test score gain or loss was regarded as the criterion variable and the frequency of tutorial sessions was divided into those less than ten, between eleven and twenty, between twenty-one and thirty, thirty-one and forty, and forty-one and over. The value of the use of the analysis of variance is to find out whether the variation in the changes in reading and math scores did so vary in terms of the number of sessions provided for the youth. Did the math and reading gain more with more tutorial sessions? The F ratios for the one-way analysis of variance for reading for Level I was .887 and for Level II was .327; neither were statistically significant.

The \underline{F} ratio for mathematics for Level I was 1.219 while for Level II it was .643. In neither case were these results statistically significant.

In summary, in none of the cases was the \underline{F} ratio high enough to be significant at the .05 level for the gains in reading and mathematics.

The summary tables to follow show the way the students were distributed and the results of the analysis of variance.



Table 1
Level I Reading

·····		Number of Sessions											
	0-10	11-20	21-30	31-40	41 and Over								
N	18	42	46	22	12								

Table 2
One Way Analysis of Variance: Reading--Level I

Source	df	Sum of Squares	Mean Squares	F Ratio
Between groups	4	248.8506	62.2201	.887
Within groups	135	9467.6909	70.1310	
Total	139	9716.5715	· · · · · · · · · · · · · · · · · · ·	

Table 3

Level II Reading

	Number of Sessions								
	0-10	11-20	21-30	31-40	41 and over	Total			
N	, 6	26	16	6	6	62			

Table 4
One-Way Analysis of Variance for Reading Level II

Source	đf	Sum of Squares	Mean Squares	<u>F</u> Ratio
Between groups	Įŧ	234.5792	58.6448	•327
Within groups	57	10226.5177	179.4126	
Total	61	10461.0969		

Table 5
Level I WRAT Mathematics

		Number of Sessions											
	0-10	11-20	21-30	31-40	41 and Over								
N	18	42	46	22	12								

Table 6
One-Way Analysis of Variance for Mathematics Level I

Source	đf	Sum of Squares	Mean Squares	F Ratio
Between groups	4	137-3953	34.3488	1.219
Within groups	135	3803.0262	28.1706	
Total	139	3940.4215		·

Table 7

Level II WRAT Mathematics

		Number of Sessions												
	0-10	11-20	21-30	31-40	41 and Over									
N	6	25	16	6	8									

Table 8
One Way Analysis of Variance for Mathematics Level II

Source	đf	Sum of Squares	Mean Squares	F Ratio
Between groups	4	33.8003	8.4501	.643
Within groups	57	749.5545	13.1501	
Total	61	783.3548		

The lack of significant results of the analysis of variance in terms of the number of sessions held may be interpreted as follows: The number of visits was not randomly assigned and results are confounded. A number of possible alternative reasons for the results may be stated. The range of youth in the program varies widely in ability, and their reasons for being in the homebound program. While they all may be regarded as likely to benefit from additional homebound instruction, about 60 percent of the youth in the program were basically emotionally disturbed youth; another 30 percent have some type of physical handicap so that they were regarded as crippled and another 10 percent were in the program for a variety of health impaired reasons.

The program presumed that all of the youth would be likely to benefit from the tutorial type of program. There were many signs of benefits from the program in addition to the final assessment of reading and math. However, to presume that reading and math scores would show gains for all these youngsters was expecting too much.

The frequency of sessions was, apparently, not randomly assigned to the children. The teachers served the youth in the program for various amounts of time or number of sessions due to such considerations as the following: (1) number of pupils assigned to them at any given time; (2) the lack of availability of other pupils assigned; (3) the feasibility of conducting sessions with given children; (4) other reasons. Some children were in the program for a longer period of time and received more frequent sessions. However, the results did not support the assumption that more sessions per se would produce greater gain



in test scores than fewer sessions.

Some of the youngsters did show gains in reading and mathematics during the program, but overall the results were not statistically significant. To determine how the gain was related to various types of youth would be beyond the scope of the evaluation. A study of diagnostic data for a small group of the students regarding the types of the problems and conditions students presented could be undertaken. Further analysis of the data could show the importance of the pupil-teacher tutorial relationship with regard to achievement in reading and mathematics. Such an analysis is possible and could show whether various types of tutorial relationship made a difference in achievement.

Another alternative to be considered is that the overall level of intellectual functioning of the youth in the program was low. They were behind in grade level in both reading and math. What the students presented in this program was compounded in a number of ways: low level of ability, behind grade level in reading and mathematics, and a mixture of various types of physical and emotional handicapping conditions.

These various characteristics among the youth may call for quite different teaching strategies.

The technique of analysis of variance may be considered an extension of the difference of means tests, but involves working with variances rather than means and standard errors. The categories of the variable, number of sessions, were found to contain within each level of session more heterogeneity than would be expected due to chance. This means that some of the youth who received fewer sessions may have shown



greater gains than did youth who received greater number of sessions.

The number of sessions alone was not the critical factor. In a word,

the variations in performance are unexplained by the number of sessions
held.

It should be noted that while the more sophisticated analysis did not show significant differences in the gain by number of sessions, there were differences between the pre- and posttest mean scores as follows in Table 9.

Table 9

Means and Standard Deviations for Pre-Post Raw Scores on WRAT for Mathematics and Reading

			Pret	est	Post	Posttest			
WRAT Level	Subject	N	М	SD	M	SD			
I	Reading	142	43.3	19.2	48.36	19.6			
II	Reading	62	35•3	15.4	41.09	17.0			
I	Mathematics	142	25.4	9.49	29.79	7.69			
II	Mathematics	, 62	15.38	6.38	19.24	6.71			

These results show that there were overall mean gains between the pre- and posttests which provide some support for the observations of staff reported in terms of gains in students.



OBJECTIVE 2

The program carried out many of the components of the project proposal. The total number of children served throughout the program was 474. This was less than the 500 youth intended in the proposal. The number of youth served were given more intensive services; there was a changeover with youth returning to school and others going to the hospital for treatment. Actual test results were from 202 students.

The goals and purposes of the program were:

- 1. To provide individualized remedial instruction in reading and/or mathematics according to the needs and strengths of each child.
- 2. To provide prescriptive instruction based on the preferred learning style and emotional and intellectual development of each child.

The target population consisted of 500 Title I eligible pupils, ages seven to seventeen, who were currently receiving homebound instruction.

The following activities were proposed to attain these goals:

- 1. Teaching sessions were held on an individual basis, with time allotted in the session for instruction in reading and mathematics according to the child's needs and strengths. Individual goals were set for each child. Materials and lessons were developed in accordance with these goals.
- 2. There was a combination of teacher-made materials and commercial materials utilized.

In the program as implemented, the teachers have provided individualized remedial instruction in reading and/or mathematics, according to the needs and strengths of the children. Prescriptive



instruction, based on the preferred learning style and emotional and intellectual development of the child, has been provided. Four hundred seventy-four (474) Title I eligible pupils who are currently on homebound instruction have received service from this supplementary program.

Teaching sessions were conducted on an individual basis with time allotted in the session to instruction in reading and mathematics according to the child's needs and strengths. Individual long and short term objectives were set for each child. Materials and lessons were developed in accordance with these goals. A combination of creative teacher-made materials and commercial materials such as Unifax Math, Ruth Cheeves program, Peg-Math, consonant and vowel wheels, Individualized Cassette Learning Packages, Right to Read Program, Hip Readers, Black Americans in History and Crouch Coordinated Cross Number Puzzles were used in order to motivate the pupils.

Individual conferences were held on a regular basis between parents and teachers, guidance counselor and supervisor to keep the parent informed of the child's progress and development, but there were no group meetings of parents or youth.

The effort to provide prescriptive instruction based upon preferred learning style was difficult to achieve in this program. There was a lack of information early in the program regarding the particular conditions and presenting difficulties of each child. The psychologists on the staff provided follow-up information as specific questions were raised by teachers about homebound children.

A series of inservice activities were included as specified in the program.

- 1. Developing weekly lesson plans based on individual prescriptions including long term objectives (specific), immediate objectives, and task analysis in the supplementary teaching of reading and mathematics.
- 2. Developing appropriate use of equipment, materials and supplies to implement objectives with focus on the visual-motor and perceptual-motor areas of learning. Developing teaching strategies based on children's strengths to remediate learning deficiencies.
- 3. Organizing and setting up a study area in the home (or other designated site) and creating a learning environment for Title I children.
- 4. Motivating children through advanced preparation of instructional materials and high-interest home project models.
- 5. Establishing structured routines for individualized teaching in the home or designated site (i.e., consistency of time periods and location of study area, minimizing distractions, preparing lessons and materials for each child, cleaning up and developing good work habits).
- 6. Fostering close personal relationships with individual children.
- 7. Communicating and working cooperatively with regular Bureau for the Education of the Physically Handicapped personnel.
 - 8. Self-evaluating (a model plan for teachers).



9. Training in family dynamics and family intervention for positive parent-teacher relationships in Title I locations.

The evaluator attended most of the orientation and inservice sessions and discussed with teachers and the coordinator the items above. The program was so brief and comprehensive that there was only time for introducing many of these activities and seek to reinforce them during field visits. By and large the activities of the program as specified in the proposal were carried out in the actual operation. The attempt to provide cognitive gains through preferred learning style for example called for much more precise information about each child in order to utilize the various materials, equipment, and supplies. Two youngsters with similar levels of intellectual functioning, but with different types of impairment would require quite different goals as realistic, given their circumstances. A brain injured child with average intelligence presents one series of obstacles to learning and the program objectives to be realistic ought to take that into account. In this program a variety of types of youth were provided tutorial sessions in reading and mathematics without facts readily available concerning the condition of youth.



Self-Concept and the Relationship with Teachers and Students

A vital component of the homebound program is to establish positive relationships with the parents. To insure maximum participation and involvement of the parents the following procedures were used: individual conferences on a regular basis to keep the parent informed of the child's progress and development, parent meetings for orientation, reaction and response to the project, outreach approaches to assist parents in arranging for the provision of necessary community services.

The evaluator found that the teachers concentrated their attention upon developing and sustaining a positive relationship with the youth. While we have no hard data, at this time, on how the positive relationship contributed to the learning, where there was a negative relationship or no relationship it was difficult to expect much learning. To view the relationship as vital is important, but it was only one of the factors to consider. The combination of consideration of consideration of type of handicapping condition and development of sound teacher pupil relationship would continue to be important. At the present stage of analysis, how these may influence learning with different youth is not clear.

IV. SUMMARY OF MAJOR FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS Findings

There were two objectives for the evaluation of this program. The first objective was to assess the extent to which the homebound children in the remedial program gained in their reading and mathematics at a level statistically significant. Since there were variations in the number of sessions given to each child and the types of information about each limited, an analysis of the differences between pre- and posttest score on reading and math showed that gain was not related to number of sessions provided for youth. A review of the mean differences between the pre- and posttest did show that there were gains for some of the children in the program. The assumption of the program that the youth would benefit with more sessions was shown not to fit for all cases, but further analysis would be necessary to determine when additional sessions would raise reading and math scores.

The second objective of the evaluation was to determine the degree that the program carried out the projected plans within the proposal. The major gap was in terms of the number of youth served. Although less than 500 youth were served, efforts were made in the program to add youth for homebound teaching whenever one of the youth returned to school. The program did carry out the major activities listed in the proposal. The program was brief.



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Conclusions

On the basis of findings no conclusions may be drawn from the first year of this short-term program. While some of the youth did show gains in reading and/or in mathematics the program results did not show that number of sessions per child was related to gain in reading and mathematics.

The program operations were carried out in line with the program proposal.

Recommendations

A number of suggestions regarding the program were made during its operation and discussed with the coordinator. A series of recommendations may be formulated.

- 1. All personnel agreed that one cycle per semester or two per school year would make more sense than two cycles per semester program. The program, however, calls for adjustments and efforts in order to get results.
- 2. The Wide Range Achievement Test (WRAT) has some advantages over other tests, but some limitations as well. It is recommended that other tests to be considered include the Adaptive Eshavior Scale by the American Association of Mental Deficiency. This scale has ten domains of functioning beyond the narrow scope of cognitive functioning per se. It enables the broader considerations of social functioning, those visible functioning behaviors that may tend to stigmatize individuals.
- 3. It is recommended that the idea of a resource center be considered rather than a generic kit of instructional materials. This



would allow the teachers to select the particular types of techniques and instructional materials deemed appropriate for each child. The disadvantage with this proposal would be the individual responsibility of the teacher to pick up and return the specific items for a wide range of youth.

- 4. The tutorial program emphasized a one-to-one relationship and in 60 percent of the cases the youth had some indications of emotional disturbance. The youth had difficulties learning in group situations, but this program sought to aid in learning in a one-to-one, but it did not take steps to move also into group learning situations of regular classrooms. There were restrictions in the program that prevented the teachers from field trips, from small group meetings with other youth on occasional basis.
- 5. Another suggestion would be to have the youth attend tutorial sessions while homebound and twice monthly attend small group sessions with other youth at the nearby school. This would be a step back to the group settings.
- 6. The program could be augmented by having parents meetings. Parents orientation sessions were not held but individual conferences with parents indicated to the evaluator that at times parents were a part of the problem for youth being homebound. Some of these parents actually were stigmatizing their children into role conceptions and negative self images, while other parents were able to build positive self concepts for severely handicapped youth. The point here is that parents are an important component in the homebound program.



- 7. Another alternative that could be considered would be the use of older teenagers and paraprofessionals to aid in a small group program to help the teachers during the monthly group sessions. Other programs along this line have been found to augment the professional roles of the teacher.
- 8. Finally, it is recommended that a variation of this program be refunded with provision for more complete information regarding each child with more lead time prior to actual teaching so that teachers may review the actual cases and prepare prescriptive teaching plans prior to visiting homes.





Formerly Table 30C

Use Table 28 for norm referenced achievement data not applicable to Table 26. (See "Instructions" Item 5 before completing this table.)

28. Standardized Test Results

In the table below, enter the requested assessment information about the tests used to evaluate the effectiveness of major project components/activities in achieving desired objectives. Before completing this form, read all footnotes. Attach additional sheets if necessary.

Component	Activ-	Test	F	orm	Le	vel	Total	Group	Numbe Test		P	retes	ţ.	Pos	sttes	<u> </u>	Stati Da	istical Ita	Level Signi	of ficance ⁸ froup 9/
Code	ity	Used 1/		Post			N 2/	ID <u>3</u> /	4/ N	<u>5</u> /		Mean	<u>6</u> / SD		Mean	SD SD	1 41	<u>8</u> / Value	8a `	· 9/ ·
6 0 8 1 3	7 2 2	WRAT			Ī	I	316		142	6	3/7	43.3	19.	2 6/10	4B,4	19.	6 F	.887	NS	Н
6 0 8 1 4	7 2 2	WRAT			Ī	I														<u> </u>
6 0 8 1 5	7 2 2	WRAT			II	II	158		62	6	3/7	35.3	154	6/10	411	17.0	F	.327	NS	H e
6 0 9 1 3	7 2 2	WRAT	,		I	Ī	316		142	6	3/7	25,4	9,5	6/10	298	7. 7	F	1,22	NS	Н
6 0 9 1 4	7 2 2	WRAT		,	I	I														
6 0 9 5	7 2 2	WRAT			II	II	158		62	6	3/7	1.5.4	6.4	6/10	19,2	6.7	F	.643	NS	H
	7 2 2																			',

- Identify test used and year of publication (MAT-58; CAT-70, etc.)
- Total number of participants in the activity. as reported.
- Identify the participants by specific grade level (e.g., grade 3, grade 5). Where several grades are combined, enter the last two digits of the component code. 28
 - Total number of participants included in the pre and posttest calculations.
 - 5/ 1 = grade equivalent; 2 = percentile rank; 3 = z score; 4 = Standard score (publisher's); 5 = stanine; 6 = raw score; 7 = other.

- 6/ SD = Standard Deviation
- $\overline{7}$ / Test statistics (e.g., t; F; X^2).
- 8/ Obtained value 8a Level of Significance Provide data for the following groups separately
- Neglected (code as N), Delinquent (code as D), and Handicapped (code as H). Place the indicated code letter in the last column to signify the subgroup evaluated.

In this table enter all pata 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 N		(6) Reasons why students were not tested, of tested, were not analyzed Number Reas	
dn ath	6	00	8	1 1	3	7	2 2	2 2	13/14	WRAT	158	70	•		See attached form . 202 Tests accounts for 362 youth	
dng	6 6	0	8 9		4	7 7	2 2	2 2	13/14	WRAT	158	. 70			(of which 140 were in both cyc	les)
														,	40 went to hospital	+i no
ing h	6	0	8 9		5	7	2 2	2	15/16	WRAT 165	158	62			27 returned to school without tes 30 incomplete test results	
				÷								202 =	280 (2 x 140)	33 too brief to test	
															5 moved	
			,													
									,			1				,

⁽¹⁾ Identify the participants by specific grade level (e.g., grade 3, grade 9). Where several grades are combined, 3() 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.

APPENDIX B DATA LOSS FORM EXPLANATION

FUNCTION # 09 58616 Remedial Program in Reading and Mathematics for Homebound Children

This statement provides the rationale for the discrepancy between the total youth reported served by the program and the total completed tests analyzed and reported.

A total of 202 youth were tested (col#4 on form). The program reported a total of 474 youth served. The evaluation is based upon completed sets of data received. It appears that youths were enrolled in two cycles of the program, but were pre-and post tested only once. Other youth were enrolled in the first cycle only then dropped; others entered in cycle two; some continued, others dropped. In a program like this about 20 percent of the youth returned to school without post-testing; another 30 percent went to the hospital for surgery or other services; some entered the program too late for testing, other tests were incomplete and invalid.

The services provided for the total of 474 varied. There were 160 in some phases of both programs, but 20 dropped. Of the 140 for both phases there were 20 from the first phase only, and another 62 for the second cycle or phase which is a total of the 202 completed valid test scores.

In summary:

140 were in both cyclessaccounting for 280 youth

20 were in cycle 1 only

62 were in cycle 2 only 202, total completed sets of responses

Of the 135 others who were served:

40 went to the hospital

27 resutrned to school without testing

36 had incomplete test results

33 entered too late for testing

5 moved

Thus of the 474 students who were served in the program, there were 202 who completed both pre and post tests, but these account for 362 cases in the program for both cycles. The remaining 135 students who were served who did not complete the pre and post testing were accounted for in the description summarized above.

