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ABSTRACT

Presented is an evaluation of a summer program which consisted of individualized and small group instruction in reading and arithmetic, recreational activities, and field trips designed to promote academic and socialization skills for 506 handicapped children. The program is noted to have had four components: severely emotionally handicapped, hearing handicapped, multiply handicapped, and preplacement (multiple learning disordered). Among findings and conclusions discussed are that at least 93% of the children met at least one instructional objective; that the children received outstanding instructional experiences; and that the exemplary program performance is based, in large part, upon the system of setting concrete instructional goals for each child (criterion referenced testing). Also identified as contributory to the program's success were excellent staff skills which provided enthusiastic learning environments, and the concept of breaking the instructional day into academic and recreational segments. Appended materials include descriptions of the criterion referenced tests used and results in tabular form. (IM)

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SUMMER PROGRAM FOR READING AND MATHEMATICS FOR
HANDICAPPED PUPILS IN SPECIAL EDUCATION CLASSES (DSEPPS)

(SEVERELY EMOTIONALLY HANDICAPPED, HEARING IMPAIRED,
MULTIPLY HANDICAPPED, PRE-PLACEMENT)

U.S. DEPARTMENT OF HEALTH,
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SUMMER 1975

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SHERWOOD B. CHOROST, PH.D.

AN EVALUATION OF A NEW YORK CITY SCHOOL DISTRICT
EDUCATIONAL PROJECT FUNDED UNDER TITLE I OF THE
ELEMENTARY AND SECONDARY EDUCATION ACT OF 1965
(PL89-10) PERFORMED FOR THE BOARD OF EDUCATION
OF THE CITY OF NEW YORK FOR THE SUMMER OF 1975.

Dr. Anthony J. Policemi, Director

BOARD OF EDUCATION OF THE CITY OF NEW YORK
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Introduction

This evaluation report covers four target populations within the 1975 Summer program of Reading and Mathematics for Handicapped Pupils in Special Education Classes. The specific components reviewed include: severely emotionally handicapped, hearing handicapped, multiply handicapped and preplacement (multiple learning handicapped) children. Each component is considered separately in this report.

I. The Program

Characteristics of the target population in each of the four program components are as follows:

A. Severely Emotionally Handicapped. This component is made up of two subgroups: 1. Transitional classes, which include 27 severely emotionally handicapped children who have been in residential treatment, such as institutions or city or state hospitals, or who are in outpatient treatment. 2. The Teacher-Moms classes, which service 54 multihandicapped, asocial, and atypical children on an individualized and small group bases.

B. Hearing Handicapped. This consists of classes for 85 hard of hearing and deaf children who are normally enrolled in regular classes in elementary and J.H.S., and are provided with supportive instruction either from the Itinerant Program or from the Resource Room Program. These children have hearing losses ranging from mild to profound.

C. Multiply Handicapped. This consists of classes for 70 children who are mentally retarded and generally exhibit

severe multihandicapping conditions, including limitations of mobility, gait, vision, speech, etc. Pupils ranged in age from 7 to 17 years, and were selected for the summer program on the basis of teacher observations and recommendations, and parental request or approval.

D. Preplacement. This consists of 270 Title I eligible handicapped pupils, ages 5-12 years, with multiple learning disorders who are in the process of being placed into appropriate special education settings.

The summer program ran from July 7 through August 13, 1975. The 506 Title I eligible pupils selected for the four components of the program were characteristically at least two or more years retarded in reading and/or mathematics. Criterion referenced tests in reading and arithmetic were administered at the start of the program period, and specific instructional objectives were identified for each child. Post testing was administered at the end of the program to determine the amount of pupil mastery as a result of participation in the program.

In each of the four programs, the curriculum included an academic segment, focused around individual and small group remediation, and a recreation segment (usually at the end of the instructional day, planned in advance by the teacher and section administrator) which was tied to specific teaching objectives (eg: vocabulary development, writing skills,

reading skills, computational skills, socialization skills, conceptual enrichment, etc.). Every teacher had a folder for each child which included background information, test data (from criterion reference tests) and a write-up of individualized and specific instructional objectives for the summer.

II. Evaluation Procedures

As stated in the program proposal, there are three evaluation objectives: (1) To determine if, as a result of participation in the program, seventy percent (70%) of the pupils master a least one instructional objective which prior to the program they did not master. (2) To determine, as a result of participation in the program, the extent to which pupils demonstrate mastery of instructional objectives. (3) To determine the extent to which the program, as actually carried out, coincided with the program as described in the project proposal.

Each instructional objective (in reading and arithmetic) was diagnosed as requiring remediation as determined by pretest failure and was selected by the teacher for each child on an individual basis. Posttesting with each child on initially failed and selected items after an appropriate interval of instruction determined the success or failure of reaching the individual objectives.

The instrument used to measure mastery in reading was the Random House Criterion Reading Tests, and in arithmetic, the American Guidance Service KeyMath Test (for Severely Emotionally Disturbed, Multiply Handicapped and Preplacement components). For the Hearing Handicap component, elements of the Croft Diagnostic Word Analysis and Diagnostic Comprehension Tests were selected to measure reading mastery. Teacher defined speech articulation objectives were added as necessary. No test for arithmetic mastery was used in this component.

With regard to objective #3, there were several externally imposed conditions which limited the efficiency of the program in each of the four components. First, the late date of funding for the project played havoc with lists of children initially accepted into the program. Because parents had no definite word until July 1 whether the program would actually open, many made alternate plans for their children. For example, at one site of the Preplacement program, of 50 children originally enrolled in the summer classes, none were available on July 7. Staff and administration showed exemplary skill in selecting 42 program eligible children - most of whom were not on the original list.

Second, except where summer program classes were scheduled in regular year around sites (e.g. Teacher Moms and Transitional classes) teachers had to cope with supply shortages, again in large part due to late program funding. A major deficit in this area was the late arrival

and late staff training in the use of the measurement instruments themselves. In some cases, pretesting on the criterion referenced tests was delayed 2 to 3 weeks in the six week program. This obviously attenuated measurement gains and restricted teacher time devoted to remediation in specific instructional objectives.

Third, a most serious and pervasive factor throughout the 6 week period was the unintentional reduction of each instructional day by delays in bus arrivals at each unit in each of the four program components. On one planned observation, teachers and supporting staff awaited the arrival of the buses until 10:30 A.M. (1½ hours late!) when the first children began to enter the classroom. Because of limited bus facilities, travel time en route to the program may have been up to 2½ hours (7:30 A.M. pick-up to 9:30 or 10:00 A.M. arrival). Observed daily attendance in the programs and between the four components varied considerably, and was critically low for the entire first week owing to coordination difficulties with parents and busing. Observations during August indicated about 85% average attendance.

Discrepancies in numbers of children in the program were minimal. For the most part this was determined by the consultant's counting of names on all teacher data rosters. (Program administrators counted children at the end of the summer.) This report counted 81 children in the Severely Emotionally Handicapped component (no discrepancy); 85 children in the Hearing Handicapped component of the program (against a reported 87); 70 children in the Multiply Handicapped component (against a reported 73); and 270 children in the Preplacement

component (against a reported 264). Thus the total number of children covered in this report is 506 (against a reported 505).

III. Findings

Evaluation objective #1, "To determine if, as a result of participation in the program, 70% of the pupils master at least one instructional objective which, prior to the program, they did not master."

In each of the four program components the primary objective was exceeded by a wide margin.

A. Severely Emotionally Handicapped: 77 of 81 children (95%) achieved at least one instructional objective.

B. Hearing Handicapped: 79 of 85 children (93%) gained at least one objective.

C. Multiply Handicapped: 66 of 70 children (94%) met at least one instructional objective.

D. Preplacement: 256 of 270 children (95%) met at least one instructional objective.

Evaluation objective #2, "To determine, as a result of participation in the program, the extent to which pupils demonstrate mastery of instructional objectives."

There was a wide variation in teacher designation of instructional objectives. Late funding, late arrival of testing materials, and uneven staff training in test procedure contributed to this fact. Some teachers stopped testing after identifying one error on the reading and arithmetic

tests respectively, these becoming the objectives. Others recorded several errors and selected one item to teach and retest. Few teachers recorded pretest successes (thereby providing insufficient data for the tables presented in the appendices.) Some teachers kept teaching and testing sequentially after post-testing successes. Others did not. This is reflected in a spuriously low number of identified instructional objectives. (Pretest failures not retested were not included as objectives for the purpose of the study.)

Tables 30A to 30P incorporate the summary data which will be cited in this report. The tables are paired (30A with 30C, etc.) so that, for each of the four components, pretest and posttest data are first presented based on the number of pupils passing and failing, and then on the number of items (instructional objectives) passed and failed.

A. Severely Emotionally Handicapped: Of 119 instructional items in reading, representing the number of objectives across schools, 101 (85%) were passed on posttest. Sixteen percent (13/81) of the children in this component passed 3 or more reading objectives. Of 127 arithmetic instructional items, 99 (78%) were passed on posttest, and 7% (6/81) of the children passed 3 or more arithmetic objectives. See Tables 30I, 30J, 30K and 30L.

B. Multiply Handicapped: Of 211 instructional items in reading, 158 (75%) were passed on posttest, and 46% (32/70) of the children in this component passed 3 or more reading objectives. Of 187 arithmetic instructional items, 140 (75%) were passed on posttest, and 39% (27/70) of the children passed 3 or more arithmetic ob-

jectives. See Tables 30E, 30F, 30G and 30H.

C. Hearing Handicapped: Of 274 identified instructional items in reading, 193 (70%) were passed on posttest, and 48% (34/85) of the children in this component passed 3 or more reading objectives. Of 49 teacher defined speech articulation items, 49 (100%) were passed on posttest. See Tables 30A, 30B, 30C and 30D.

D. Preplacement: Of 518 instructional items in reading, 486 (94%) were passed on posttest, and 24% (64/270) of the children passed 3 or more reading objectives. Of 551 arithmetic instructional items, 486 (94%) were passed on posttest, and 23% (63/270) of the children passed 3 or more arithmetic objectives. See Tables 30M, 30N, 30-O and 30P.

The balance of this section deals with non-quantitative findings and recommendations.

A. Severely Emotionally Disturbed

Administration has provided staff with ample teaching supplies (a problem in the other components). The program was excellently organized, based on behavior modification principles, and the engineered classroom concept. The continuity of structure from the year round program was an important factor in how much work was accomplished in each class observed. Daily log and narrative summaries from prior teachers were found in almost every child's folder. Lesson plans were written very concretely, and were based on the criterion reference test results. This enabled teachers and paraprofessionals to focus on instructional objectives according to preset plans. The recreation segment of

each class day seemed well integrated into the teaching objectives of the program. The Teacher-Mom classes made excellent use of space through utilization of private work enclosures and functional group instructional areas.

This appears to be an exemplary program from the viewpoint of administrative and teaching excellence. Needs of children with severe emotional handicaps appear to be met with regard to promoting growth in academic and socialization (including impulse control) areas.

B. Hearing Handicapped

No arithmetic instructional objectives were established. It would have been better had these been included, as the educational needs of hearing handicapped children include quantitative skills, particularly since these children attend regular classes in elementary school and junior high school. A positive aspect of this component was that the supervisor and teachers identified particular speech articulation needs of 49 of the children and included criterion referenced items in this area in the remediation planning.

Observation in several classes of hearing handicapped children showed that many children who had hearing aids prescribed were not wearing them to class (10 of 21 were without their aids). It is strongly recommended that teachers make systematic efforts to check for the presence of aids (in good working order) and for the program to offer any necessary information and/or counselling to parents

where indicated, possibly through the Itinerent Teacher component.

The administration of the program was in particular need of more transportation facilities. Eighteen children eligible and in need of help through the summer program had to be excluded because they could not be transported. And bus routing was very long. One bus had to pick up children throughout Queens, and another throughout all of the Bronx, for delivery to and from the Manhattan site.

Recommendation is also made to review the physical plant of future classes assigned for hearing handicapped children. The class structure during the summer of 1975 left much to be desired with regard to freedom from ambient noise and to acoustical properties.

C. Multiply Handicapped

Records generally contained little information from previous teachers (though many children were well known by program personnel). Many of the children were profoundly orthopedically or neurologically limited and many test items in the criterion reference battery were not relevant to this population. Administration emphasized that the program was designed to produce a camplike structure while reaching instructional objectives. Good attendance and a very enthusiastic mood was noted in each class in this component. There was good use made of one teacher's background in speech therapy in one unit of the program. One unmet, and

unspecified need for this population was for sufficiently trained staff with more materials relevant to providing occupational, music, art, and physical therapy. Swimming was an excellent physical therapy experience for this group (needed to develop motor skills and reduce fear and awkwardness). Licensed life guards were provided. Multisensory approaches to presentation of information were excellent.

Recommendation is made for a thorough reappraisal of the structural facilities of buildings to house the Multiply Handicapped. For example, at P.S. 52, children with severe orthopedic limitations could use a ramp leading to the playground and bars in the hallway and bathrooms to aid the semi-ambulatory. Recommendation is also made for improved coordination of information between M-H classes and services being provided for children in various agencies and hospitals outside of school.

D. Preplacement

This component was most seriously effected by the late funding date, yet recovered due to energetic reorganization by administration and teaching staff. Teachers developed daily lesson plans which were noted in each individual student's folder, and contained much information, including sending teacher data. A distinct service to each of the children in the summer preplacement program is the effort taken by staff to pull together a "Summary of Work" report which is ticketed to go to the child's teacher in the Fall. These reports contain

clear, concrete instructional information and a statement of the child's social and emotional adjustment. There was excellent coordination of recreational segments of the day into a total instructional framework (experience charts, logs, etc.) to enrich the specific reading and arithmetic objectives.

It is recommended that teachers be provided with more materials to meet instructional objectives. Late start-up and delay in receipt of ordered supplies reduced the availability of materials-oriented stimulation. As a possible side effect, teachers were engaged in instructing the entire class as a group much of the time. It is recommended that a high priority be set for writing of instructional objectives in the future, so that teachers can more effectively distribute their time to engage in individual remediation. As it was, the Preplacement program did a very creditable job in meeting the needs of its children.

IV. Summary of Major Findings, Conclusions and Recommendations

1. Each of the four program components experienced difficulty in student attendance for the first one or two weeks of the summer. Student lateness due, in part, to extended bus routes, shortened the planned daily program by 1 to 1½ hours. Late funding and delayed shipment of ordered supplies also produced a disruptive start-up element.

2. Despite the above limitations, all four programs demonstrated exemplary results. Ninety-five percent (95%) of children

in the Severely Emotionally Disturbed classes passed at least one instructional objective; 93% of Hearing Handicapped children passed at least one objective; 94% of children in classes for Multiply Handicapped passed at least one objective; and 95% of children in the Preplacement classes passed at least one objective.

3. Each child seemed to experience a program of enrichment in academic and socialization skills. The recreation segment of each day was uniformly well integrated into the goal of meeting reading and arithmetic instructional objectives.

4. On the basis of the quantitative and qualitative findings summarized above, the major program aim has clearly been satisfied. Recommendation is made for continuity of the program.

5. The concept of criterion referenced testing was introduced as a new procedure for evaluation of program effectiveness in 1975. This was a significant break from the norm referenced concept of evaluation in the preceding years of the Title I grants. One finding which was unanimously shared by teachers and supervisors in the program was that criterion referenced testing is an extremely useful concept for both measurement and teaching. Future use of this modality is strongly recommended as providing clearer statements of instructional goals, and thus sets the stage for more systematic and better teaching.

6. The program could be improved through uniformly early

criterion referenced testing and initial selection of at least three objectives in reading and arithmetic. With earlier notification of funding, teachers should have six full weeks of instruction time, rather than the 4½ or 5 weeks, as in 1975. The problem of transporting handicapped children over long distances so that they arrive at 9:00 A.M. has yet to be resolved. More buses and more sites may help with this logistical problem.

7. Underutilization of class lines, on the average of about 20% daily, might be handled through oversubscription, since some parents do make later alternative plans for their children despite accepting places for the summer program in the spring. This was noted by the previous evaluator, Dr. James Boudouris, and the problem persists.

8. Each teacher should prepare a narrative adjustment report of each child in her class for transfer to his receiving teacher. Such reports with specification of concrete instructional objectives can extend summer program benefits into the year round program.

ABSTRACT

SUMMER PROGRAM OF READING AND MATHEMATICS FOR HANDICAPPED
PUPILS IN SPECIAL EDUCATION CLASSES

(D.S.E.P.P.S.)

FUNCTION NO. 09-61623

This summer program, funded through Title I, included four components for handicapped children -- severely emotionally disturbed, hearing handicapped, multiply handicapped, and preplacement classes.

The program ran from July 7 through August 13, 1975 and consisted of individualized and small group instruction in reading and arithmetic, recreational activities and field trips designed to promote academic and socialization skills.

In each of the four program components, at least 93% of the children enrolled met at least one instructional objective. In general, the evaluation indicated that the children received outstanding instructional experiences. Credit for overall exemplary program performance is based, in large part, upon the system of setting up concrete instructional goals for each child (criterion referenced testing). Excellent supervisory, teaching and paraprofessional staff skills in motivating handicapped children by providing enthusiastic learning environments was strongly aided by the concept of breaking the instructional day into academic and recreational segments.

The University of the State of New York
THE STATE EDUCATION DEPARTMENT
Bureau of Urban and Community Programs Evaluation
Albany, New York 12234

MAILED INFORMATION REPORT FOR CATEGORICALLY AIDED EDUCATION PROJECTS

SECTION III

1974-75 School Year

Due Date: July 15, 1975

SED Project Number

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BE Function Number (N.Y.C. only)

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Project Title SUMMER PROJECT OF READING AND MATHEMATICS FOR HANDI-
CAPPED PUPILS IN SPECIAL EDUCATION CLASSES - D.S.E.P.P.S.

School District Name D.S.E.P.P.S.

School District Address 110 Livingston Street

Breoklyn New York 11201

Name and Title of Person Completing this form:

Name Sherwood B. Cherest, Ph.D.

Title Consultant-Evaluator

Telephone Number 212 596-8376
(Area Code)

Date this form was completed 9 / 5 / 75

Measures of growth other than Standardized Tests

31.A. This question is designed to describe the attainment of approved objectives not normally associated with measurement by norm referenced standardized achievement tests. Such objectives usually deal with behavior that is indirectly observed, especially in the affective domain. For example, a reduction in truancy, a positive change in attitude toward learning, a reduction in disruptive behavior, an improved attitude toward self (as indicated by repeated interviews), etc., are frequently held to be prerequisite to the shift toward increased academic achievement by disadvantaged learners. Where your approved measurement devices do not lend themselves to reporting on tables 26, 27, 28, or 29, use any combination of items and report on separate pages. Attach additional pages if necessary.

SEVERELY EMOTIONALLY HANDICAPPED

Component Code	Activity Code	Objective Code
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6	0	8	6	1
---	---	---	---	---

7	2	0
---	---	---

8	0	1
---	---	---

30

Brief Description The Criterion Reading Test measured mastery in the following categories: auditory input with motor response, phonology, and syntax.

Number of cases observed:

		8	1
--	--	---	---

 Number of cases in treatment:

		8	1
--	--	---	---

Pretreatment index of behavior (Specify scale used): _____

Criterion of success: Mastery was defined as success on items selected as instructional objectives following pretest failure.

Was objective fully met? Yes No If yes, by what criteria do you know? 90% (73/81) of the children passed at least one instructional objective in reading.

Comments: _____

Measures of growth other than Standardized Tests

31.B. This question is designed to describe the attainment of approved objectives not normally associated with measurement by norm referenced standardized achievement tests. Such objectives usually deal with behavior that is indirectly observed, especially in the affective domain. For example, a reduction in truancy, a positive change in attitude toward learning, a reduction in disruptive behavior, an improved attitude toward self (as indicated by repeated interviews), etc., are frequently held to be prerequisite to the shift toward increased academic achievement by disadvantaged learners. Where your approved measurement devices do not lend themselves to reporting on tables 26, 27, 28, or 29, use any combination of items and report on separate pages. Attach additional pages if necessary.

SEVERELY EMOTIONALLY HANDICAPPED

Component Code

Activity Code

Objective Code

6 0 9 6 1

7 2 0

8 0 1

30

Brief Description The KeyMath Test measured mastery in the following categories: numeration, addition, subtraction, and multiplication.

Number of cases observed: 8 1 Number of cases in treatment: 8 1

Pretreatment index of behavior (Specify scale used): _____

Criterion of success: Mastery was defined as success on items selected as instructional objectives following pretest failure.

Was objective fully met? Yes No If yes, by what criteria do you know? 90% (73/81) of the children passed at least one

instructional objective in arithmetic.

Comments: _____

Measures of growth other than Standardized Tests

31. C This question is designed to describe the attainment of approved objectives not normally associated with measurement by norm referenced standardized achievement tests. Such objectives usually deal with behavior that is indirectly observed, especially in the affective domain. For example, a reduction in truancy, a positive change in attitude toward learning, a reduction in disruptive behavior, an improved attitude toward self (as indicated by repeated interviews), etc., are frequently held to be prerequisite to the shift toward increased academic achievement by disadvantaged learners. Where your approved measurement devices do not lend themselves to reporting on tables 26, 27, 28, or 29, use any combination of items and report on separate pages. Attach additional pages if necessary.

HEARING HANDICAPPED

Component Code	Activity Code	Objective Code	
6 0 8 6 1	7 2 0	8 1 3	30

Brief Description The Croft Reading Test measured mastery in the following categories: letter recognition, consonants, vowels, structural analysis, and comprehension.

Number of cases observed: Number of cases in treatment:

Pretreatment index of behavior (Specify scale used): _____

Criterion of success: 89% (76/85) of the children passed at least one instructional objective in reading.

Was objective fully met? Yes No If yes, by what criteria do you know? Mastery was defined as success on items selected as

instructional objectives following pretest failure.

Comments: _____

32. Program Abstract: Please provide an abstract of your project, including aspects of the project which account for highly positive results. Provide a summary of the findings in relation to the objectives, as well as a description of the pedagogical methodology employed.

33. Date activities began 7 / 1 / 75 Date activities will terminate 8 / 13 / 75
Mo. Day Yr. Mo. Day Yr.

34. Project time span (check one): 1 School Year 2 Summer 3 12 Mos. 4 More than 1 year

35. Project is: 1 New 2 Resubmitted 3 Continuation (Title III only)

A. If project is resubmitted, please indicate number of years operated:

2 years 4 years
 3 years 5 or more years

Measures of growth other than Standardized Tests

31.D. This question is designed to describe the attainment of approved objectives not normally associated with measurement by norm referenced standardized achievement tests. Such objectives usually deal with behavior that is indirectly observed, especially in the affective domain. For example, a reduction in truancy, a positive change in attitude toward learning, a reduction in disruptive behavior, an improved attitude toward self (as indicated by repeated interviews), etc., are frequently held to be prerequisite to the shift toward increased academic achievement by disadvantaged learners. Where your approved measurement devices do not lend themselves to reporting on tables 26, 27, 28, or 29, use any combination of items and report on separate pages. Attach additional pages if necessary.

MULTIPLY HANDICAPPED

Component Code	Activity Code	Objective Code															
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6	0	8	6	1													
7	2	0															
8	1	4															
8	1	5															
			30														

Brief Description The Criterion Reading Test measured mastery in the following categories: motor skills, visual input with motor response, auditory input with motor response, phonology, structural analysis, vocabulary, syntax and comprehension.

Number of cases observed:

		70
--	--	----

 Number of cases in treatment:

		70
--	--	----

Pre-treatment index of behavior (Specify scale used): _____

Criterion of success: 94% (66/70) of the children passed at least one instructional objective in reading.

Was objective fully met? Yes No If yes, by what criteria do you know? Mastery was defined as success on items selected as instructional objectives following pretest failure.

Comments: _____



Measures of growth other than Standardized Tests

11.E. This question is designed to describe the attainment of approved objectives not normally associated with measurement by norm referenced standardized achievement tests. Such objectives usually deal with behavior that is indirectly observed, especially in the affective domain. For example, a reduction in truancy, a positive change in attitude toward learning, a reduction in disruptive behavior, an improved attitude toward self (as indicated by repeated interviews), etc., are frequently held to be prerequisite to the shift toward increased academic achievement by disadvantaged learners. Where your approved measurement devices do not lend themselves to reporting on tables 26, 27, 28, or 29, use any combination of items and report on separate pages. Attach additional pages if necessary.

MULTIPLY HANDICAPPED

Component Code	Activity Code	Objective Code	30
6 0 9 6 1	7 2 0	8 0 1	

Brief Description The KeyMath Test measured mastery in the following categories: numeration, fractions, symbols, addition, subtraction, multiplication, division, mental computation, numerical reasoning, word problems, money, measurement, and time.

Number of cases observed: Number of cases in treatment:

Pretreatment index of behavior (Specify scale used): _____

Criterion of success: 90% (63/70) of the children passed at least one instructional objective in arithmetic.

Was objective fully met? Yes No If yes, by what criteria do you know? Mastery was defined as success on items selected as

instructional objectives following pretest failure.

Comments: _____

Measures of growth other than Standardized Tests

11. F. This question is designed to describe the attainment of approved objectives not normally associated with measurement by norm referenced standardized achievement tests. Such objectives usually deal with behavior that is indirectly observed, especially in the affective domain. For example, a reduction in truancy, a positive change in attitude toward learning, a reduction in disruptive behavior, an improved attitude toward self (as indicated by repeated interviews), etc., are frequently held to be prerequisite to the shift toward increased academic achievement by disadvantaged learners. Where your approved measurement devices do not lend themselves to reporting on tables 26, 27, 28, or 29, use any combination of items and report on separate pages. Attach additional pages if necessary.

PREPLACEMENT

Component Code	Activity Code	Objective Code		
6 0 8 6 1	7 2 0	8 1 4 8 1 7	801	30

Brief Description The Criterion Reading Test measured mastery in the following categories: meter skills, visual input with meter response, auditory input with meter response, phonology, structural analysis, vocabulary, syntax, and comprehension.

Number of cases observed: 270 Number of cases in treatment: 270

Pretreatment index of behavior (Specify scale used): _____

Criterion of success: Mastery was defined as success on items selected as instructional objectives following pretest failure.

Was objective fully met? Yes No If yes, by what criteria do you know? 87% (234/270) of the children passed at least one instructional objective in reading.

Comments: _____

Measures of growth other than Standardized Tests

31. This question is designed to describe the attainment of approved objectives not normally associated with measurement by norm referenced standardized achievement tests. Such objectives usually deal with behavior that is indirectly observed, especially in the affective domain. For example, a reduction in truancy, a positive change in attitude toward learning, a reduction in disruptive behavior, an improved attitude toward self (as indicated by repeated interviews), etc., are frequently held to be prerequisites to the shift toward increased academic achievement by disadvantaged learners. Where your approved measurement devices do not lend themselves to reporting on tables 26, 27, 28, or 29, use any combination of items and report on separate pages. Attach additional pages if necessary.

PREPLACEMENT

Component Code

Activity Code

6 0 9 6 1

2 7 0

30

Brief Description The KeyMath Test measured mastery in the following categories: numeration, fractions, symbols, addition, subtraction, multiplication, division, numerical reasoning, word problem, money, measurement, and time.

Number of cases observed: 2 7 0 Number of cases in treatment: 2 7 0

Pretreatment index of behavior (Specify scale used): _____

Criterion of success: Mastery was defined as success on items selected as instructional objectives following pretest failure.

Was objective fully met? Yes No If yes, by what criteria do you know? 91% (247/270) of the children passed at least one instructional objective in arithmetic.

Comments: _____

30A 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. **HEARING HANDICAPPED**

Code	Instructional Objective	Publisher	Level	Component Code 1/	Subgroup 2/	Pretest		Posttest	
						No. of Pupils		No. of Pupils from Col. 2 Passing	No. of Pupils from Col. 2 Failing
						Passing (1)	Failing (2)		
2101	letter recog.	Croft	P	60861	H	ins.data	15	10(67%)	5 (33%)
2102-3, 4, 2108	consonants	Croft	P	60861	H	" "	54	43(80%)	11(20%)
2106-7	vowels	Croft	P	60861	H	" "	9	1(11%)	8 (89%)
2200	struct. analys.	Croft	P	60861	H	" "	42	36(86%)	6 (14%)
2400	comprehension	Croft	P	60861	H	" "	48	38(79%)	10(21%)
TOTALS				60861	H				
30B									
2507	speech artic.	teacher defined		60861		ins.data	49	49(100%)	0(0%)
NO MATH EVALUATION				60961	H	X	X	X	X

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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.

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20. 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 50 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.

HEARING HANDICAPPED

Code	Instructional Objective	Publisher	Level	Component Code 1/	Subgroup 2/	Pretest		Posttest	
						No. of Items*		No. of Items* from Col. 2	No. of Items* from Col. 2
						Passing (1)	Failing (2)	Passing	Failing
2101	letter recogn.	Greft	P	60861	H.	Insufficient	17	11(65%)	6 (35%)
2102, 3, 4, 5, 2108, 9	consonants	Greft	P	60861	H	" "	90	70(78%)	20(22%)
2106-7	vowels	Greft	P	60861	H	" "	9	1 (11%)	8 (89%)
2200	struct. analys.	Greft	P	60861	H	" "	63	44(70%)	19(30%)
2400	comprehension	Greft	P	60861	H	" "	95	67(71%)	28(29%)
	TOTALS	Greft	P	60861			274	193=74%	81=26%
300									
2507	speech artic.	teacher defined		60861	H	" "	49	46=94%	3 = 6%
	NO MATH EVALUATION			60961		X	X	X	X
	* total number of items								

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.

MULTIPLY HANDICAPPED

Code	Instructional Objective	Publisher	Level	Component Code 1/	Subgroup 2/	Pretest		Posttest	
						No. of Pupils		No. of Pupils from Col. 2 Passing	No. of Pupils from Col. 2 Failing
						Passing (1)	Failing (2)		
	Motor skills	Random House	1	60861	H	ins.data	34	23(68%)	9 (32%)
	Vis.input-mot.	"	1	60861	H	"	33	25(76%)	8 (24%)
	Aud.input-mot.	"	1	60861	H	"	39	32(82%)	7 (18%)
2100	Phonology	Random House	2	60861	H	"	10	7 (70%)	3 (30%)
2200	Struct.Analysis	" "	2	60861	H	"	2	1 (50%)	1 (50%)
2300	Vocabulary	" "	2	60861	H	"	12	12(100%)	0(0%)
2207-8	Syntax	" "	2	60861	H	"	5	5(100%)	0(0%)
2400	Comprehension	" "	2	60861	H	"	4	4(100%)	0(0%)
2100	Phonology	Random House	3	60861	H	"	3	3(100%)	0(0%)
2200	Struct.Analysis	" "	3	60861	H	"	2	2(100%)	0(0%)
2300	Vocabulary	" "	3	60861	H	"	4	3(75%)	0(0%)
2207-8	Syntax	" "	3	60861	H	"	3	2(67%)	1 (33%)
2400	Comprehension	" "	3	60861	H	"	1	1(100%)	0(0%)

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: Excluded (code as E), 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. **Pretest-Posttest 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 30 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.

MULTIPLY HANDICAPPED

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Code	Instructional Objective	Publisher	Level	Component Code 1/	Subgroup 2/	Pretest		Posttest	
						No. of Pupils		No. of Pupils from Col. 3	No. of Pupils from Col. 2
						Passing (1)	Failing (2)	Passing	Failing
1100	numeration	Amer. Guid. Serv.		60961	H	ins. data	27	16(59%)	11(41%)
1103	fractions	AGS		60961	H	"	11	10(91%)	1(9%)
1200	geometry, symbols	"		60961	H	"	34	31(91%)	3(9%)
1107	addition	"		60961	H	"	20	18(90%)	2(10%)
1108	subtraction	"		60961	H	"	12	10(83%)	2(17%)
1109	multiplication	"		60961	H	"	3	2(67%)	1(33%)
1110	division	"		60961	H	"	1	1(100%)	0(0%)
1800	mental computa.	"		60961	H	"	1	1(100%)	0(0%)
1800	numerical reas.	"		60961	H	"	2	1(50%)	1(50%)
1900	word problems	"		60961	H	"	2	2(100%)	0(0%)
1305	money	"		60961	H	"	18	13(72%)	5(38%)
1300	measurement	"		60961	H	"	11	1(18%)	0(0%)
1306	time	"		60961	H	"	20	14(70%)	6(30%)

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- 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 50 hours) in reading or mathematics. Use the instructional objective codes provided on pp. 2-4 of the construction manual. List 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 column 8 and 9 those participants who completed both tests.

MULTIPLY HANDICAPPED

Code	Instructional Objective	Publisher	Level	Component Code 1	Subgroup 2	Pre-test		No. of Pupils from Col. 2 Passing	No. of Pupils from Col. 2 Failing
						Passing	Failing		
						(1)	(2)		
	motor skills	Random House	1	60861	H	Ins. data	37	22(59%)	15(41%)
	vis input-met.	" "	1	60861	H	"	39	31(79%)	8(21%)
	aud input-met.	" "	1	60861	H	"	82	63(77%)	19(23%)
2100	phonology	Random House	2	60861	H	"	11	6(55%)	5(45%)
2200	struct. analysis	" "	2	60861	H	"	2	1(50%)	1(50%)
2300	vocabulary	" "	2	60861	H	"	12	12(100%)	0(0%)
2207-B	syntax	" "	2	60861	H	"	5	5(100%)	0(0%)
2400	comprehension	" "	2	60861	H	"	5	5(100%)	0(0%)
2100	phonology	Random House	3	60861	H	"	5	2(40%)	3(60%)
2200	struct. analysis	" "	3	60861	H	"	2	2(100%)	0(0%)
2300	vocabulary	" "	3	60861	H	"	5	4(80%)	1(20%)
2207-B	syntax	" "	3	60861	H	"	5	4(80%)	1(20%)
2400	comprehension	" "	3	60861	H	"	1	1(100%)	0(0%)
	TOTALS		1,2,3				211	158=75%	53=25%

- 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. **Handicapped Referenced Test Results:** In the table below, enter the number of participants who completed each of the referenced test results used to evaluate the effectiveness of each treatment. Use the appropriate code for each group of participants or mathematics. Use the instructional objective codes provided in pp. 7-8 of this report. Enter the number of items on only those instructional objective codes which were addressed by the treatment and provide separate data for each test used and each level tested. Use appropriate codes if necessary. Record in columns 7, 8 and 9 the number of those participants who completed both tests.

MULTIPLY HANDICAPPED

Code	Instructional Objective	Publisher	Level	Component Code 1/	Subgroup 2/	Pretest		Posttest	
						No. of items		No. of	No. of
						Passing (1)	Not Passing (2)	Passing %	Not Passing %
1100	numeration	Amer. Guid. Ser.		60961	H	ins. data	34	18(53%)	16(47%)
1103	fractions	"		"	H	"	11	10(91%)	1(9%)
1200	geom. symbols	"		"	H	"	36	30(83%)	7(17%)
1107	addition	"		"	H	"	23	21(91%)	2(9%)
1108	subtraction	"		"	H	"	12	10(83%)	1(17%)
1109	multiplication	"		"	H	"	3	1(33%)	2(67%)
1110	division	"		"	H	"	1	1(100%)	0(0%)
1800	mental computa.	"		"	H	"	1	1(100%)	0(0%)
1800	numer. reason.	"		"	H	"	2	1(50%)	1(50%)
1900	word problems	"		"	H	"	1	2(100%)	0(0%)
1305	money	"		"	H	"	25	18(72%)	7(28%)
1300	measurement	"		"	H	"	11	11(100%)	0(0%)
1306	time	"		"	H	"	26	16(62%)	10(38%)
	TOTALS			60961	H		187	140=75%	47=25%

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.

*total number of items

30. **Instructional Referenced Test Results.** In the table below, enter the number of instructional objective codes and referenced test results used to evaluate the effectiveness of each treatment group. Use the letters N, D, B, or H for Neglected, Delinquent, Bilingual, or Handicapped. Use the instructional objective codes provided in appendix 1. Use only those instructional objective codes which were addressed by the treatment and provide separate data for each level tested. Use additional sheets if necessary. Report in columns 2 and 3 only those participants who completed both tests.

SEVERELY EMOTIONALLY DISTURBED

Code	Instructional Objective	Publisher	Level	Component Code 1	Subgroup 2	Pretest		Posttest	
						No. of Pupils		No. of Pupils	No. of Pupils
						(1)	(2)	Col. 1	Col. 2
						Passing	Failing	Passing	Failing
--	aud, input met, r.	Random House	1	60861	H	ins. data	30	30(100%)	0(0%)
2100	phonology	"	2	60861	H	"	17	12(71%)	5(21%)
2100	phonology	"	3	60861	H	"	21	19(90%)	2(10%)
2207-8	syntax	"	3	60861	H	"	6	6(100%)	0(0%)
30.J.									
1100	numeration	Amer. Guid. Serv.		60961	H	ins. data	15	15(100%)	0(0%)
1107	addition	"		60961	H	"	51	46(90%)	0(0%)
1108	subtraction	"		60961	H	"	16	12(75%)	4(25%)
1109	multiplication	"		60961	H	"	1	1(100%)	0(0%)

- 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. K. Results of Standard Test Results. In the table below, under the appropriate column for each subject, present the results used to evaluate the effectiveness of a subcomponent. (The total score for each or mathematics. Use the instructional objective codes provided in appendix 1. Provide separate data only those instructional objective codes which were addressed by the treatment and provide separate data for each test and each level tested. Use additional sheets if necessary. Report in columns 2, 3 and 4 only those participants who completed both tests. SEVERELY EMOTIONALLY DISTURBED

Code	Instructional Objective	Publisher	Level	Component Code 1	Subgroup 2	Pretest		Posttest	
						No. of items		No. of items	No. of items
						Passing (1)	Failing (2)	from Col. 1 Passing	from Col. 2 Failing
--	aud. input-mot. r.	Random House	1	60861	H	ins. data	45	41 (91%)	4 (9%)
2100	phonology	"	2	60861	H	"	28	17 (61%)	9 (39%)
2100	phonology	"	3	60861	H	"	40	37 (94%)	3 (7%)
2207-8	syntax	"	3	60861	H	"	6	6 (100%)	0 (0%)
TOTALS							119	101=85%	18=15%
30. L.									
1100	numeration	Amer. Guid. Ser.		60961	H	ins. data	46	33 (72%)	13 (28%)
1107	addition	"		60961	H	"	64	53 (83%)	11 (17%)
1108	subtraction	"		60961	H	"	16	12 (75%)	4 (25%)
1109	multiplication	"		60961	H	"	1	1 (100%)	0 (0%)
TOTALS				60961	H		127	99=78%	28=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 speech treatments (less than 60 hours) in reading or mathematics. Use the instructional objective codes provided on pp. 2-4 of the instruction manual. Record 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.

PREPLACEMENT

Code	Instructional Objective	Publisher	Level	Component Code 1/	Subgroup 2/	Pretest		Posttest	
						No. of Pupils		No. of Pupils from Col. 1	No. of Pupils from Col. 2
						Passing (1)	Failing (2)	Passing	Failing
	motor skills	Random House	1	60861	H	ins. data	14	14(100%)	0(0%)
	vis. input-mot. r.	"	1	"	H	"	34	34(100%)	0(0%)
	aud. input-mot. r.	"	1	"	H	"	44	42(95%)	2(5%)
2100	phonology	Random House	2	60861	H	"	81	76(94%)	5(6%)
2200	struct. analysis	"	2	"	H	"	4	4(100%)	0(0%)
2300	vocabulary	"	2	"	H	"	34	33(97%)	1(3%)
2207-8	syntax	"	2	"	H	"	2	2(100%)	0(0%)
2400	comprehension	"	2	"	H	"	14	13(93%)	1(7%)
2100	phonology	Random House	3	60861	H	"	59	57(97%)	2(3%)
2200	struct. analysis	"	3	"	H	"	2	2(100%)	0(0%)
2300	vocabulary	"	3	"	H	"	33	33(100%)	0(0%)
2207-8	syntax	"	3	"	H	"	1	1(100%)	0(0%)
2100	phonology	Random House	4	"	H	"	5	5(100%)	0(0%)
2300	vocabulary	"	4	"	H	"	4	4(100%)	0(0%)
2400	comprehension	"	4	"	H	"	1	1(100%)	0(0%)

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. **Numerical 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.

PREPLACEMENT

Code	Instructional Objective	Publisher	Level	Component Code 1/	Subgroup 2/	Pretest		Posttest	
						No. of Pupils		No. of Pupils from Col. 2 Passing	No. of Pupils from Col. 2 Failing
						Passing (1)	Failing (2)		
1100	numeration	Amer. Guid. Ser.		60961	H	ins. data	123	122(99%)	1(1%)
1103	fractions	"		"	H	"	21	20(95%)	1(5%)
1200	geom. symbols	"		"	H	"	17	17(100%)	0(0%)
1107	addition	"		"	H	"	77	76(99%)	0(0%)
1108	subtraction	"		"	H	"	37	37(100%)	0(0%)
1109	multiplication	"		"	H	"	5	5(100%)	0(0%)
1110	division	"		"	H	"	4	4(100%)	0(0%)
1800	numerical reason	"		"	H	"	3	3(100%)	0(0%)
1900	word problems	"		"	H	"	2	2(100%)	0(0%)
1305	money	"		"	H	"	17	17(100%)	0(0%)
1300	measurement	"		"	H	"	32	31(97%)	0(0%)
1306	time	"		"	H	"	27	27(84%)	5(16%)

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 30 hours) in reading or mathematics. Use the instructional objective codes provided on pp. 26 of the criterion-referenced test 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.

PREPLACEMENT

Code	Instructional Objective	Publisher	Level	Component Code 1/	Subgroup 2/	Pretest		Posttest	
						No. of Items		No. of Items from Col. 1	No. of Items from Col. 2
						Passing (1)	Failing (2)	Passing	Failing
	meter skills	Random House	1	60861	H	ins. data	20	20(100%)	0(0%)
	vis. input-met.	"	1	"	H	"	60	53(88%)	7(12%)
	aud. input-met.	"	1	"	H	"	95	87(92%)	8(8%)
2100	phonology	Random House	2	"	H	"	89	83(93%)	6(6%)
2200	struct. analysis	"	2	"	H	"	8	8(100%)	0(0%)
2300	vocabulary	"	2	"	H	"	59	56(95%)	3(5%)
2207-8	syntax	"	2	"	H	"	2	2(100%)	0(0%)
2400	comprehension	"	2	"	H	"	18	15(83%)	3(17%)
2100	phonology	Random House	3	"	H	"	71	69(97%)	2(3%)
2200	struct. analysis	"	3	"	H	"	2	2(100%)	0(0%)
2300	vocabulary	"	3	"	H	"	77	75(97%)	2(3%)
2207-8	syntax	"	3	"	H	"	1	1(100%)	0(0%)
2100	phonology	Random House	4	"	H	"	8	7(87%)	1(13%)
2300	vocabulary	"	4	"	H	"	7	7(100%)	0(0%)
2400	comprehension	"	4	"	H	"	1	1(100%)	0(0%)

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.

TOTALS 60861 H 518 486=94% 32=6%



30. **Pretest and Posttest Results:** In the tables on pages 49 and 50, the pretest and posttest results are presented for the 100 items used to evaluate the effectiveness of the experimental program. The items are listed in column 1, and the instructional objectives to which they are related are listed in column 2. The pretest and posttest results are given in columns 3 and 4, respectively. The number of items which were addressed by the treatment and which were used in each level test are given in columns 5 and 6, respectively. The number of those participants who completed both tests is given in column 7.

PREPLACEMENT

Code	Instructional Objective	Publisher	Level	Component Code 1/	Subgroup 2/	Pretest		Posttest	
						No. of items	No. of items	No. of items	No. of items
						Passing (1)	Failing (2)	Col. 1 Passing	Col. 2 Failing
1100	numeration	Amer. Guid. Serv.		60961	H	ins. data	178	173(93%)	5(7%)
1103	fractions	"		"	H	"	25	24(96%)	1(4%)
1200	geom. symbols	"		"	H	"	18	18(100%)	0(0%)
1107	addition	"		"	H	"	120	107(89%)	13(11%)
1108	subtraction	"		"	H	"	60	54(90%)	6(10%)
1109	multiplication	"		"	H	"	6	6(100%)	0(0%)
1110	division	"		"	H	"	7	7(100%)	0(0%)
1800	numerical reas.	"		"	H	"	9	8(89%)	1(11%)
1900	word problems	"		"	H	"	2	2(100%)	0(0%)
1305	money	"		"	H	"	32	27(84%)	5(16%)
1300	measurement	"		"	H	"	36	34(94%)	2(6%)
1306	time	"		"	H	"	58	43(74%)	15(26%)
	TOTALS						551	503=91%	48=9%

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.