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ABSTRACT

This first phase of a projected longitudinal study designed to assess the impact of Head Start in Montgomery County, Maryland, concentrates on reporting results of data collection activities from 1966 to the end of 1969. Instruments were developed to measure whether Head Start evolved a curriculum relevant to its goals and whether the developmental characteristics of former Head Starters are different from those of comparable first graders without Head Start experience. Methodology involved observation in classrooms, trial of specially developed materials, and administration of tests. Classroom adjustment was evaluated for pupils working with teachers, with other adults, and without direct adult supervision. Pupils in Head Start classes, former Head Starters currently in kindergarten, and non-Head Starters used as matched controls were tested on tests of basic experience and rated for adjustment. First graders who were former Head Starters were tested on standardized intelligence and readiness tests. Even though few significant differences were found between Head Starters and non-Head Starters, this phase of the study was judged successful because instruments were developed for the description of Head Start classroom activities and for the evaluation of classroom adjustment. Sixteen tables and thirteen figures are provided along with three appendixes. (WY)

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Final Report:

Impact of the Head Start Program
Contract No. B99-4851
Phase I of a
Projected Longitudinal Study

to

The U. S. Office of Economic Opportunity

from the

Department of Research
Montgomery County Public Schools
Rockville, Maryland

May, 1970

Montgomery County Public Schools
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BRIEF DESCRIPTION OF PROJECT

INTRODUCTION

This is a report on evaluative research on the Head Start classes in the Montgomery County Public Schools conducted during the period May 1, 1969 to December 30, 1969, under contract B99-4851.

Head Start classes for pre-school children from low socio-economic homes began in the Montgomery County Public Schools during the summer of 1965. In line with their policy of evaluating the impact of all innovative programs, the Montgomery County Public Schools were interested in how successful the Head Start program was in meeting its goals.

Earlier Study, Supported by Office of Economic Opportunity

In this connection, the Department of Research of the Montgomery County Public Schools, under grant from the U. S. Office of Economic Opportunity conducted a pilot study in evaluation in Head Start classes in 1966-67, collecting data on instructional activities, curriculum emphases, estimates of students' general ability levels and teachers' estimates of pupil adjustment, useful in describing the Head Start program as it then existed.

The current study, here reported utilizes some of the data collected in 1966-67 and is designed to determine whether Head Start has evolved a curriculum relevant to its goals, whether the developmental characteristics of former Head Start pupils are different from those of comparable first grade pupils who have not been through the Head Start program, and to obtain preliminary evaluative information on the success of Head Start.

The Problems Studied in the Current Research

The specific tasks for this current investigation are: (1) The identification of differences in classroom adjustment and achievement of former Head Start pupils and their non-Head Start first grade classmates. (2) An examination of the emphases in the current Head Start curriculum. (3) Determination of the predictive validity of data gathered on Head Start pupils during their participation in Head Start for future school performance.

The data obtained during the course of this project will be useful in following the progress of former Head Start pupils throughout the primary grades (K-2) and evaluating the effect of the program.

This report summarizes the instrument development and data collection of the first phase of this current multi-phased study. The data and activities reported here are interim results which must be compared with data still to be collected in subsequent phases planned for this study.

Design of the Current Study

The current research divides into two time periods: (1) from May through July, 1969 and (2) from September through December 1969.

These two time segments will be reported separately for purposes of clarity in presentation.

The data collected in both of these time segments constitute baseline data, not final criterion data. This, therefore, is not a report of a completed evaluation research. It is a report of progress in collecting the data that must be banked for use in a terminal evaluation, planned for 1972, if funds for continuing the study become available.

Activities in the Spring of 1969 included:

- (1) Testing of first grade students who had had Head Start experience in the 1966-67 Head Start program and students who had not had such experience. The aim of the testing was to determine the performance levels of these groups near the end of first grade.
- (2) Selected former Head Start pupils and non-Head Start first grade pupils were observed in the classroom and rated on their social reactions and personal relations by specially trained observers.
- (3) Completion by first grade teachers of the Classroom Adjusted Checklist (developed in 1966) for these selected pupils.
- (4) Observations of Head Start classrooms to describe classroom activities and atmosphere objectively.
- (5) Completion of the Classroom Adjustment Checklist for each pupil currently in Head Start classes.

Activities in the 1969-70 school years are much more extensive. These included:

- (1) Administering three batteries of tests -- one battery to Head Start pupils, one to selected Kindergarten pupils and one to selected first grade pupils.
- (2) Observations in Head Start classrooms for the entire school year.
- (3) Observations of selected individual first grade pupils.
- (4) Ratings in the Classroom Adjustment Checklists on all Head Start and selected first grade pupils in the Fall of 1969 (as a companion to a second rating to be obtained on these pupils at the end of the school year).

Data reported here were collected as of December 1, 1969. Additional data will continue to be collected until the end of the current school year.

This report will serve to point out what data collection has revealed so far.

METHODOLOGY

Instrument Development

Determination of the relevance of the Head Start program to its avowed goals was central to the study. Activities in Head Start classrooms would logically be assumed to reflect the incorporation of the program's stated goals. A statement of Head Start goals was obtained from Head Start materials. Identification of classroom activities was accomplished by using a time-sampled classroom observation procedure which provided a means for reporting observable activities and features of the learning situation.

Head Start Goals

Head Start has many educational goals, involving not only the pupils, but also their parents and the community. The goals involving pupils are most relevant to this study.

These goals are addressed to specific deficits. A 2-page list of all the avowed Head Start goals is included in Appendix A.

Time-Sampled Observation Procedure

The time-sampled observation method is extensively used by the Montgomery County Public Schools to describe classroom activities and dynamics. This technique has been developed and refined by the Department of Research of the Montgomery County Public Schools over an eight-year period. It has proved useful in ascertaining what the prevailing curriculum practices are at a given point in time in many subject areas. It is a way of obtaining baseline data on prevailing curriculum practices to which data from a later series of observations may be compared. Differences in the two sets of data permit change in curriculum practices to be assessed.

The use of the time-sampled observation technique to describe the Head Start program was a pioneer effort in extending the technique to a pre-school program. The collected data from observations show what the Head Start program actually looked like in operation. The data identify what the teachers, aides and pupils did most frequently or not at all. The data provide evidence regarding whether Head Start emphasizes the language development, the socialization and the acquisition of positive attitudes toward school by the child to the degree its goals predict.

The basic time-sampled observation schedule used was developed in 1961. Subject area supervisors, curriculum specialists, teachers and research personnel participated in the development of the instrument. The initial list of categories was obtained in an a priori manner. Specific observable actions and features of the classroom setting were identified and classified into manageable categories. The instrument was tried out and revised over a period of time to eliminate overlapping categories and to identify gaps in the categories. This basic instrument has served with few structural changes over the years. However, the basic instrument is modified to meet the specific purposes of individual studies undertaken by the Department of Research. Additions are made to accommodate the special interests and concerns of each study and details are added to the categories insuring that the instrument is inclusive of the subject of the study. In modifying the instrument for use in Head Start, preliminary observations were made in Head Start classes. The classes were observed and their teachers were actively involved in the revision of the basic instrument, making it applicable to the Head Start program.

The revised observation instrument reflected the activities of the Head Start classes in terms of their avowed goals. A major part of the revision was the inclusion of a section related to concepts or topics of instruction emphasized in Head Start classes. The Materials section of the observation instrument was expanded to include a variety of items used in Head Start classes such as floor play equipment, household cleaning tools, food service trays and dishes, gardening tools and kitchen utensils. Special attention was given to insure that special skills involving verbal development, socialization and coordination important to the Head Start program were included. Pupil activities specially applicable to Head Start classes were added, for example, eating and drinking, personal grooming and taking care of ones' personal needs. The section on Teachers' Activities was expanded to include supportive talk and reinforcement categories.

A new section on Classroom Behavior was added to include categories dealing with social reactions and personal relations evidenced by pupils. This section is used only when individual pupils are observed. Observations of individual pupils are made to identify differences in classroom behavior between groups of pupils with varying backgrounds.

A copy of this instrument appears in Appendix B.

Training of Observers

Effective use of time-sampled observation technique requires a trained team of observers capable of carrying out observations in a precise manner. Successful observers are generally teachers who have had classroom experience and can move in and out of classrooms without disrupting on-going activities.

Training of observers in the use of the Head Start instrument was conducted by specialists whose chief responsibility was to supervise the use of the time-sampled observation instrument. The purposes, assumptions and operational plan underlying the observation instruments were explained. The instrument itself was discussed in detail, and the categories and subcategories were precisely defined. The next step was to have the observers visit Head Start classes and to familiarize them with the kinds of activities taking place and give them a "feel" for the atmosphere of Head Start. Group observations were then made with a specialist as leader in charge. Discrepancies in percept and definition of terms were resolved by group discussion, and training continued until observer to observer reliability was at least 90 per cent, that is, until the different observers agreed on their major entries at least 9 out of 10 times.

Estimates of Classroom Adjustment

Two techniques were used for estimating the classroom adjustment of Head Start, Kindergarten and first grade pupils. One of these was to secure teachers' rating of pupils' adjustment on a checklist developed during a prior research effort on Head Start in Montgomery County, and the other was an observation approach. The checklist was used with pupils in all three of the above programs. The observation approach was used only with the first grade pupils.

Classroom Adjustment Checklist

The Classroom Adjustment Checklist is a behavior rating scale expressly designed to describe and differentiate the behaviors of young children in the classroom setting. The development of the checklist was a joint effort of the Department of Research and Head Start classroom teachers. Head Start teachers submitted positively framed statements of behavior which they considered contributory to the achievement of the goals set by the Head Start program for pupils. Checklists developed by other authors were then examined to find any behaviors relevant to young children not mentioned by the teachers. Items from both sources were combined, and a final 41 items were selected and assembled into a checklist with a seven-point rating scale. These items were subjected to factor analysis using the varimax solution to attain maximum differentiation among the items. The analysis yielded five factors to which all 41 items could be related. The five factors and the specific sets of items related to them are shown below.

FACTOR I - Out-going, Socially Oriented Behaviors

- Item 1. Speaks as loudly or as quietly as the situation requires.
- Item 2. Volunteers answers to questions from adults.
- Item 3. Replies to direct questions from adults.
- Item 4. Talks with other children.
- Item 5. Talks with adults.
- Item 6. Participates in talking activities.
- Item 7. Has energy and drive.
- Item 8. Appears confident that he can do what is expected of him.
- Item 9. Is genuinely curious about the world around him.
- Item 10. Maintains his rights to take his turn in games or to use materials.

FACTOR II - Active Self-Control Behaviors

- Item 11. Follows directions.
- Item 12. Responds appropriately to correction or help.
- Item 13. Participates in listening activities
- Item 14. Is content with moderate adult attention.
- Item 15. Is content with moderate peer attention.
- Item 16. Takes reasonable care of instructional materials.
- Item 17. Completes assignments or tasks.

FACTOR II - Passive Self-Control Behaviors

- Item 18. Remains quiet at appropriate times.
- Item 19. Allows other children to carry on scheduled activities without interference.
- Item 20. Controls verbal aggressive behavior toward adults.
- Item 21. Controls verbal aggressive behavior toward other children.
- Item 22. Controls physical aggressive behavior toward adults.
- Item 23. Controls physical aggressive behavior toward other children.
- Item 24. Shares materials as the situation requires.
- Item 25. Waits for his turn to speak.

FACTOR III - Speech Quality

- Item 26. Speaks with normal voice quality.
- Item 27. Speaks fluently.
- Item 28. Uses conventional speech forms for everyday speech.
- Item 29. Articulates speech sounds expected of age group.
- Item 30. Enunciates words clearly.

FACTOR IV - Performance of Personal Needs

- Item 31. Feeds self without requiring excessive help.
- Item 32. Attends to toilet needs without requiring excessive help.
- Item 33. Attends to dressing needs without requiring excessive help.

FACTOR V - Performance of Required Activities

- Item 34. Appears to understand what the teacher is saying when directions, corrections or instructions are involved.
- Item 35. Appears to understand simple directions, corrections or instructions.
- Item 36. Participates in large muscle activities.
- Item 37. Participates in small muscle or manipulative activities.
- Item 38. Is independent of help from adults.
- Item 39. Is independent of help from other children.
- Item 40. Seems interested in the general quality of his performance.
- Item 41. Seems interested in his personal appearance.

The seven-point rating scale on the checklist consisted of these ratings: always, almost always, usually, half of the time, seldom, almost never and never. A copy of the checklist appears in Appendix C.

Classroom Behavior Instrument

The development of the classroom behavior observation categories was mentioned under the section dealing with the development of the time-sampled observation instrument. The classroom behavior categories are essentially a rating scale in the areas of social reactions and personal relations. The items included in these categories represented a continuum of behavior in these areas. The personal relations category has four traits, independence, responsibility, interest and confidence, to be rated on a four-point scale. The Social Reactions category has three items, participation, self-control and cooperation, also to be rated on a four-point scale.

Definitions of each of these items are given below. The definitions are given in terms of representative behavior and non-representative behavior. The observer evaluated the child observed on each item and rated him on a four-point scale -- above average, below average, average, poor -- according to the degree to which the representative behavior for each item was evidenced at the time of the observation. The categories rated are listed on the following page.

CLASSROOM BEHAVIOR CATEGORIES

Personal Relations

1. Independence
 - a. Cares for personal needs - food, sanitation, clothing.
Cares for routine and school activity needs.
 - b. Dependent, has to be helped.
2. Accepts Responsibility
 - a. Completes tasks, cares for materials.
Has capacity for independent activities.
 - b. Irresponsible, doesn't complete work or care for materials.
Cannot initiate activities on his own.
3. Shows Interest
 - a. Energy, drive enthusiastic
 - b. Disinterested, listless
4. Confidence
 - a. Self-assurance, maintains right to take turn.
 - b. Unsure, hesitates, nervous

Social Reaction Patterns

1. Participation
 - a. Volunteers, actively participates in group, works well alone or with others, attentive.
 - b. Inattentive, disruptive behavior
2. Self-Control
 - a. Controls physical and verbal aggressive behavior toward adults and children.
 - b. Annoys the other children, talks back to teacher.
3. Cooperation
 - a. Follows directions, shares, takes turns, get along well with others.
 - b. Doesn't pay attention, wants to do things his own way, unwilling to wait turn.

FINDINGS

ACTIVITIES DURING SPRING 1969

Activities from May 1969 to July 1969 were centered on Head Start classrooms and first grade classrooms. The major research activity was observing classroom activities in Head Start and classroom behavior in first grade, testing of selected first grade pupils and obtaining estimates of classroom adjustment from Head Start and first grade teachers.

Head Start activities will be discussed first and then first grade activities.

Head Start Classroom Organization

The focus of Head Start is the pupils and the goals of Head Start are aimed at making up the deficits in verbal ability, socialization and general experience that act as handicaps in undertaking school work. Head Start, therefore, is designed as an enrichment experience for such youngsters, designed to permit them to gain an equal footing with their classmates and have a chance for staying up with their classmates.

The time-sampled observation instrument used in observing the Head Start classes permitted the recording of the activities of pupils, teachers, aides, volunteers, student helpers, resource teachers and other adults present in the classroom; the types of activities they were engaged in whether functioning within or outside of the learning situation; and the "climate" of the Head Start classroom. The observations provide a total picture of Head Start including activities of pupils when working with the teacher and when working independently of direct adult guidance.

In the Spring of 1969 there were 31 Head Start classes in 23 elementary schools in the system. Over a three-month period (May to July) 727 observations of ten Head Start classes in eight of these schools were made at points in time randomly spaced throughout the Head Start school day. The ten schools at which Head Start classes were observed were scattered throughout the geographic area of the county, which extends over a 500 square mile area.

Since the purpose of the observations was to describe the Head Start classroom, an important factor was the organization of classrooms represented by the number of adults present, the number of groups into which pupils were divided, how the pupils were organized for instruction, and the kind of interaction taking place. The following tabulation shows the per cent of time there were the indicated number of adults in the classroom.

<u>Number of Adults in Room</u>	<u>Per Cent of 30 Observations</u>
1	5.3
2	29.8
3	38.6
4	19.3
5 or more	6.7

TABLE 1

INTERACTION PATTERNS OF ADULTS AND PUPILS IN HEAD START CLASSROOMS

TYPE OF ADULT INTERACTION WITH PUPILS	Number of Occurrences of Each Type of Interaction Pattern	Indicated Number of Occurrences Expressed as Per Cent of all Observations
<u>One Adult in Room</u>		
010 - Adult interacting with whole class.	23	3.2
020 - Adult interacting with one pupil; other pupils functioning separately.	5	0.7
050 - Adult interacting with group of pupils; other pupils functioning separately.	10	1.4
080 - Adult not interacting with pupils.	5	0.7
<u>More Than One Adult in Room</u>		
141 - One adult interacting with whole class, others helping.	73	10.0
142 - One adult interacting with whole class, others observing.	110	15.1
143 - One adult interacting with whole class, others not interacting.	159	21.8
150 - Two or more adults equally sharing conduct of whole class.	107	14.7
160 - Two or more adults with pupils, interacting with different groups.	204	28.1
170 - No adults interacting with pupils.	31	4.3
TOTAL	727	100.0

Nearly all of the time (94.7 per cent), there were at least two adults in the classroom. During the 727 observations, some of the adults who were seen in the classroom were not working directly with the pupils about 34.2 per cent of the time.

Pupils were divided into two or more groups during 53.2 per cent of the observations, that is, 388 times there were two or more groups of pupils functioning in the classroom. The frequency with which numbers of groups were observed is shown below. A total of 1,660 separate groups were observed during the 730 observations.

<u>Number of Groups Observed</u>	<u>Per Cent of 730 Observations</u>
1	46.8
2	16.9
3	14.9
4	9.8
5 or more	11.2

Three possible ways in which pupils could be organized were defined. The most frequently observed type of organization (58.0 per cent) was for "all pupils to be performing the same activity in the same way." This generally involved some form of group activity in which all pupils can participate at the same time, such as singing in unison, counting and playing group games. The next most frequent type of organization (36.3 per cent) was for groups of pupils to be doing different things. This is exemplified by "free play" periods in which some pupils play with toys, others do craft-type work and others art work. The remaining type of organization, with all pupils on the same activity but in different ways, was observed only 5.6 per cent of the time. An example is doing the same thing but using different materials, as in art, when painting and drawing activities are going on simultaneously.

Interaction Pattern of Head Start Classes (1968-69)

Table 1 shows the interaction patterns of Head Start pupils with adults during the 727 observations made in the time-sampled survey of Head Start curriculum practices.

There was always one or more adults in every Head Start classroom observed, and only 5 per cent of the time the children were not interacting with some adult present (7 per cent when one adult was present and 4.3 per cent when two or more were present). During 24.7 per cent of the observations, two adults were sharing the teaching responsibilities (10.0 per cent when teacher or aide was conducting the activity with support from some other type of adult, and 14.7 per cent when two adults were equally sharing the class). On 36.9 per cent of the occasions, one adult was conducting the classwork while others were either observing (15.1 per cent) or not interacting (21.8 per cent). The most frequent single interaction pattern was for two or more adults to be interacting with different groups of children (28.1 per cent).

Description of Classroom Activities

The Head Start classroom activities are intended to provide experiences that the typical child would acquire from his home environment prior to entering kindergarten. A primary goal of Head Start is to develop patterns of behavior appropriate to the classroom. A structured classroom situation with definite rules and standards is designed to prepare Head Start pupils to cope with kindergarten activities.

Before the data are presented in detail, the general impressions of the observers will be summarized. The observers were asked about their impressions of and reactions to Head Start as a program and as compared with nursery school programs. There was considerable feeling that the Head Start program was more structured in terms of activities and time allotted for activities than nursery schools and that Head Start classrooms were equipped better than most nursery schools. Head Start appeared to be more purposeful than nursery school and to be oriented toward educational concepts.

As with any school program, the individual classrooms varied considerably in terms of size, location, atmosphere and integration with the regular school program. In some schools, Head Start is well accepted and resource teachers lend their skills for special lessons, while in others Head Start is largely as a thing apart. Sometimes the classrooms and equipment must be shared with other teachers and sometimes not. In general, though, the classrooms are well organized and pupils appear to be enjoying themselves.

The following tables report findings yielded by the time-sampled observations about the relative emphasis upon different types of pupil activities, pupil verbal behavior, materials in use, topics of instruction, teachers' purposes, teachers' activities and teachers' verbal behavior.

Pupil Activities

Table 2 reports the pupil activities observed in Head Start classes. The most frequently observed activities are engaging in large muscle activity (19.6 per cent), manipulating material (14.0 per cent), listening or observing and speaking (13.5 per cent) and eating or drinking activities (10.6 per cent).

When pupils are with the teacher, greatest emphasis is upon either listening without response (12.4 per cent) or listening and responding (23.4 per cent). Considerable routine activity by pupils occurs under teacher direction (11.4 per cent). Skills learning (making or constructing, 7.2 per cent; manipulating material, 5.6 per cent) accounts for 12.4 per cent of the pupils' time, under teacher supervision. Almost 14 per cent of pupils' activities involve large muscle tasks (10.4 per cent) or moving about in rhythmic games (3.2 per cent).

When pupils are working with adults other than the teacher, their activity involves personal affairs about 35.7 per cent of their time (eating and drinking, 16.2 per cent; doing personal routines, 8.3 per cent; and other routine, 10.2 per cent). The other adults (volunteers, essentially) seem to carry the bulk of the responsibility for supporting the pupils in large muscle activity (14.5 per cent), making or constructing (13.4 per cent), and manipulating material (16.9 per cent) -- for a total of 44.8 per cent of time when pupils are working with adults other than the teacher.

When pupils are functioning independently, i.e., without direct adult supervision, 38 per cent of the time they are engaging in large muscle activity. This, plus their independent activity of constructing (6.4 per cent) and of manipulating material (18.4 per cent), accounts for 62.8 per cent -- about two-thirds -- of the independent activity is on routines leaving a total of 19.2 per cent of the pupils' time when not supervised directly for personal activities (classroom routines, 6 per cent; personal routines, 9.1 per cent; and eating and drinking, 4.1 per cent).

Verbal activities get comparatively little pupil attention during independent activity: looking at books, 2.6 per cent; listening (as, for example, to audio devices) 0.4 per cent; and listening or observing and speaking, 11.5 per cent.

TABLE 2

PUPIL ACTIVITIES IN THE 1968-69 HEAD START CLASSES
FOR PUPILS WORKING WITH TEACHER, WITH OTHER ADULTS, AND INDEPENDENTLY
(DATA EXPRESSED AS PERCENTAGES OF NUMBER OF OCCURRENCES UNDER EACH CONDITION)
NOTE: THIS IS PAGE 1 OF A 3-PAGE TABLE

CATEGORIES OF PUPIL ACTIVITIES	FREQUENCY (N) AND CORRESPONDING PER CENT (%) WITH WHICH EACH IDENTIFIED ACTIVITY OCCURRED UNDER EACH OF THE INDICATED CONDITIONS									
	CONDITION I: WHEN PUPILS WERE WORKING WITH TEACHERS		CONDITION II: WHEN PUPILS WERE WORKING WITH OTHER ADULTS		CONDITION III: WHEN PUPILS WERE ENGAGED IN INDEPENDENT ACTIVITY		TOTAL OF ALL CONDITIONS			
	N	%	N	%	N	%	N	%	N	%
LOOKING AT BOOKS (LOOKING AT BOOKS WITHOUT DISCUSSION; LOOKING AT BOOKS WITH DISCUSSION; SELECTING LIBRARY BOOKS; LOOKING AT BOOKS WHILE TELLING STORY; ONLY TEACHER LISTENING).	6	1.2	2	0.3	15	2.6	23	1.4		
OBSERVING OR VIEWING (OBSERVING AND EXAMINING OBJECTS; EXPLORING OR HANDLING; EXPERIMENTING AND OBSERVING; WATER PLAY; PLAYING WITH AND/OR CARING FOR PETS).	9	1.8	115	2.6	16	2.8	40	2.4		
LISTENING (TO MECHANICAL DEVICE; TO TEACHER, VISITING TEACHER, ANOTHER ADULT; AUDIO-VISUAL; TEACHER DEMONSTRATION, ILLUSTRATION; FIELD TRIP).	62	12.4	35	6.0	2	6.4	99	6.0		
LISTENING OR OBSERVING AND SPEAKING (PUPILS ANSWERING AND/OR QUESTIONING; PUPILS EXPLAINING, DEMONSTRATING, ILLUSTRATING, DESCRIBING, REPORTING, "SHOW AND TELL," TELLING A STORY; VERBAL GAMES; DRILLING; CONFERRING; DISCUSSION; SPEAKING; FINGER PLAY; OBSERVING AND SPEAKING; PRACTICING HABITS OF SOCIETY; DRAMATIZING; DEVELOPING VOCABULARY).	117	23.4	40	6.9	65	11.5	222	13.5		

TABLE 2 CONTINUED

PUPIL ACTIVITIES IN THE 1968-69 HEAD START CLASSES
FOR PUPILS WORKING WITH TEACHER, WITH OTHER ADULTS, AND INDEPENDENTLY
(DATA EXPRESSED AS PERCENTAGES OF OCCURRENCES UNDER EACH CONDITION)
NOTE: THIS IS PAGE 2 OF A 3-PAGE TABLE

	FREQUENCY (N) AND CORRESPONDING PER CENT (%) WITH WHICH EACH IDENTIFIED ACTIVITY OCCURRED UNDER EACH OF THE INDICATED CONDITIONS						
	CONDITION I: WHEN PUPILS WERE WORKING WITH TEACHERS		CONDITION II: WHEN PUPILS WERE WORKING WITH OTHER ADULTS		CONDITION III: WHEN PUPILS WERE ENGAGED IN INDEPENDENT ACTIVITY		TOTAL OF ALL CONDITIONS
	N	%	N	%	N	%	
ENGAGING IN LARGE MUSCLE ACTIVITY (GAMES; COMPETITIVE SPORTS; CALISTHENICS OR GYMNASTICS; PLAYING WITH TOYS, GAMES, LARGE BLOCKS OR PLAY EQUIPMENT; RUN- NING, JUMPING, SKIPPING, ETC.; LISTENING AND MOVING; CREATIVE DANCING; RHYTHMICAL MOVEMENT).	52	10.4	84	14.5	187	33.0	323 19.6
SINGING, PLAYING MUSICAL INSTRUMENTS, MOVING TO RHYTHM WHILE SINGING	16	3.2	16	2.8	2	0.4	34 2.1
MAKING OR CONSTRUCTING (CHART, BOOKLET; PICTURE, DESIGN, ILLUSTRATION, MURAL, PRINT; HANDICRAFTS; MODEL, USEFUL OBJECT, STRUCTURE, PUPPET, ETC.; ORGANIZING, ARRANGING A DISPLAY; SHAPES, FORMS, COPYING CHARTS; PRACTICING; LISTENING, OBSERVING AND WRITING; ANSWERING QUES- TIONS OR PROBLEMS/FOLLOWING DIRECTIONS).	36	7.2	78	13.4	36	6.4	150 9.1
MANIPULATING MATERIAL (ORGANIZING MATERIALS OR MATCHING ITEMS; COMPUTING; COUNTING; PLAYING WITH SAND; PLAYING WITH SMALL TOYS; FEELING MATERIALS OR OBJECTS; DIGGING AND/OR GARDENING).	28	5.6	98	16.9	104	18.4	230 14.0

PUPIL ACTIVITIES IN THE 1968-69 HEAD START CLASSES
FOR PUPILS WORKING WITH TEACHER, WITH OTHER ADULTS, AND INDEPENDENTLY
(DATA EXPRESSED AS PERCENTAGES OF NUMBER OF OCCURRENCES UNDER EACH CONDITION)
NOTE: THIS IS PAGE 3 OF A 3-PAGE TALBE

	FREQUENCY (N) AND CORRESPONDING PER CENT (%) WITH WHICH EACH IDENTIFIED ACTIVITY OCCURRED UNDER EACH OF THE INDICATED CONDITIONS						
	CONDITION I: WHEN PUPILS WERE WORKING WITH TEACHERS		CONDITION II: WHEN PUPILS WERE WORKING WITH OTHER ADULTS		CONDITION III: WHEN PUPILS WERE ENGAGED IN INDEPENDENT ACTIVITY		TOTAL OF ALL CONDITIONS
	N	%	N	%	N	%	
DOING ROUTINES (PREPARING FOR ANOTHER ACTIVITY; MOVING TO ANOTHER AREA FOR INSTRUCTION; HELPING; HELPING TEACHER; HELPING OTHER PUPIL(S); ADDITIONAL VARIETY OF ROUTINE ACTIVITY; WAITING; PREPARING AND CLEANING UP FOR EATING; SETTING TABLE OR ARRANGING TRAYS; PASSING OUT FOOD; CLEANING UP).	57	11.4	59	10.2	34	6.0	150 9.1
DOING PERSONAL ROUTINE (CLOTHING; HYGIENE; RESTING; RESTING AND LISTENING STORY/ MUSIC).	43	8.6	48	8.3	52	9.1	143 8.7
EATING AND/OR DRINKING ACTIVITIES (WITH TALKING AND/OR LISTENING; WITHOUT TALKING AND/OR LISTENING).	57	11.4	94	16.2	23	4.1	174 10.6
INATTENTIVE ACTIVITIES (ENGAGING IN ADDITIONAL ACTIVITY; BEING DISCIPLINED; BEING INATTENTIVE TO ORGANIZED ACTIVITY; "ACTING-UP," CLOWNING, ANNOYING OTHERS; DAYDREAMING; ENGAGING IN DIFFERENT ACTIVITY; CRYING; HIDING).	17	3.4	11	1.9	30	5.3	58 3.5
TOTAL	500	100.0	580	100.0	566	100.0	1646 99.9

Pupil Skills

Table 3 reports the skills being emphasized in Head Start classes. It will be noted in the "Total" column that, overall, activity is concentrated strongly on muscular skills. There is a balance of emphasis among organizing and communicating information (11.8 per cent), following directions (8.9 per cent), social behavior (12.7 per cent), and personal self-management (acceptable personal behavior); so, there is evidence that the skills in these areas needed in regular school are being worked upon in Head Start classes. The question of whether language skills is found in the degree of strength that the proponents of Head Start hope for it still remains. There is evidence that language development is receiving attention -- gathering information (6.5 per cent), word study (1.1 per cent), dealing with information (7.3 per cent) -- and perhaps part of the already mentioned category "organizing and communicating information" is relevant here.

TABLE 3

PUPIL SKILLS IN THE 1968-69 HEAD START CLASSES
FOR PUPILS WORKING WITH TEACHER, WITH OTHER ADULTS, AND INDEPENDENTLY
(DATA EXPRESSED AS PERCENTAGES OF NUMBER OF OCCURRENCES UNDER EACH CONDITION)
NOTE: THIS IS PAGE 1 OF A 2-PAGE TABLE

CATEGORIES OF PUPIL SKILLS	FREQUENCY (N) AND CORRESPONDING PER CENT (%) WITH WHICH EACH IDENTIFIED ACTIVITY OCCURRED UNDER EACH OF THE INDICATED CONDITIONS											
	CONDITION I: WHEN PUPILS WERE WORKING WITH TEACHERS		CONDITION II: WHEN PUPILS WERE WORKING WITH OTHER ADULTS		CONDITION III: WHEN PUPILS WERE ENGAGED IN INDEPENDENT ACTIVITY		TOTAL OF ALL CONDITIONS					
	N	%	N	%	N	%	N	%				
GATHERING INFORMATION (CONTENT; LOCATING INFORMATION; INTERPRETING SYMBOLS).	66	13.5	25	4.3	12	2.2	103	6.5				
WORD STUDY/STRUCTURAL ANALYSIS (AUDITORY PERCEPTION/DISCRIMINATION; VISUAL PER- CEPTION/DISCRIMINATION; PHONICS).	10	2.0	2	0.4	6	1.1	18	1.1				
LANGUAGE (PRONUNCIATION; USAGE/CORRECT FORM; VOCABULARY/MEANINGS; CHOICE OF WORDS/PRECISION; IMAGINATION/EXPANSION; LISTENING).	34	7.0	30	5.2	52	9.9	116	7.3				
DEALING WITH INFORMATION (REASONING/ LOGICAL THINKING; ANALYZING; INTER- PRETING; DEALING WITH RELATIONSHIPS; PREDICTING OUTCOMES; AESTHETIC APPRECIATION).	37	7.6	29	5.0	15	2.8	81	5.1				
PROBLEM SOLVING (RAISING QUESTIONS; PLAN- NING; CRITICAL THINKING; CAUSE AND EFFECT; EXPLORING; EXPERIMENTING; COMPUTING).	25	5.1	23	4.0	17	3.2	65	4.1				

TABLE 3 CONTINUED

PUPIL SKILLS IN THE 1968-69 HEAD START CLASSES
FOR PUPILS WORKING WITH TEACHER, WITH OTHER ADULTS, AND INDEPENDENTLY
(DATA EXPRESSED AS PERCENTAGES OF NUMBER OF OCCURRENCES UNDER EACH CONDITION)
NOTE: THIS IS PAGE 2 OF A 2-PAGE TABLE

	FREQUENCY (N) AND CORRESPONDING PER CENT (%) WITH WHICH EACH IDENTIFIED ACTIVITY OCCURRED UNDER EACH OF THE INDICATED CONDITIONS											
	CONDITION I: WHEN PUPILS WERE WORKING WITH TEACHERS		CONDITION II: WHEN PUPILS WERE WORKING WITH OTHER ADULTS		CONDITION III: WHEN PUPILS WERE ENGAGED IN INDEPENDENT ACTIVITY		TOTAL OF ALL CONDITIONS					
	N	%	N	%	N	%	N	%	N	%	N	%
ORGANIZING/COMMUNICATING INFORMATION (DESCRIBING; CLASSIFYING; EXPLAINING; ORGANIZING, COMPARING; EXPRESSING IDEAS; CREATIVE EXPRESSION; MEMORIZING, PRACTICING; ORAL EXPRESSION).	65	13.3	69	12.0	53	10.1	187	11.8				
FOLLOWING DIRECTIONS	57	11.7	67	11.6	17	3.2	141	8.9				
ACCEPTABLE SOCIAL BEHAVIOR	72	14.8	96	16.6	34	6.5	202	12.7				
ACCEPTABLE PERSONAL BEHAVIOR	56	11.4	84	14.6	56	10.7	196	12.3				
SELF-RELIANCE	2	0.4	6	1.0	9	1.7	17	1.1				
MUSCULAR SKILLS (LARGE MUSCLE; SMALL MUSCLE; COMBINATION BOTH LARGE AND SMALL; EYE/HAND COORDINATION; BALANCING; BASIC LOCOMOTOR; GAME SKILLS; MANIP- ULATING).	64	13.1	146	25.3	252	48.1	462	27.1				
TOTAL	488	99.9	577	100.0	523	99.5	1588	100.0				

Pupil Verbal Behavior

Pupil verbal behavior was also included in the description of the Head Start classroom. Table 4 indicates how frequently each type of identified verbal behavior was engaged in by the Head Starters. Verbalization that promoted satisfying relationships with other children was in evidence. One quarter (25.4 per cent) of the time was spent in quiet school-related talk with other pupils. The largest part of the time (29.9 per cent) was spent not talking. Pupils were talking with the teacher 20.8 per cent of the time. Fifteen and three-tenths (15.3 per cent) of the time was spent in disruptive noise making.

The greatest percentage of time spent in disruptive noise-making occurred when pupils were working independently. Pupils working under this condition were not talking more frequently than under the other conditions. However, socializing was also a frequent type of verbal behavior during independent activities.

When pupils were working with teachers, they were most frequently (33.7 per cent of time) talking with the teacher or not talking (27.1 per cent). Socializing decreased to 9.6 per cent of the time. The pattern of pupil verbal behavior just noted was present when pupils were working with adults other than the teacher.

PUPIL VERBAL BEHAVIOR IN THE 1968-69 HEAD START CLASSES
 FOR PUPILS WORKING WITH TEACHER, WITH OTHER ADULTS, AND INDEPENDENTLY
 (DATA EXPRESSED AS PERCENTAGES OF OCCURRENCES UNDER EACH CONDITION)

PUPIL VERBAL BEHAVIOR	FREQUENCY (N) AND CORRESPONDING PER CENT (%) WITH WHICH EACH IDENTIFIED ACTIVITY OCCURRED UNDER EACH OF THE INDICATED CONDITIONS									
	CONDITION I: WHEN PUPILS WERE WORKING WITH TEACHERS		CONDITION II: WHEN PUPILS WERE WORKING WITH OTHER ADULTS		CONDITION III: WHEN PUPILS WERE ENGAGED IN INDEPENDENT ACTIVITY		TOTAL OF ALL CONDITIONS			
	N	%	N	%	N	%	N	%		
NO TALKING (TEACHER ENFORCED; PUPIL ENFORCED).	136	27.1	158	26.9	202	35.6	496	29.9		
RELEVANT, QUIET TALK (OTHER; QUIET, ORDERLY; RELEVANT).	124	24.7	166	28.2	130	22.9	420	25.4		
SOCIALIZING	48	9.6	64	10.9	142	25.0	254	15.3		
DRAMATIZING	7	1.4	4	0.7	52	9.1	63	3.8		
DISRUPTIVE/NOISE (DISRUPTIVE; NOISE).	17	3.4	22	3.7	41	7.2	80	4.8		
TALKING INVOLVING TEACHER (TALKING).	169	33.7	174	29.6	1	0.2	344	20.8		
TOTAL	501	99.9	588	99.9	568	100.0	1657	99.9		

Materials in Use

Evidence of the wealth of materials available to the Head Starters is shown in Table 5. Materials for physical activities are heavily used (17.5 per cent of the time), whereas library books, magazines, and audio-visual materials to promote language and listening goals are not used as frequently (9.7 per cent of the time). Other materials used frequently are table games and puzzles (12.5 per cent), floor play equipment (10.2 per cent), art materials (11.2 per cent) and food (14.8 per cent).

When pupils were working without direct adult supervision they were most likely to be using physical education equipment (24.1 per cent of the time), floor play equipment (18.4 per cent) and toy household equipment (12.8 per cent), indicating that their activity when working independently was some form of playing with toys and games. When with the teacher, the pupils were most likely to be using books (13.3 per cent of the time), food (17.2 per cent), and physical education and art materials (both 10.7 per cent). When with other adults, pupils were most frequently dealing with food (21.6 per cent of the time) or playing with toys, games and physical education equipment (47.0 per cent of the time).

TABLE 5

MATERIALS IN USE IN THE 1968-69 HEAD START CLASSES
FOR PUPILS WORKING WITH TEACHER, WITH OTHER ADULTS, AND INDEPENDENTLY
(DATA EXPRESSED AS PERCENTAGES OF NUMBER OF OCCURRENCES UNDER EACH CONDITION)

NOTE: THIS IS PAGE 1 OF A 4-PAGE TABLE

	FREQUENCY (N) AND CORRESPONDING PER CENT (%) WITH WHICH EACH IDENTIFIED ACTIVITY OCCURRED UNDER EACH OF THE INDICATED CONDITIONS												
	CONDITION I: WHEN PUPILS WERE WORKING WITH TEACHERS		CONDITION II: WHEN PUPILS WERE WORKING WITH OTHER ADULTS		CONDITION III: WHEN PUPILS WERE ENGAGED IN INDEPENDENT ACTIVITY		TOTAL OF ALL CONDITIONS						
	N	%	N	%	N	%	N	%					
PUPIL'S USE OF MATERIALS													
TRADE BOOKS, MAGAZINES (TRADE BOOKS; VARIETY OF TITLES; SAME TITLES (USED BY VARIETY OF PUPILS); TRADE BOOK - ONE TITLE; MAGAZINES; OTHER - PAPER- BACK BOOK; CHILDRENS MAGAZINES).	51	13.3	20	3.9	19	4.0	90	6.6					
CHARTS (GROUP EXPERIENCE CHARTS; QUANTITY CHART, GRAPH TABLE OR DIA- GRAM; VARIETY OF CHARTS; CHALKBOARD; FLANNEL BOARD; CALENDAR/WEATHER; MAGNETIC BOARD).	21	5.5	12	2.4	12	2.5	45	3.3					
WORKSHEETS (VARIETY OF COMMERICALLY MADE WORKSHEETS).	0	0.0	0	0.0	1	0.1	1	0.1					
PUPIL'S WORK PICTURES, MODELS (PAPERS; MODEL, DIORAMA, ETC.); PICTURE, BY PUPIL; BOOKLET, BY PUPIL (INCLUDING PICTURE BOOKLET).	6	1.6	5	1.0	0	0.0	11	0.8					

TABLE 5 CONTINUED

MATERIALS IN USE IN THE 1968-69 HEAD START CLASSES
 FOR PUPILS WORKING WITH TEACHER, WITH OTHER ADULTS, AND INDEPENDENTLY
 (DATA EXPRESSED AS PERCENTAGES OF NUMBER OF OCCURRENCES UNDER EACH CONDITION)
 NOTE: THIS IS PAGE 2 OF A 4-PAGE TABLE

	FREQUENCY (N) AND CORRESPONDING PER CENT (%) WITH WHICH EACH IDENTIFIED ACTIVITY OCCURRED UNDER EACH OF THE INDICATED CONDITIONS							
	CONDITION I: WHEN PUPILS WERE WORKING WITH TEACHERS		CONDITION II: WHEN PUPILS WERE WORKING WITH OTHER ADULTS		CONDITION III: WHEN PUPILS WERE ENGAGED IN INDEPENDENT ACTIVITY			
	N	%	N	%	N	%		
TABLE ACTIVITY, GAMES, PUZZLES, PEGS, BEADS, CUBES (ARITHMETIC; VOCABULARY; PICTURE CARDS, GAMES, ETC.; MATCHING GAMES; ARITHMETIC GAMES; PUZZLES; TABLE ACTIVITIES; PEGS AND PEGBOARD; PARQUETRY BLOCKS, COLORED CUBES; COLORED BEADS; LOTTO GAMES; ASSOCIATION CARDS; SEQUENCE CARDS; NUMBER CARDS; TYPEWRITER; KNOCK- OUT BENCH FOR POUNDING; VARIETY OF MATERIALS IN USE).	36	9.4	76	15.0	59	12.3	171	12.5
PHYSICAL EDUCATION EQUIPMENT (BALLS, BEAN BAGS; BARS; ROPES; RING TOYS; SANDBOX AND SANDBOX TOY; VARIETY; BALANCE BEAM; SWINGS, SLIDES; GARDENING/DIGGING TOOLS).	41	10.7	83	16.4	115	24.1	239	17.5
FLOOR PLAY EQUIPMENT (UNIT BLOCKS; HOLLOW BLOCKS AND BOARDS; TRUCKS; TRAILER TRACTOR; ROCKING HORSE; RUBBER ANIMALS; WOODEN PLAY BUILDING MATERIALS; TOYS; WORK BENCH; HAMMERS, NAILS).	27	7.1	24	4.8	88	18.4	139	10.2

TABLE 5 CONTINUED

MATERIALS IN USE IN THE 1968-69 HEAD START CLASSES
 FOR PUPILS WORKING WITH TEACHER, WITH OTHER ADULTS, AND INDEPENDENTLY
 (DATA EXPRESSED AS PERCENTAGES OF NUMBER OF OCCURRENCES UNDER EACH CONDITION)
 NOTE: THIS IS PAGE 3 OF A 4-PAGE TABLE

FREQUENCY (N) AND CORRESPONDING PER CENT (%) WITH WHICH EACH IDENTIFIED ACTIVITY OCCURRED UNDER EACH OF THE INDICATED CONDITIONS		CONDITION I: WHEN PUPILS WERE WORKING WITH TEACHERS		CONDITION II: WHEN PUPILS WERE WORKING WITH OTHER ADULTS		CONDITION III: WHEN PUPILS WERE ENGAGED IN INDEPENDENT ACTIVITY		TOTAL OF ALL CONDITIONS	
	N	N	%	N	%	N	%	N	%
HOUSEHOLD & DRAMATIC PLAY (DOLLS AND DOLL PLAY EQUIPMENT; SMALL TABLE; KITCHEN EQUIP- MENT (STOVE, SINK, CUPBOARD); TOY DISHES AND UTENSILS; IRONING BOARD AND IRON; DRESS UP ARTICLES; PROPS; PUPPETS).	17	12	4.4	12	2.4	61	12.8	90	6.6
	41	79	10.7	79	15.6	33	6.9	153	11.2
ART (ART. MATERIALS; CRAYONS; PAINTS; PAPER; SCISSORS AND PASTE; CHALK; MODELING MATERIALS; TOOLS (SPONGES, COOKIE CUTTERS, ETC.); MISCELLANEOUS (STAWS, TOOTH PICKS, EGG CARTONS).	6	7	1.6	7	1.4	6	1.2	19	1.4
	24	14	6.2	14	2.8	4	0.8	42	3.1
SCIENCE (THERMOMETER; MAGNIFYING GLASS; ANIMALS; PLANTS (SEEDS); SIMPLE MACHINES).	4	14	1.0	14	2.8	3	0.6	21	1.5
	4	14	1.0	14	2.8	3	0.6	21	1.5
AUDIO-VISUAL EQUIPMENT (FILM STRIPS; FILMS AND PROJECTOR; RECORDINGS; PICTURES - COMMERCIAL; OTHER AUDIO- VISUAL MATERIALS).									
MUSIC (AUTO-HARP; RHYTHM INSTRUMENTS { TAMBOURINE, TRIANGLE, STICKS }; PIANO).									

TABLE 5 CONTINUED

MATERIALS IN USE IN THE 1968-69 HEAD START CLASSES
FOR PUPILS WORKING WITH TEACHER, WITH OTHER ADULTS, AND INDEPENDENTLY
(DATA EXPRESSED AS PERCENTAGES OF NUMBER OF OCCURRENCES UNDER EACH CONDITION)

NOTE: THIS PAGE 4 OF A 4-PAGE TABLE

	FREQUENCY (N) AND CORRESPONDING PER CENT (%) WITH WHICH EACH IDENTIFIED ACTIVITY OCCURRED UNDER EACH OF THE INDICATED CONDITIONS						
	CONDITION I: WHEN PUPILS WERE WORKING WITH TEACHERS		CONDITION II: WHEN PUPILS WERE WORKING WITH OTHER ADULTS		CONDITION III: WHEN PUPILS WERE ENGAGED IN INDEPENDENT ACTIVITY		TOTAL OF ALL CONDITIONS
	N	%	N	%	N	%	
FOOD - FOOD SERVICE (FOOD SERVICE, FOOD AND BEVERAGE; PLASTIC BOWLS FOR SERVING; TRAYS AND PLATES; FORKS AND SPOONS; NAPKINS, STRAWS; FOOD; BEVERAGE).	66	17.2	109	21.6	26	5.4	201 14.8
WATER PLAY (PLASTIC DISH PAN; PITCHERS, FUNNELS, EGG BEATERS; SOAP; MORE).	6	1.6	4	0.8	6	1.2	16 1.2
PERSONAL MATERIALS (CLOTHING; TOOTH BRUSH, TOOTH PASTE; COMB AND BRUSH; SOAP, WATER, PAPER TOWELS; RESTING MAT, TOWEL).	33	8.6	42	8.3	41	8.6	116 8.5
CLEAN UP MATERIALS (OTHER).	3	0.8	4	0.8	3	0.6	10 0.7
TOTAL	477	99.6	382	99.7	505	100.0	1364 100.0

Curriculum Topics

One Head Start goal is to expand the world of the pupils through the curriculum topics presented, starting with the child, his surroundings, exposure to interpersonal relationships and proceeds to science, math, and abstract concepts. Table 6 Pupil Concepts being taught.

Over a third (35.6 per cent) of the time was spent in self-expression. Another common topic of instruction was "All About Me" (21.2 per cent of the time). When pupils were engaged in independent activities, 54.4 per cent of the time was spent in self-expression, reinforcing the finding in Table 5, Materials in Use that much of the independent activity in Head Start involves play.

The data in Table 6 are evidence that the Head Start curriculum has purpose and structure.

TABLE 6

CURRICULUM TOPICS IN THE 1968-69 HEAD START CLASSES
FOR PUPILS WORKING WITH TEACHER, WITH OTHER ADULTS, AND INDEPENDENTLY
(DATA EXPRESSED AS PERCENTAGES OF NUMBER OF OCCURRENCES UNDER EACH CONDITION)

NOTE: THIS IS PAGE 1 OF A 3-PAGE TABLE

CURRICULUM TOPIC	FREQUENCY (N) AND CORRESPONDING PER CENT (%) WITH WHICH EACH IDENTIFIED ACTIVITY OCCURRED UNDER EACH OF THE INDICATED CONDITIONS											
	CONDITION I: WHEN PUPILS WERE WORKING WITH TEACHERS		CONDITION II: WHEN PUPILS WERE WORKING WITH OTHER ADULTS		CONDITION III: WHEN PUPILS WERE ENGAGED IN INDEPENDENT ACTIVITY		TOTAL OF ALL CONDITIONS					
	N	%	N	%	N	%	N	%	N	%	N	%
ALL ABOUT ME (NAME, ADDRESS, PHONE NUMBER; BODY IMAGE; IDENTIFYING PARTS OF BODY; FUNCTIONS OF BODY PARTS; COORDINATION OF BODY PARTS; HEALTH - PERSONAL CLEANLINESS; POSITIVE PERSONAL SELF-CONCEPT -- SELF- CONFIDENCE, SUCCESS).	122	24.3	141	24.0	89	15.7	352	21.2				
MY CLOTHING (TYPES AND NAMES OF; PRO- TECTION; APPROPRIATENESS).	10	2.0	9	1.5	2	0.4	21	1.3				
MY FAMILY (MEMBERS OF FAMILY; RESPONSIBILITIES AND DUTIES OF MEMBER OF FAMILY; POSSESSIONS).	16	3.2	3	0.5	2	0.4	21	1.3				
MY SCHOOL (STANDARDS AND HABITS; SAFETY AND ORDERLINESS).	43	8.5	45	7.7	19	3.3	107	6.5				
COMMUNITY (PLACES IN COMMUNITY; WORKERS).	13	2.6	10	1.7	2	0.4	25	1.5				
HOLIDAYS	2	0.4	0	0.0	0	0.0	2	0.1				

CURRICULUM TOPICS IN THE 1968-69 HEAD START CLASSES
 FOR PUPILS WORKING WITH TEACHER, WITH OTHER ADULTS, AND INDEPENDENTLY
 (DATA EXPRESSED AS PERCENTAGES OF NUMBER OF OCCURRENCES UNDER EACH CONDITION)
 NOTE: THIS IS PAGE 2 OF A 3-PAGE TABLE

	FREQUENCY (N) AND CORRESPONDING PER CENT (%) WITH WHICH EACH IDENTIFIED ACTIVITY OCCURRED UNDER EACH OF THE INDICATED CONDITIONS									
	CONDITION I: WHEN PUPILS WERE WORKING WITH TEACHERS		CONDITION II: WHEN PUPILS WERE WORKING WITH OTHER ADULTS		CONDITION III: WHEN PUPILS WERE ENGAGED IN INDEPENDENT ACTIVITY		TOTAL OF ALL CONDITIONS			
	N	%	N	%	N	%	N	%	N	%
INTER-PERSONNEL RELATIONSHIPS (GOOD SPORTS- MANNERS; SOCIAL BEHAVIOR, RELATIONSHIPS WITH PEERS; RELATIONSHIPS WITH ADULTS; POLITENESS; TABLE MANNERS).	32	6.3	49	8.4	17	3.0	98	5.9		
ABSTRACT CONCEPTS (SPATIAL ARRANGEMENT; COLOR; SHAPES; LIKENESS; PATTERNING; LEFT TO RIGHT; COLORS AND SHAPES; VARIETY).	24	4.8	69	11.8	66	11.6	159	9.6		
MATH CONCEPTS (ROTE COUNTING; RATIONAL COUNTING; SIZE AND QUANTITY; SETS AND RELATIONSHIP OF SETS; TIME; DIRECTION; LOCATION AND SPACE).	17	3.4	23	3.9	5	0.9	45	2.7		
SCIENCE (SUN, PLANETS, CALENDAR, SEASONS, WEATHER; MACHINES; SENSES).	18	3.6	11	1.9	3	0.5	32	1.9		
ANIMAL LIFE (PETS, OTHER ANIMALS WATCHED; FARM ANIMALS; WILD ANIMALS).	29	5.8	16	2.7	8	1.4	53	3.2		
SELF-EXPRESSION (ARTS; MUSIC; PLAY).	108	21.5	172	29.3	99	17.4	589	35.6		

TABLE 6 CONTINUED

CURRICULUM TOPICS IN THE 1968-69 HEAD START CLASSES
 FOR PUPILS WORKING WITH TEACHER, WITH OTHER ADULTS, AND INDEPENDENTLY
 (DATA EXPRESSED AS PERCENTAGES OF OCCURRENCES UNDER EACH CONDITION)

NOTE: THIS IS PAGE 3 OF A 3-PAGE TABLE

	FREQUENCY (N) AND CORRESPONDING PER CENT (%) WITH WHICH EACH IDENTIFIED ACTIVITY OCCURRED UNDER EACH OF THE INDICATED CONDITIONS											
	CONDITION I: WHEN PUPILS WERE WORKING WITH TEACHERS		CONDITION II: WHEN PUPILS WERE WORKING WITH OTHER ADULTS		CONDITION III: WHEN PUPILS WERE ENGAGED IN INDEPENDENT ACTIVITY		TOTAL OF ALL CONDITIONS					
	N	%	N	%	N	%	N	%				
ROUTINE (ROUTINE - CLEANING).	25	5.0	9	1.5	4	0.7	38	2.3				
NONE OR UNDETERMINED (INATTENTIVE TO ORGANIZED ACTIVITY).	5	1.0	11	1.9	22	3.9	38	2.3				
STORIES	38	7.6	19	3.2	19	3.4	76	4.6				
	502	100.0	587	100.0	567	100.0	1656	100.0				

Adult Purpose

Table 7 summarizes data on teachers' and other adults' purposes in working with Head Start pupils.

The most evident purpose was improving the working conditions in the class, that is, creating and maintaining an atmosphere and the physical conditions conducive to constructive pupil activity. This goal was an element in 38.2 per cent of the teachers' behavior, and it was equally important in the work of the other adults in the Head Start classroom (37.8 per cent). Second in importance was helping pupils develop effective classroom work habits (25.0 per cent). Third biggest emphasis was motivating pupils (10.7 per cent), that is, creating interest through demonstrations, showing how to do new things, using illustrations, raising questions, and similar devices. There was also in evidence efforts to develop concepts (drawing inferences, seeing relationships), 5.6 per cent; developing skills in gathering information, and expressing ideas (5.6 per cent), and reinforcing learning through review and practice and application to new situations (6.1 per cent).

TABLE 7

ADULT PURPOSE IN THE 1968-69 HEAD START CLASSES
FOR PUPILS WORKING WITH TEACHER AND WITH OTHER ADULTS
(DATA EXPRESSED AS PERCENTAGES OF NUMBER OF OCCURRENCES UNDER EACH CONDITION)

NOTE: THIS IS PAGE 1 OF A 2-PAGE TABLE

CATEGORIES OF ADULT PURPOSES	CONDITION I: WHEN PUPILS WERE WORKING WITH TEACHERS		CONDITION II: WHEN PUPILS WERE WORKING WITH OTHER ADULTS		TOTAL OF CONDITIONS	
	N	%	N	%	N	%
	FREQUENCY (N) AND CORRESPONDING PER CENT (%) WITH WHICH EACH IDENTIFIED ACTIVITY OCCURRED UNDER EACH OF THE INDICATED CONDITIONS					
IMPROVING WORKING SITUATION (BEHAVIOR OF STUDENT; ENVIRONMENT (PHYSICAL); ORGANI- ZATION OF STUDENTS; INSTRUCTIONAL MATERIALS; ATMOSPHERE-INTERACTION- ATTITUDES; FLEXIBILITY; PERSONAL HABITS (HEALTH); SOCIAL HABITS; PUPIL VERBALIZATION).	188	37.8	223	38.2	411	38.0
IMPROVING LEVEL OF STUDENT OPERATION (STANDARDS; CORRECT FORM; INDIVIDUALIZ- ING, PRIOR EXPERIENCE; SETTING EX- AMPLE; CORRECT USAGE; EFFECTIVENESS; DETAILS).	89	17.9	181	31.0	270	25.0
COUNSELING & ADVISEMENT OF STUDENTS (APPEARANCE; LANGUAGE; INDEPENDENCE, SELF-CONFIDENCE; SELF-CONTROL; AESTHETIC APPRECIATION).	38	7.6	29	5.0	67	6.2
MOTIVATING (CREATING INTEREST; OPENING NEW APPROACHES; IDENTIFYING NEED/PURPOSE; DEMONSTRATING/SHOWING HOW/ILLUSTRATING; STIMULATING IMPROVEMENT; RAISING QUES- TIONS OR HYPOTHESES; USING EMOTION, GESTURE, POSTURE, ETC.; PRAISE).	64	12.8	52	8.9	116	10.7

TABLE 7 CONTINUED

ADULT PURPOSE IN THE 1968-69 HEAD START CLASSES
FOR PUPILS WORKING WITH TEACHER AND WITH OTHER ADULTS
(DATA EXPRESSED AS PERCENTAGES OF NUMBER OF OCCURRENCES UNDER EACH CONDITION)
NOTE: THIS IS PAGE 2 OF A 2-PAGE TABLE

	FREQUENCY (N) AND CORRESPONDING PER CENT (%) WITH WHICH EACH IDENTIFIED ACTIVITY OCCURRED UNDER EACH OF THE INDICATED CONDITIONS					
	CONDITION I: WHEN PUPILS WERE WORKING WITH TEACHERS		CONDITION II: WHEN PUPILS WERE WORKING WITH OTHER ADULTS		TOTAL OF CONDITIONS	
	N	%	N	%	N	%
DEVELOPING CONCEPTS (DRAWING INFERENCES; CRITICAL THINKING; COMMUNICATION; REASONING/LOGICAL THINKING; APPROPRI- ATENESS; RELATIONSHIPS; AWARENESS).	33	6.6	16	2.7	49	4.5
DEVELOPING SKILLS (GATHERING INFORMATION; ORGANIZING INFORMATION; COMMUNICATING INFORMATION; EXPRESSING IDEAS; PROBLEM SOLVING; ANALYZING; DIFFERENTIATING ACCORDING TO PURPOSE; PRECISION).	31	6.2	30	5.2	61	5.6
REINFORCEMENT OF LEARNING (REVIEWING; PRACTICING; APPLYING TO NEW SITUATIONS/ MATERIAL; RE-STATING; EXPLORING; RE- LATING TO OTHER LEARNINGS; INSIGHT).	39	7.8	27	4.6	66	6.1
EVALUATING (STUDENT GOAL; STUDENT PRODUCT; INFORMATION/CONTENT).	3	0.6	11	1.9	14	1.3
NO IDENTIFIABLE TEACHER PURPOSE	13	2.6	14	2.4	27	2.5
TOTAL	498	99.9	583	99.9	1081	99.9

Adult Verbal Behavior

As shown on Table 8, almost one-quarter (23.7 per cent) of the time is spent by adults in giving directions, and another fifth (20.6 per cent) of the time was spent not talking. The categories of conferring, asking and answering questions, commenting on, and supporting and clarifying receive almost equal emphasis, (7.1; 8.9 and 10.9 per cent respectively). The types of adult verbal behavior occur in about the same proportion whether pupils are working with the teacher or with other adults. This indicates that adult verbal behavior is geared to the children, regardless of the type of adult interacting with the pupils.

TABLE 8

ADULT VERBAL BEHAVIOR IN THE 1968-69 HEAD START CLASSES
FOR PUPILS WORKING WITH TEACHER AND WITH OTHER ADULTS

(DATA EXPRESSED AS PERCENTAGES OF NUMBER OF OCCURRENCES UNDER EACH CONDITION)

NOTE: THIS IS PAGE 1 OF A 3-PAGE TABLE

CATEGORIES OF ADULT VERBAL BEHAVIOR	CONDITION I: WHEN PUPILS WERE WORKING WITH TEACHERS		CONDITION II: WHEN PUPILS WERE WORKING WITH OTHER ADULTS		TOTAL OF BOTH CONDITIONS	
	N	%	N	%	N	%
CONFERRING WITH ANOTHER ADULT	0	0.0	2	0.3	2	0.2
SOCIALIZING WITH CHILDREN	51	10.2	82	13.9	133	12.2
READING ORALLY (READING A STORY, ANNOUNCING, DIRECTING; TELLING A STORY).	34	6.8	18	3.0	52	4.8
GIVING DIRECTIONS OR MAKING ASSIGNMENTS (DICTATING; MAKING AN ANNOUNCEMENT, ASSIGNMENT; CALLING ON PUPILS TO SPEAK, REPORT; TESTING, DICTATING QUESTIONS; GIVING DIRECTIONS, EX- PLAINING; REVIEWING, SUMMARIZING; MAKING SUGGESTIONS; PLANNING; STATING FACTS, INFORMATION; DIRECTING, FINGER PLAY, CHORAL SPEAKING, MUSIC).	136	27.3	122	20.6	258	23.7

TABLE 8 CONTINUED

ADULT VERBAL BEHAVIOR IN THE 1968-69 HEAD START CLASSES
FOR PUPILS WORKING WITH TEACHER AND WITH OTHER ADULTS
(DATA EXPRESSED AS PERCENTAGES OF NUMBER OF OCCURRENCES UNDER EACH CONDITION)

NOTE: THIS IS PAGE 2 OF A 3-PAGE TABLE

	FREQUENCY (N) AND CORRESPONDING PER CENT (%) WITH WHICH EACH IDENTIFIED ACTIVITY OCCURRED UNDER EACH OF THE INDICATED CONDITIONS					
	CONDITION I: WHEN PUPILS WERE WORKING WITH TEACHERS		CONDITION II: WHEN PUPILS WERE WORKING WITH OTHER ADULTS		TOTAL OF BOTH CONDITIONS	
	N	%	N	%	N	%
CONFERRING, ASKING & ANSWERING QUESTIONS (ASKING QUESTIONS WITH PREDICTED ANSWERS; ANSWERING PUPIL'S QUESTION OR INQUIRY; CONFERRING WITH PUPIL(S); EVALUATING (POSITIVE TOWARD PUPIL SUCCESS).	47	9.4	30	5.1	77	7.1
COMMENTING ON: (PUPIL'S IDEA OR CONTRI- BUTION; PUPIL'S LANGUAGE; BEHAVIOR UN- RELATED TO PUPIL'S WORK; SITUATION; UNDETERMINED - UNHEARD).	42	8.4	56	9.5	98	8.9
SUPPORTING AND CLARIFYING (REINFORCING A PUPIL'S STATEMENT; PRAISING, ENCOURAGING; USING PUPIL'S FEELINGS, JOKING; LAUGHING TOGETHER; CLARIFYING PUPIL(S) STATE- MENT(S) OR CONCEPTS; RAISING STANDARDS TO ACCEPTABLE LANGUAGE; FURNISHING WORDS FOR PUPIL - ADDING TO VOCABULARY).	42	8.4	67	11.3	109	10.0
ASKING QUESTIONS WITHOUT PREDICTED ANSWER (QUESTIONING TO STIMULATE THOUGHT AND/ OR DISCUSSION; ASKING QUESTIONS REQUIRING THOUGHTFUL ANSWER).	33	6.6	8	1.4	41	3.8

ADULT VERBAL BEHAVIOR IN THE 1968-69 HEAD START CLASSES
FOR PUPILS WORKING WITH TEACHER AND WITH OTHER ADULTS

(DATA EXPRESSED AS PERCENTAGES OF NUMBER OF OCCURRENCES UNDER EACH CONDITION)

NOTE: THIS IS PAGE 3 OF A 3-PAGE TABLE

	FREQUENCY (N) AND CORRESPONDING PER CENT (%) WITH WHICH EACH IDENTIFIED ACTIVITY OCCURRED UNDER EACH OF THE INDICATED CONDITIONS					
	CONDITION I: WHEN PUPILS WERE WORKING WITH TEACHERS		CONDITION II: WHEN PUPILS WERE WORKING WITH OTHER ADULTS		TOTAL OF BOTH CONDITIONS	
	N	%	N	%	N	%
CORRECTING (CRITICIZING; CRITICIZING PUPIL LANGUAGE; CORRECTING STUDENT BEHAVIOR; USING DEFOGATORY REMARKS; THREATENING).	26	5.2	29	4.9	55	5.0
SINGING	19	3.8	21	3.6	40	3.7
NOT TALKING	69	13.9	156	26.4	225	20.6
TOTAL	499	100.0	591	100.0	1090	100.0

Adult Activities

Two more goals of the Head Start program are to identify and help with special problems -- physical, intellectual, emotional and social, either directly or through referral to appropriate community resources. The Head Start teacher has greater opportunity to participate in activities with the children and to identify special problems than most nursery school teachers because of the assistance in handling the class received from other adults present, such as the aide and volunteer. In the 727 observations, an aide was present 95.4 per cent of the time, and a volunteer 63.4 per cent of the time.

Table 9 reports the activities of teachers and other adults when they were with pupils. About 8 per cent of the time is spent in routine administrative activities. Adults are participating in activities with pupils about one-fifth of the time (21.7 per cent). Adults other than teachers spent considerable time (27.6 per cent) helping pupils to perform specific tasks and participating in pupil activities (27.2 per cent).

Teachers helped pupils perform specific tasks 19.6 per cent of the time, directed activities 15.2 per cent of the time, participated in pupils' activities 15.2 per cent of the time and talked or listened to pupils 17.8 per cent of the time.

The data on Table 9 indicate that the teacher's schedule provided considerable opportunity to interact with pupils, to identify special problems of individual children and to help the pupils develop a positive self-concept so that they may begin to think of themselves as having capabilities for controlling some aspects of life.

TABLE 9

ADULT ACTIVITIES IN THE 1968-69 HEAD START CLASSES
FOR PUPILS WORKING WITH TEACHER AND WITH OTHER ADULTS
(DATA EXPRESSED AS PERCENTAGES OF NUMBER OF OCCURRENCES UNDER EACH CONDITION)
NOTE: THIS IS PAGE 1 OF A 3-PAGE TABLE

CATEGORIES OF ADULT ACTIVITIES	FREQUENCY (N) AND CORRESPONDING PER CENT (%) WITH WHICH EACH IDENTIFIED ACTIVITY OCCURRED UNDER EACH OF THE INDICATED CONDITIONS				TOTAL OF BOTH CONDITIONS
	CONDITION I: WHEN PUPILS WERE WORKING WITH TEACHERS		CONDITION II: WHEN PUPILS WERE WORKING WITH OTHER ADULTS		
	N	%	N	%	
ROUTINE (CONFERRING WITH PRINCIPAL/ADMINISTRATOR; MAINTAINING ORDER; HOUSEKEEPING, CLEANING UP; OPERATING AUDIO-VISUAL EQUIPMENT; OUT OF ROOM; ADMINISTRATIVE ROUTINE - COLLECTING MONEY, ATTENDANCE, WRITING REPORTS, LUNCH COUNT AND OTHER CLERICAL WORK).	38	7.6	45	7.7	83
HELPING (TALKING AND OBSERVING, COMMENTING WHILE OBSERVING PUPIL'S WORK, EVALUATION; HELPING PUPIL/SMALL GROUP WITH ART, GAMES, PUZZLES, HOW TO RIDE A BICYCLE, TIE A BOW; MOVING ABOUT ROOM, HELPING WITH ART, GAMES, PUZZLES, USE OF MATERIALS & EQUIPMENT; HELPING PUPILS WITH PERSONAL ROUTINE - WASHING HANDS, USING BATHROOM, BRUSHING TEETH, PUTTING ON & TAKING OFF OUTDOOR CLOTHING).	98	19.6	161	27.6	259
DEMONSTRATING (P.E., ART, MUSIC, SOCIAL ACTS, TALKING & ILLUSTRATING, USING PICTURES, FLANNEL BOARDS; AUDIO-VISUAL EQUIPMENT).	17	3.4	13	2.2	30

TABLE 9 CONTINUED

ADULT ACTIVITIES IN THE 1968-69 HEAD START CLASSES
FOR PUPILS WORKING WITH TEACHER AND WITH OTHER ADULTS
(DATA EXPRESSED AS PERCENTAGES OF NUMBER OF OCCURRENCES UNDER EACH CONDITION)
NOTE: THIS IS PAGE 2 OF A 3-PAGE TABLE

FREQUENCY (N) AND CORRESPONDING PER CENT (%) WITH WHICH EACH IDENTIFIED ACTIVITY OCCURRED UNDER EACH OF THE INDICATED CONDITIONS	CONDITION I: WHEN PUPILS WERE WORKING WITH TEACHERS		CONDITION II: WHEN PUPILS WERE WORKING WITH OTHER ADULTS		TOTAL OF BOTH CONDITIONS	
	N	%	N	%	N	%
DIRECTING (P.E., MUSIC, CLASSROOM MOVEMENT, CHORAL SPEAKING; INSTRUCTIONAL ROUTINE - MIXING PAINTS, PASSING OUT MATERIALS, SERVING FOOD, ASSIGNING TASKS).	76	15.2	55	9.4	131	12.1
LISTENING & OBSERVING (LISTENING TO/OBSERVING - DISCUSSION, RECITATION, AUDIO-VISUAL MATERIALS; OBSERVING ACTIVITY OR PUPILS - DANCE, PANTOMIME, P.E.).	32	6.4	57	9.8	89	8.2
PARTICIPATING WITH CHILDREN (PARTICIPATING IN ON-GOING ACTIVITY, PLAYING GAMES, MOVING TO RHYTHM, FINGER PLAY, OBSERVING AUDIO-VISUAL, SINGING, EATING AND/OR DRINKING).	76	15.2	159	27.2	235	21.7
TALKING (GIVING DIRECTIONS, EXPLAINING, JUST TALKING TO PUPILS; PRAISING AND ENCOURAGING, COMFORTING, DISCIPLINING, AND PRETENDING - DRAMATIZING).	44	8.8	32	5.5	76	7.0

ADULT ACTIVITIES IN THE 1968-69 HEAD START CLASSES
FOR PUPILS WORKING WITH TEACHER AND WITH OTHER ADULTS
(DATA EXPRESSED AS PERCENTAGES OF NUMBER OF OCCURRENCES UNDER EACH CONDITION)
NOTE: THIS IS PAGE 3 OF A 3-PAGE TABLE

	FREQUENCY (N) AND CORRESPONDING PER CENT (%) WITH WHICH EACH IDENTIFIED ACTIVITY OCCURRED UNDER EACH OF THE INDICATED CONDITIONS					
	CONDITION I: WHEN PUPILS WERE WORKING WITH TEACHERS		CONDITION II: WHEN PUPILS WERE WORKING WITH OTHER ADULTS		TOTAL OF BOTH CONDITIONS	
	N	%	N	%	N	%
TALKING & LISTENING (TALKING & LISTENING - CONFERRING, DISCUSSING).	89	17.8	47	8.0	136	12.5
READING ORALLY (READING ORALLY, STORY, ANNOUNCING, INSTRUCTING, DIRECTING).	30	6.0	15	2.6	45	4.2
TOTAL	500	100.0	584	100.0	1084	100.0

Classroom Adjustment of Head Start Pupils (1968-1969)

Near the end of the 1968-69 Head Start program, teachers completed Classroom Adjustment Checklists for all Head Start pupils. Checklists were completed. The checklists were scored by assigning numerical values to each rating.

Used to compute Classroom Adjustment scores for 434 children were used to compute Classroom Adjustment scores.

Always	7 points
Almost always	6 points
Usually	5 points
Half of the time	4 points
Seldom	3 points
Almost never	2 points
Never	1 point

The total score for each of the six* factors for boys and girls was obtained and the mean rating was computed and the ratings obtained follow.

	N	Social Orientation	Self-Control Active	Self-Control Passive	Speech Pattern	Personal Needs	Required Activities
Boys	209	4.97	5.04	5.35	4.75	6.23	5.36
Girls	225	5.05	5.28	5.68	5.01	6.23	5.56

The girls had higher scores for all factors except Personal Needs where the ratings for boys and girls were equal. These data will be useful for comparison with ratings obtained by Head Start classes in subsequent phases of this study.

* There are five factors but one is reported as negative and as positive, yielding the six columns reported on the next page.

Achievement of Former Head Start and
Non-Head Start First Grade Pupils (1968-69)

First grade pupils in 12 elementary schools spread throughout the county were tested to obtain achievement data on former Head Start first grade pupils and on selected first grade classmates who had not had Head Start experience. All former Head Start students enrolled in the first grade in these schools were scheduled for testing. The non-Head Start first grade pupils tested in each school were identified by the teachers who had been instructed to select students of comparable ability and home background to that of the former Head Start students.

The tests used were the Stanford Achievement Battery Primary I, Form X and the Test of Basic Experiences, Level L. The SABP was administered to 338 first grade students and the TOBE was given to 347 first grade pupils. A total of 354 pupils was tested. Each test had four subtests which were administered in two sittings on consecutive days, making a total of four testing days in each school. Consequently, the total number of pupils taking each test, and each subtest, varies because of absence.

Many of the children tested were not able to obtain a single correct answer on the SABP test, even though they were tested at the end of the first grade. The test manual did not contain grade equivalent for examinees who did not get a single correct answer. If only one correct answer was obtained, it was usually scored as grade equivalent 1.0. To permit use of all tests, when no correct answers were made, a grade equivalent score of 0.9 was given to indicate that the student was below the grade 1 entry level. All means reported here contain such scores. Non-Head Start pupils took 682 subtests and 9.5 per cent of their scores were 0.9. The Head Start pupils took 626 subtests and 14.1 per cent of their scores were 0.9. The majority of 0.9 scores (151) were on the Paragraph Meaning and Spelling subtests while the Word Reading and Vocabulary subtests had only one 0.9 score apiece.

Table 12 reports the mean scores and standard deviations on each subtest for boys and girls in each group. There is a mean difference ranging from .04 to .11 grade equivalent points between the two groups on the subtests of the SAPB and a difference of from .71 to 2.75 raw score points between the two groups on the TOBE subtests. These differences, while slight in magnitude favor the non-Head Start group.

TABLE 10

Mean Scores of Pupils in First Grade Tested on the
Stanford Achievement Battery (Primary) and on the Test of Basic Experiences
(Pupils Classified by Sex and Head Start Experience)

A. SABP Grade Equivalent Scores

	HEAD START			NON-HEAD START		
	N	Mean	Standard Deviation	N	Mean	Standard Deviation
Race: Negro	105			39		
Caucasian	55			135		
Oriental	1			3		
Sex: Boys	81			102		
Girls	80			75		
Age in Mo:						
Boys	81	87.51	5.98	102	85.97	5.69
Girls	80	87.38	6.02	75	86.07	5.27
SABP						
<u>W. Reading</u>						
Boys	78	1.33	0.28	103	1.44	0.31
Girls	79	1.40	0.27	72	1.50	0.37
<u>P. Meaning</u>						
Boys	78	1.23	0.28	102	1.31	0.36
Girls	78	1.28	0.30	72	1.32	0.38
<u>Vocabulary</u>						
Boys	80	1.44	0.24	96	1.64	0.46
Girls	77	1.52	0.29	71	1.63	0.45
<u>Spelling</u>						
Boys	79	1.17	0.37	95	1.24	0.38
Girls	77	1.30	0.41	71	1.38	0.48

B. TOBE Raw Scores

	HEAD START			NON-HEAD START		
	N	Mean	Standard Deviation	N	Mean	Standard Deviation
Race: Negro	112			40		
Caucasian	56			135		
Oriental	1			3		
Sex: Boys	86			105		
Girls	83			73		
Age in Mo:						
Boys	86	87.19	5.91	105	85.91	5.76
Girls	83	87.34	5.94	73	86.03	5.34
TOBE						
<u>Math</u>						
Boys	83	40.83	5.13	104	41.76	5.83
Girls	80	39.99	5.51	70	40.70	6.34
<u>Language</u>						
Boys	84	38.98	4.89	103	40.15	4.88
Girls	80	40.25	4.88	72	41.55	5.49
<u>Science</u>						
Boys	84	42.34	6.00	103	44.60	5.15
Girls	80	42.55	5.96	72	45.30	4.71
<u>Studies</u>						
Boys	82	39.61	5.70	103	42.32	5.69
Girls	82	40.54	5.59	72	42.83	5.44

The test data just reviewed were secured on the entire available sample of former Head Start pupils now in first grade and on their non-Head Start controls. The following is a review of the scores in the same two tests for matched pairs of these pupils, selected to secure greater precision in the comparison, on the basis of race as well as sex.

The former Head Start pupils and their non-Head Start counterparts were classified into subgroups on the basis of age, sex and race, as here shown, to secure directly comparable groups:

	<u>Former Head Start Pupils</u>		<u>Non-Head Start Pupils</u>	
	<u>Negro</u>	<u>White</u>	<u>Negro</u>	<u>White</u>
Boys	20	27	20	27
Girls	19	29	19	29

The means and standard deviations of the scores of the above groups appear in Table 11. The differences between the group means tend to favor the non-Head Start groups. The mean scores of the non-Head Start groups are higher than the mean scores of the Head Start groups 21 times out of the 32 possible comparisons. This is especially true for the white group where only once does the Head Start group have a higher mean (white girls on Paragraph Meaning Subtest of SABP). For Negroes, the Head Start groups had higher means on ten of the 16 subtests. However, the differences favoring either group are generally slight. The mean differences range from .01 to .30 grade score equivalents on the SABP for both whites and Negroes and from .06 to 1.78 raw score points for Negroes on the TOBE and 1.55 to 5.08 raw score points for whites on the TOBE.

Overall, the achievement of Grade 1 former Head Start and non-Head Start students was similar.

TABLE 11

**Scores of Matched Pairs of Head Start and non-Head Start Pupils Tested in
Grade 1 on the Stanford Achievement Battery (Primary) and the Test of Basic Experiences**

	HEAD START						NON-HEAD START					
	Negro			Caucasian			Negro			Caucasian		
	N	Mean	Standard Deviation	N	Mean	Standard Deviation	N	Mean	Standard Deviation	N	Mean	Standard Deviation
Age in Mo												
Months:												
Boys	20	87.00	6.76	27	87.61	6.12	20	86.85	6.53	27	87.41	6.04
Girls	19	85.16	5.67	29	86.03	5.31	19	85.26	5.56	29	85.93	5.20
SABP (Grade score)												
4. Reading												
Boys	19	1.32	0.22	26	1.27	0.23	19	1.37	0.30	26	1.47	0.37
Girls	17	1.40	0.29	29	1.39	0.31	17	1.41	0.34	29	1.46	0.31
7. Meaning												
Boys	19	1.18	0.28	26	1.23	0.24	19	1.16	0.29	26	1.40	0.40
Girls	17	1.36	0.27	29	1.34	0.37	17	1.26	0.26	29	1.26	0.28
Vocabulary												
Boys	19	1.43	0.18	25	1.39	0.23	19	1.57	0.25	25	1.69	0.55
Girls	17	1.62	0.30	28	1.45	0.29	17	1.42	0.20	28	1.60	0.35
Spelling												
Boys	19	1.22	0.35	25	1.14	0.32	19	1.14	0.22	25	1.30	0.52
Girls	17	1.42	0.46	28	1.22	0.48	17	1.22	0.43	28	1.36	0.42
TOBE (Raw scores)												
Math												
Boys	18	40.50	5.73	26	43.31	6.80	18	42.38	5.47	26	46.69	4.81
Girls	18	43.39	5.81	28	42.39	5.74	18	43.33	4.97	28	45.32	4.76
Language												
Boys	18	39.56	4.69	26	37.96	4.22	18	38.61	4.34	26	40.54	4.73
Girls	18	40.22	3.89	28	40.00	5.40	18	39.55	4.84	28	41.68	5.54
Science												
Boys	20	40.50	5.55	24	40.67	5.42	20	40.00	4.92	24	45.12	3.99
Girls	18	41.11	4.24	27	40.37	5.56	18	39.33	6.37	27	45.72	4.33
Sec. Studies												
Boys	20	40.20	5.80	26	39.35	5.96	20	40.60	4.77	26	44.43	4.89
Girls	19	38.89	6.29	27	40.44	5.52	19	40.74	4.39	27	44.78	5.62

Predictive Value of 1967 Peabody
Picture Vocabulary Test Scores

No comparative data are available for most of the students tested. However, for 72 of the former Head Start students, scores were available for the Peabody Picture Vocabulary Test which had been administered to them in 1967 as part of a prior research study on Head Start conducted by the Research Department. A correlation between the PPVT scores and the SABP Paragraph Meaning subtest scores was done. The resulting coefficient was .38, indicating that while the PPVT has some validity for predicting future achievement of Head Start pupils it is not a strong predictor. A scatter plot of the scores is presented in Figure 1.

FIGURE 1

Scatter Plot of Correlation Between Peabody Picture Vocabulary Test Scores Secured in 1967 and Stanford Achievement Battery (Primary) Secured in 1969

PPVT of 1967 IQ Equivalent	Raw Score															Total	
91	37									1							1
90	36																0
88	35																0
86	34										1						1
85	33		1	1													2
83	32								1					1			2
81	31																0
80	30							1									1
78	29	2		1				1									4
76	28							2									2
74	27		1					1					1				3
73	26			1				1		1						1	4
71	25	1				1	1										3
69	24	4			1			1	1								7
68	23		2		2	1											5
66	22	1	1		2		2		2								8
64	21	2	1		1		1	1	1								7
62	20						2										2
61	19	3			1												4
59	18	3	1		1		1	1									7
57	17									1							1
56	16				1		1										2
	15																0
	14	1															1
	13	1		1													2
	12	1															1
	11																0
	10	1															1
SABP Scores of 1969		.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	72	

Observational Data on
Classroom Adjustment of Selected Former
Head Start and Non-Head Start First Grade
Pupils (1968-69)

First grade pupils with Head Start experience were matched with first grade pupils with no Head Start experience on the basis of age in months and sex. Students were also matched as closely as possible according to socio-economic information provided by the teacher and school records. Most of the socio-economic information used in matching was based upon perceptions and presents a problem of validity.

Individual students were observed in eight schools. The total number of first grade students involved in this part of the study was 48--24 control or non-Head Start pupils and 24 experimental or former Head Start pupils. There were 11 female and 13 male pupils of each type. The 24 former Head Start pupils did not exhaust the number of Head Start pupils in the first grade classes in the eight schools, but it did constitute the matches available within this limited number of schools.

Individual observations were made of the 48 matched first grade students. Each child was scheduled to be observed 10 times. Four hundred eighty (480) observations of individual children were made; but, because of absences, observations range from 4 to 12 per child. Observations were made on a random basis throughout the school day and week. Each child was rated on traits involved in Personal Relations and Social Reactions. Seven characteristics in these two areas were rated on a four-point scale for a total of 3,360 ratings.

Above average	4 points
Average	3 points
Below average	2 points
Poor	1 point

The following tabulation shows the average rating received by former Head Start and non-Head Start pupils when they were interacting with an adult or were working without direct adult supervision.

	<u>Head Start</u>		<u>Non-Head Start</u>	
	<u>With Adult</u>	<u>Without Adult</u>	<u>With Adult</u>	<u>Without Adult</u>
Boys	3.20	2.15	2.02	2.16
Girls	3.04	2.26	2.99	2.96

The mean ratings above all reflect average development. Individual students, of course, varied considerably in some cases, ranging from 1.43 to 4.00. The per cent of former Head Start and non-Head Start first grade students receiving each type of rating is shown below.

<u>Rating</u>	<u>Head Start</u> N=1764 observations	<u>Non-Head Start</u> N=1596 observations
Above average	10.5	13.3
Average	70.8	72.9
Below average	14.2	10.8
Poor	4.4	2.9

Checklist Ratings of Class Adjustment
of Head Start and Non-Head Start First
Grade Pupils 1968-69

The teachers of the pupils being individually observed were asked to complete Classroom Adjustment Checklists for the matched pairs of students. The following figures (2-7) show the number of former Head Start and non-Head Start first grade pupils receiving the indicated rating for all factors represented on the checklist except Personal Needs and the number receiving the indicated rating as a composite score. Fulfilling Personal Needs is not charted because nearly all pupils received the same rating. The mean composite scores of the pupils rated are shown below.

	<u>Head Start</u>	<u>Non-Head Start</u>
Boys	5.28	5.36
Girls	5.44	5.65
Boys & Girls	5.36	5.50

The non-Head Start pupils have slightly higher ratings than the former Head Start pupils. A rating of 6 would indicate "almost always" while a rating of 5 means "usually." The ratings on the individual factors for each group all fall between 5 and 6 and show that both groups of students "usually" have good social orientation, manifest self-control, use acceptable speech, fulfill their personal needs adequately and perform the required activities.

Figures 2 through 7 show the relative number of former Head Start and non-Head Start first grade pupils who were rated as indicated on the factors of social orientation, self-control, speech pattern and performance of required activities along with a composite rating which also includes taking care of personal needs.

Figure 2, which shows composite scores on the rating instrument, indicates that the non-Head Start pupils in Grade 1 were rated "usually" well adjusted more often than the controls, but were less often rated "almost always" well adjusted than the controls. Figures 3 through 7, which give detail on the comparison between the two groups in the specific factors rated, show differences in most ratings that are too slight to warrant drawing firm conclusions at this early stage of the study, on the basis of the small number of pairs used to pilot-test this rating procedure.

Figure 2

Number of Head Start and Non-Head Start
First Grade Pupils Achieving Indicated
Composite Rating in Spring 1969

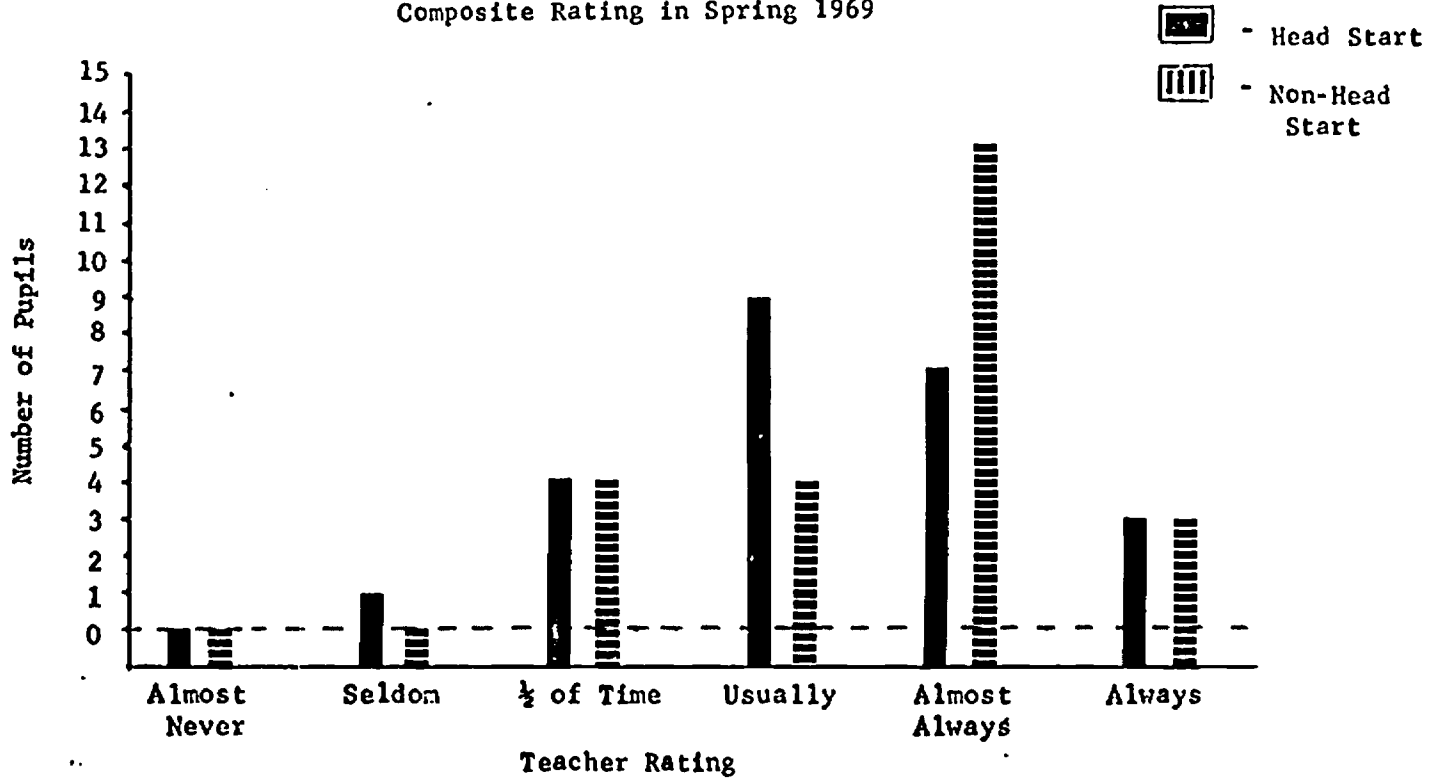


Figure 3

Number of Head Start and Non-Head Start
First Grade Pupils Achieving Indicated
Social Orientation Rating in Spring 1969

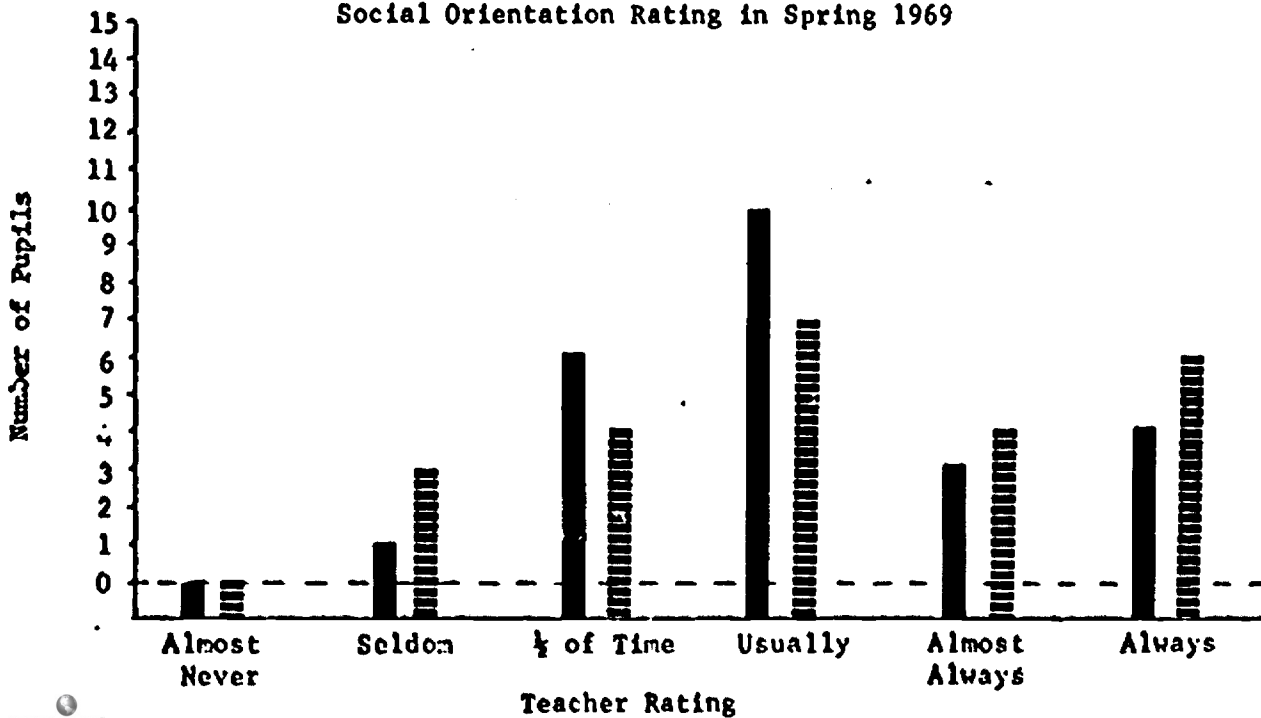


Figure 4

Number of Head Start and Non-Head Start
First Grade Pupils Achieving Indicated
Self-Control (Active) Rating in Spring 1969

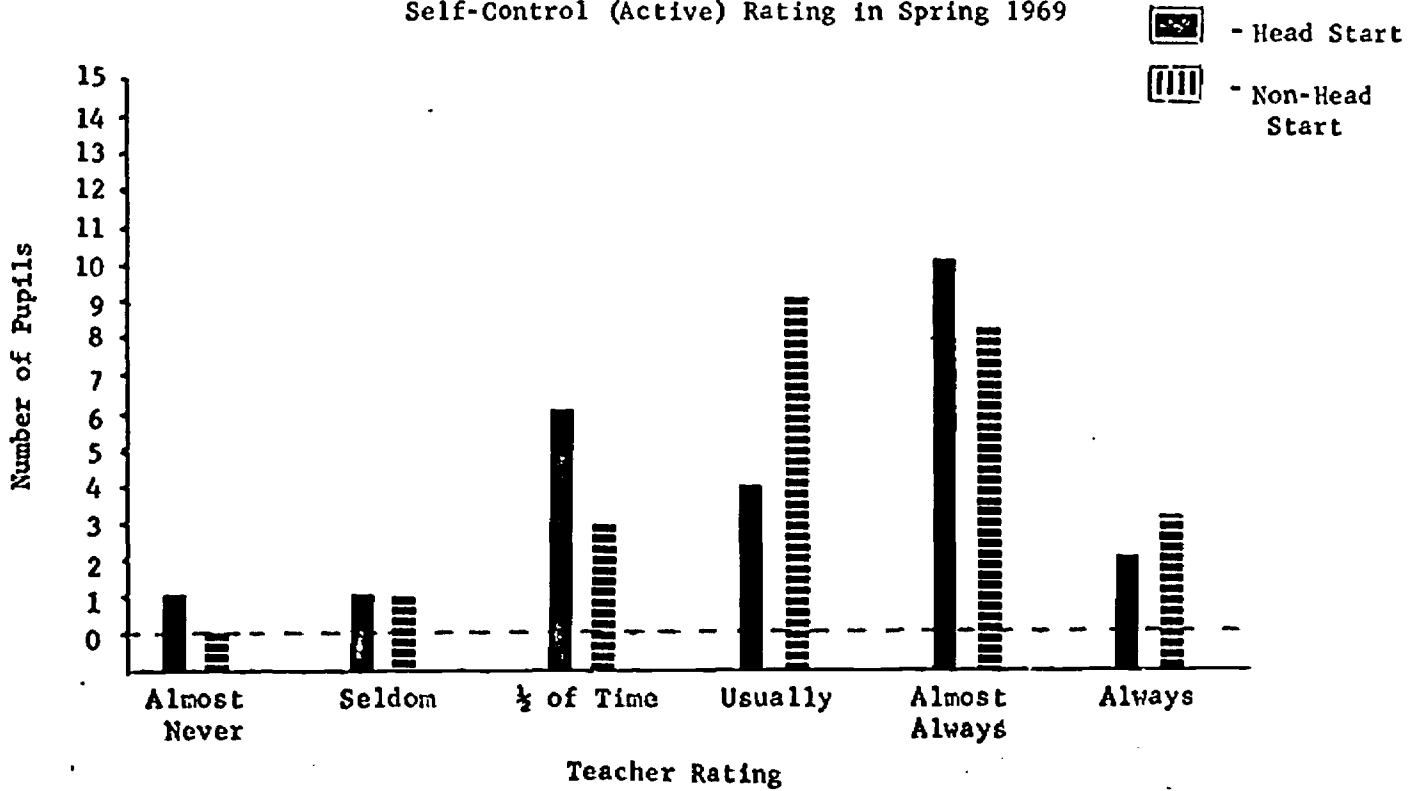


Figure 5

Number of Head Start and Non-Head Start
First Grade Pupils Achieving Indicated
Self-Control (Passive) Rating in Spring 1969

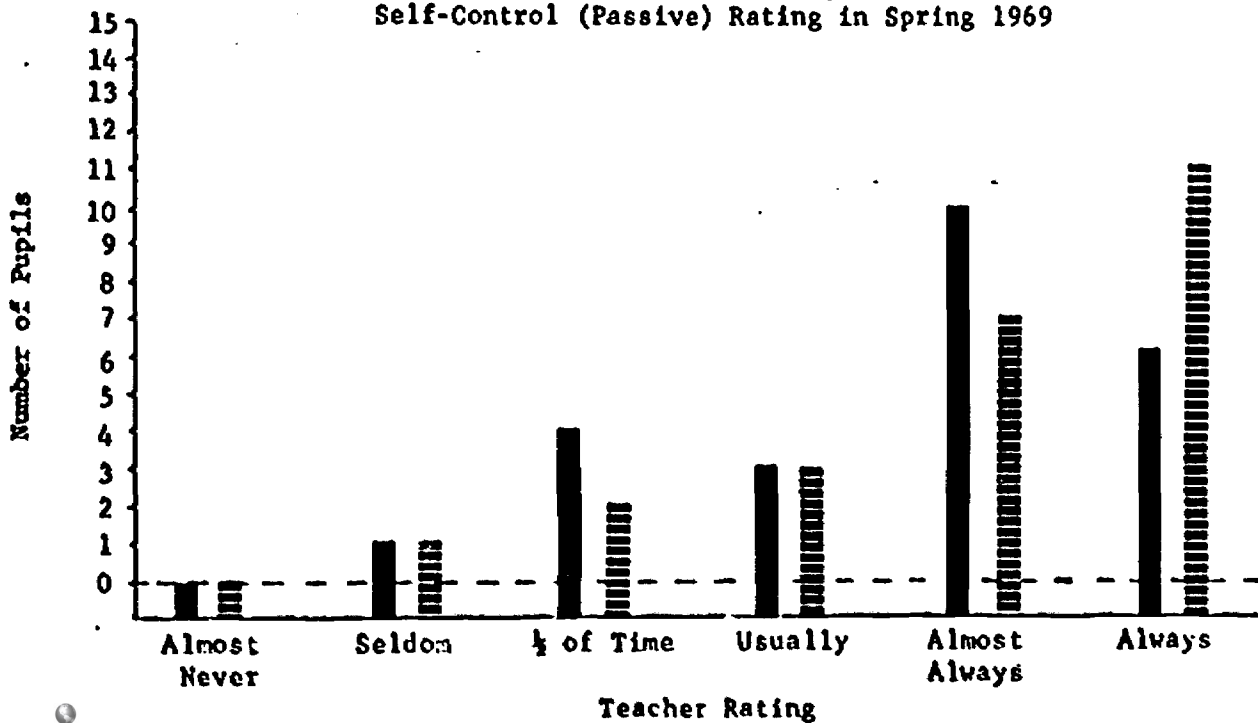


Figure 6

Number of Head Start and Non-Head Start First Grade Pupils Achieving Indicated Speech Pattern Rating in Spring 1969

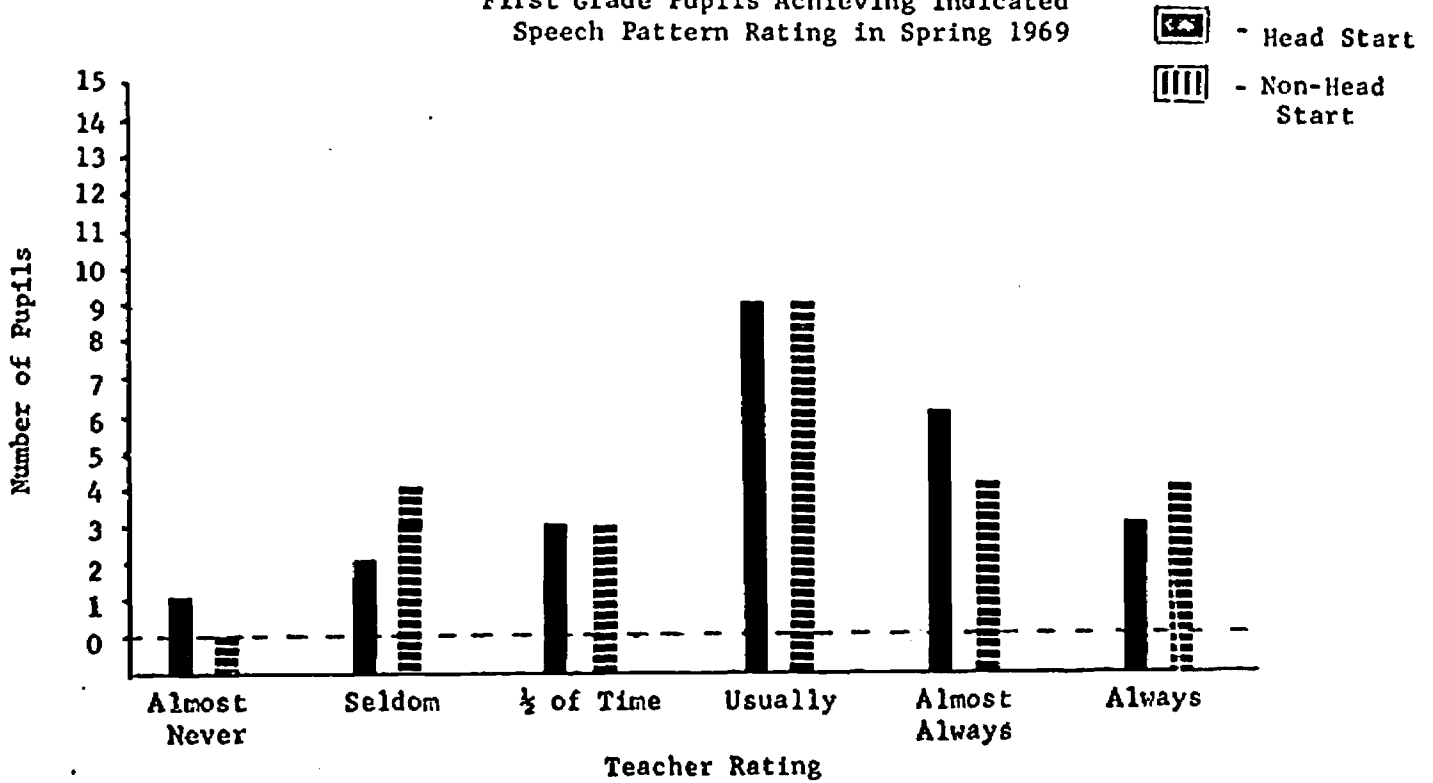
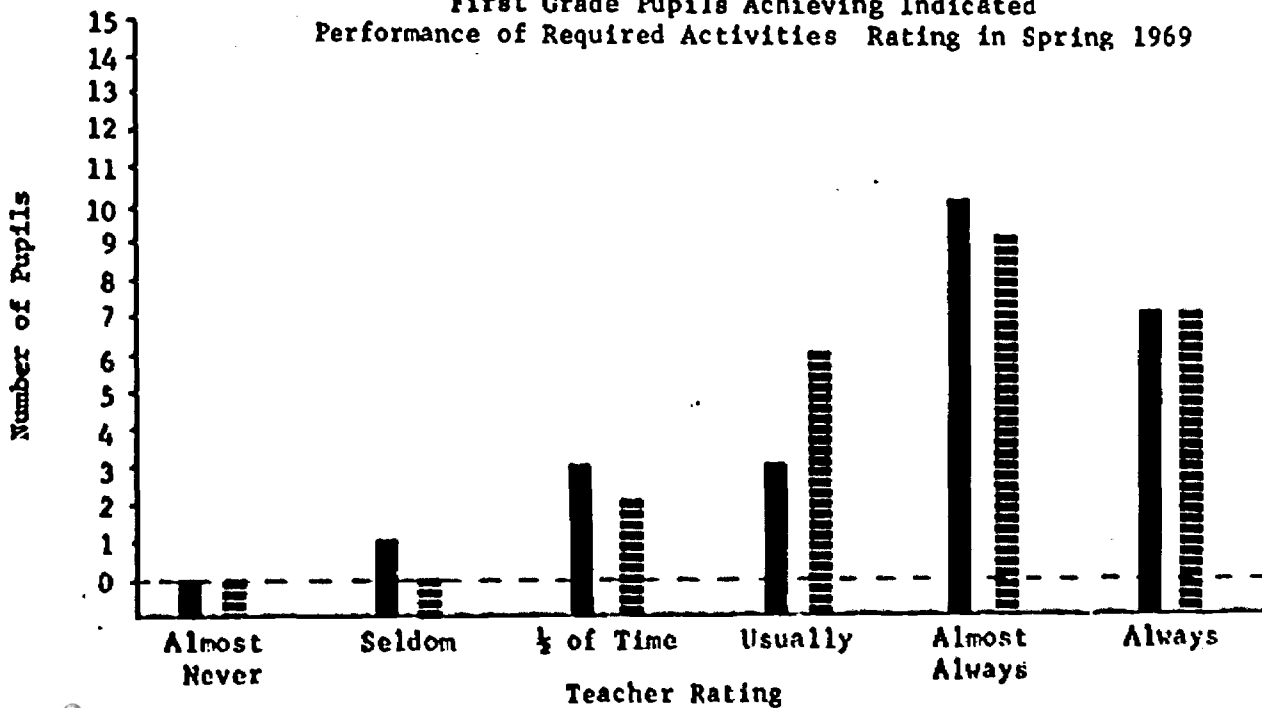


Figure 7

Number of Head Start and Non-Head Start First Grade Pupils Achieving Indicated Performance of Required Activities Rating in Spring 1969



ACTIVITIES DURING FALL 1969

Activities from September to December 1969 consisted chiefly of testing Head Start, kindergarten, and first grade pupils. Observation of first grade and Head Start classrooms was begun during November 1969 and is continuing until the end of the 1969-70 program. Baseline classroom adjustment data on Head Start pupils were obtained in November.

Testing

Three testing schedules were set up, as outlined below:

1. Head Start

Test of Basic Experience - Level K: (all Head Start students 357 received one of four subtests).

2. Kindergarten

Test of Basic Experience - Level K: (427 kindergarten students tested, including all former Head Start pupils. Each student took one pair of the the subtests. Subtests pairs were (1) Language Arts and Science and (2) Social Studies and Math).

3. Grade 1

a. Metropolitan Readiness Test (A)

b. Lorge-Thorndike Level I

(391 first grade students tested. This included 185 former Head Start students and 210 non-Head Start students).

Results reported here are of a descriptive nature. The lack of truly reliable and valid methods for equating groups in this age range limits the analysis of the test results. Because of the very nature of the research it was not possible to equate the matching groups on all variables relevant to achievement and to control all extraneous variables that could possibly affect the children, i.e., home situation, health problems, emotional state, etc.

Head Start Testing (Fall 1969)

A preliminary form of the Test of Basic Experiences (TOBE) Level K was administered to Head Start pupils in October of 1969. The TOBE Level K has four subtests, Social Studies, Science, Math and Language Arts, each requiring approximately 30 minutes to administer in one sitting. Since Head Start pupils had just started school and were still unaccustomed to classroom routine, each child took only one subtest. In order to insure a representative sample from each classroom for each subtest one quarter of the pupils in each classroom took each subtest. The tests were randomly distributed in the classrooms and administered to the groups of students separately.

TABLE 12

PERFORMANCE OF HEAD START PUPILS TESTED IN 1969
ON THE TEST OF BASIC EXPERIENCES (LEVEL K)

	Negro Girls			Negro Boys		
	N	Mean	Standard Deviation	N	Mean	Standard Deviation
TOBE Tests:						
Soc. Studies	30	28.63	7.59	28	28.25	8.70
Science	18	19.22	6.19	26	20.65	6.20
Math	28	21.75	5.13	22	21.23	5.53
Lang. Arts	29	24.76	7.96	22	23.41	7.45

	White Girls			White Boys		
	N	Mean	Standard Deviation	N	Mean	Standard Deviation
TOBE Tests:						
Soc. Studies	23	27.78	10.04	21	25.43	9.64
Science	18	19.11	5.28	16	22.37	6.50
Math	17	23.76	5.72	17	26.24	7.56
Lang. Arts	21	25.48	6.95	21	23.52	7.61

TOTAL HEAD START PUPILS

	N	Mean	Standard Deviation
TOBE Tests:			
Soc. Studies	102	27.68	8.86
Science	78	20.32	6.07
Math	84	22.93	6.10
Lang. Arts	93	24.32	7.47

Table 12 shows the means and standard deviations on the four subtests for the Head Start pupils by sex and race. No overall score is obtained with the TOBE.

The white Head Start girls had higher mean scores than the white Head Start boys in Social Studies and Language Arts. This was reversed for Science and Mathematics where the boys had the higher mean scores. The Negro Head Start girls had a slight edge over the Negro Head Start boys in Social Studies, Mathematics, and Language Arts, but the Negro boys had a higher mean score on the Science subtest.

Figures 8 and 9 are graphical presentations of the data in Table 12 on average scores of the Negro boys and girls, and the white boys and girls for the four subtests.

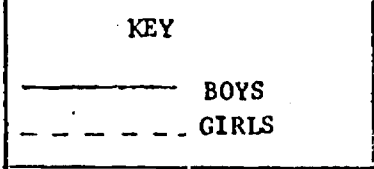
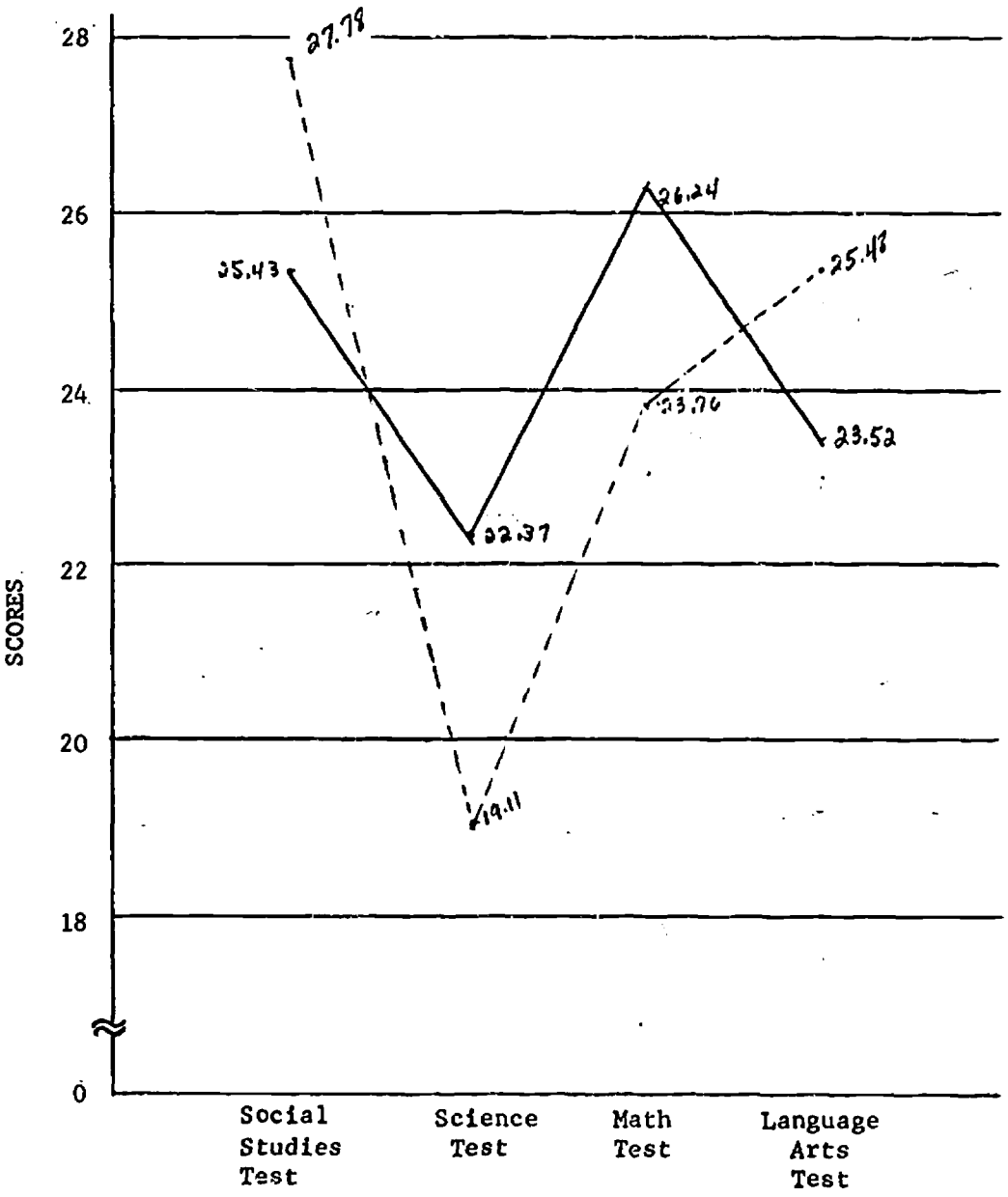


FIGURE 8
 GRAPHIC PRESENTATION OF MEANS ON FOUR TESTS OF
 BASIC INFORMATION
 WHITE HEAD START PUPILS TESTED IN FALL 1969



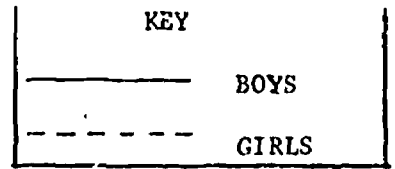
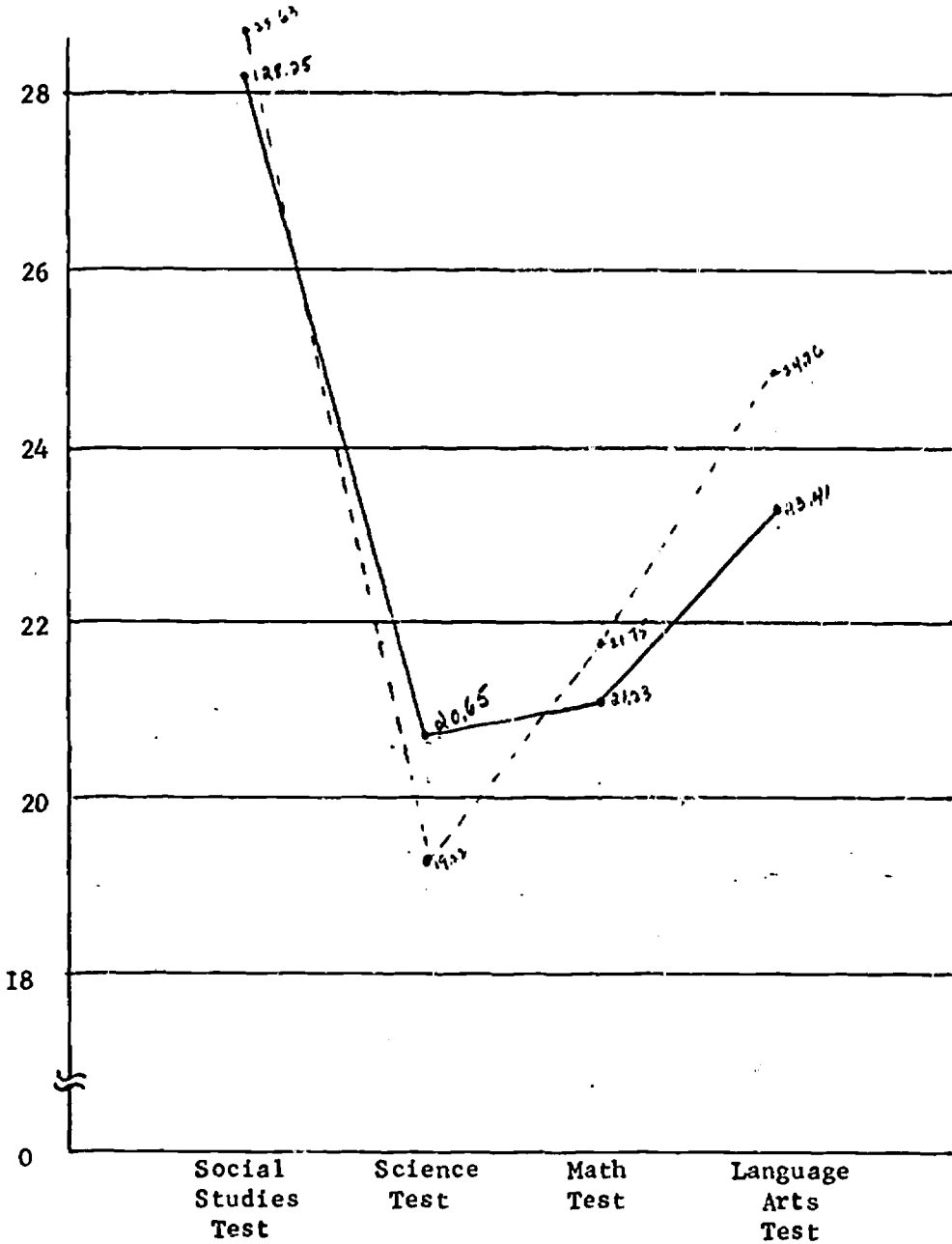


FIGURE 9

GRAPHIC PRESENTATION OF MEANS ON FOUR TESTS OF
 BASIC INFORMATION
 NEGRO HEAD START PUPILS TESTED IN FALL 1969



Kindergarten Testing (Fall, 1969)

The Test of Basic Experiences (TOBE) Level K was also administered to selected kindergarten classes. Kindergarten classes selected for testing were located at eight schools where Head Start classes were in progress and at eight additional schools where a large number of former Head Start students was enrolled in kindergarten. Since these pupils were older than the Head Start pupils, and were more accustomed to classroom procedure, each pupil was given two subtests. The subtests were paired with Social Studies and Mathematics in one pair and Science and Language Arts in the other. Each pair was given in two sittings on consecutive days. Only one pair was given each classroom. The following numbers of each subtest were given:

Social Studies	215
Math	207
Science	212
Language Arts	212

For purposes of comparison, the pupils' scores in the TOBE subtests are reported by sex, race and Head Start attendance.

Table 13 contains the means and standard deviations for the following eight groups:

1. Negro Head Start boys
2. Negro Head Start girls
3. Negro Non-Head Start boys
4. Negro Non-Head Start girls
5. White Head Start boys
6. White Head Start girls
7. White Non-Head Start boys
8. White Non-Head Start girls

TABLE 13

Scores of Former Head Start Pupils and Their Controls Tested on the Test of Basic Experiences (Level K) in Kindergarten in Fall 1969

TOBE TESTS:	HEAD START						NON-HEAD START					
	Negro			Caucasian			Negro			Caucasian		
	N	Mean	Standard Deviation	N	Mean	Standard Deviation	N	Mean	Standard Deviation	N	Mean	Standard Deviation
<u>Soc. Studies</u>	35	38.46	7.26	21	38.43	8.82	5	33.80	4.09	36	37.39	6.54
Boys	35	36.40	5.45	25	37.40	5.97	12	33.33	6.10	46	40.22	5.49
Girls	32	33.59	6.52	21	32.09	8.37	4	35.50	2.38	33	33.27	5.72
<u>Math</u>	32	31.69	7.31	26	32.65	8.22	12	28.42	5.52	47	35.30	7.12
Boys	38	25.55	8.59	11	23.18	3.28	19	25.95	8.05	42	30.91	7.59
Girls	44	26.02	7.25	19	25.68	6.64	12	25.42	6.22	27	29.70	7.33
<u>Science</u>	37	27.00	8.40	10	26.70	5.79	19	29.21	10.68	43	31.98	7.69
Boys	44	29.52	8.82	19	31.53	6.06	12	29.08	8.91	28	32.04	8.09
Girls												

TOTAL KINDERGARTEN

TOBE Tests:	N	Mean	Standard Deviation
Soc: Studies	215	37.80	6.76
Math	207	33.10	7.11
Science	212	27.16	7.68
Lang. Arts	212	29.91	8.39

Figures 10, 11, 12 and 13 present graphically the differences between kindergarten graduates of Head Start and non-Head Start kindergarteners of the same race and sex. Figure 12 shows that Negro Head Start boys have lower mean scores than Negro non-Head Start boys in Mathematics, Science and Language Arts. Figure 13 indicates that Negro Head Start girls have higher means than the Negro non-Head Start girls on all four subtests. Figure 14 shows higher means in Mathematics, Science, and Language Arts for white non-Head Start boys than for white Head Start boys.

The largest mean differences between any comparable group occurs between white boys on the Science and Language Arts subtests. The white non-Head Start boys have the higher means and the differences are 7.73 raw score points for Science and 5.28 for Language Arts. Figure 15 shows a markedly higher means on all four tests for the white non-Head Start girls than for the white Head Start girls.

Both Negro and white Head Start boys have higher means scores on the Social Studies subtests and lower mean scores on the other three subtests than the non-Head Start boys. The Negro Head Start girls have higher means scores on all four subtests than do the Negro non-Head Start girls but the reverse is true for the white girls.

On all four charts the groups have their highest means in Social Studies, the second highest in Mathematics, the third highest in Language Arts, and lowest in Science.

FIGURE 10
 MEAN SCORES OF FORMER HEAD START AND NON-HEAD START NEGRO BOYS TESTED IN
 KINDERGARTEN ON THE TESTS OF BASIC EXPERIENCE LEVEL K

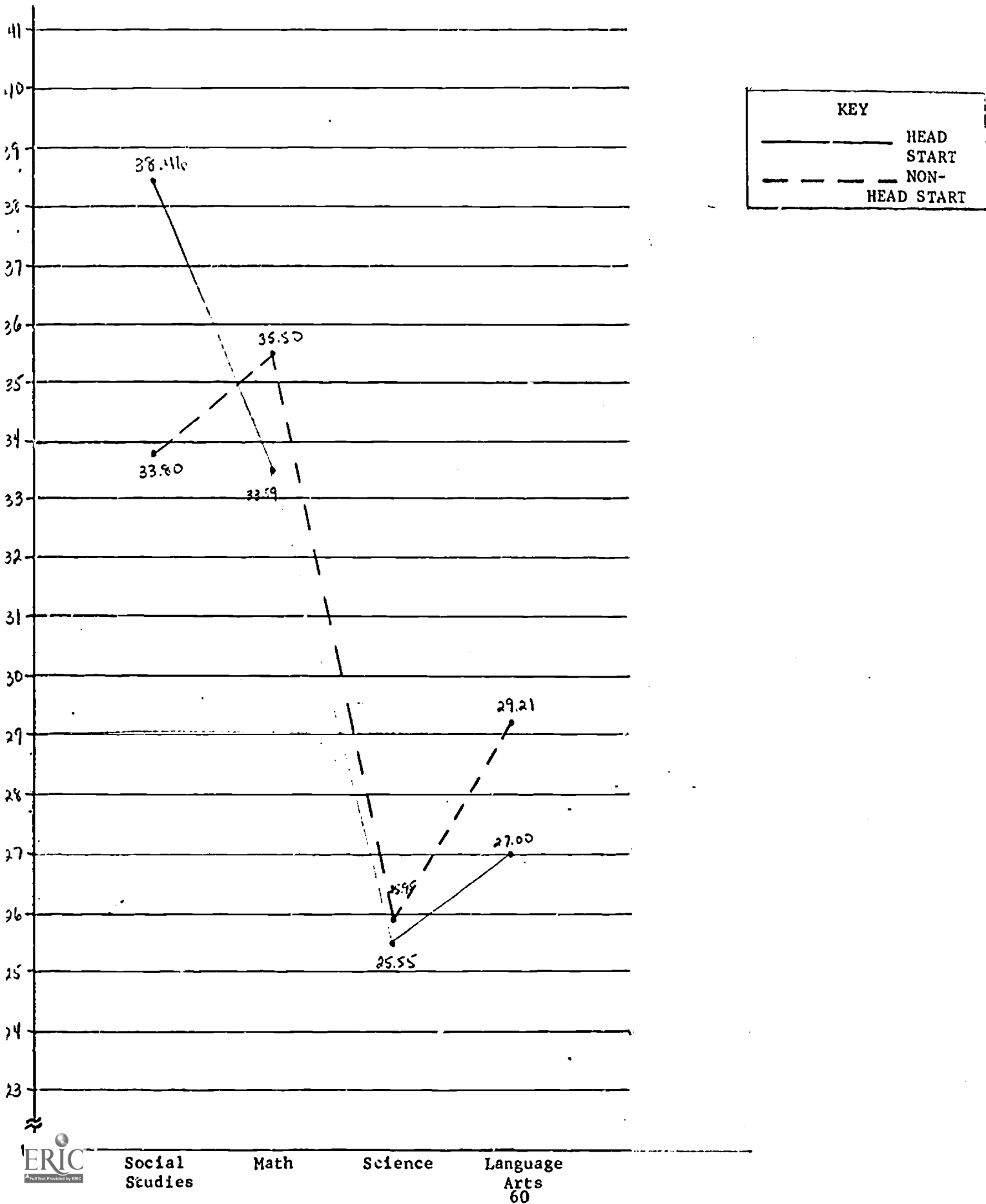


FIGURE 11
 MEAN SCORES OF FORMER HEAD START AND NON-HEAD START NEGRO GIRLS TESTED IN
 KINDERGARTEN ON THE TESTS OF BAS C EXPERIENCE LEVEL K

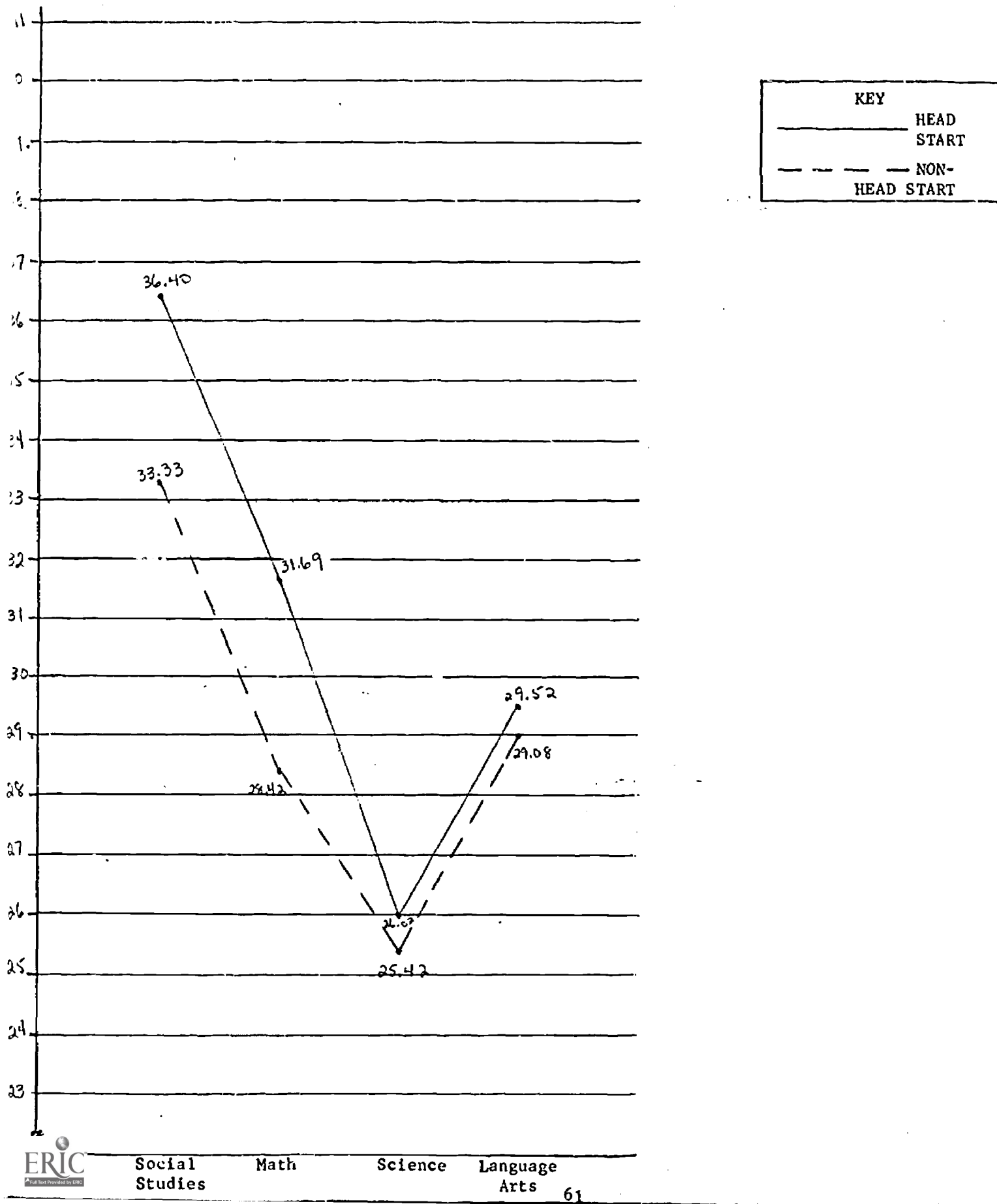


FIGURE 12
 MEAN SCORES OF FORMER HEAD START AND NON-HEAD START WHITE BOYS TESTED IN
 KINDERGARTEN ON THE TESTS OF BASIC EXPERIENCE LEVEL K

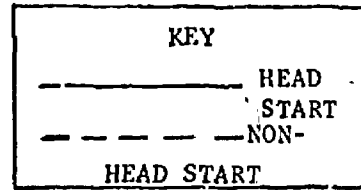
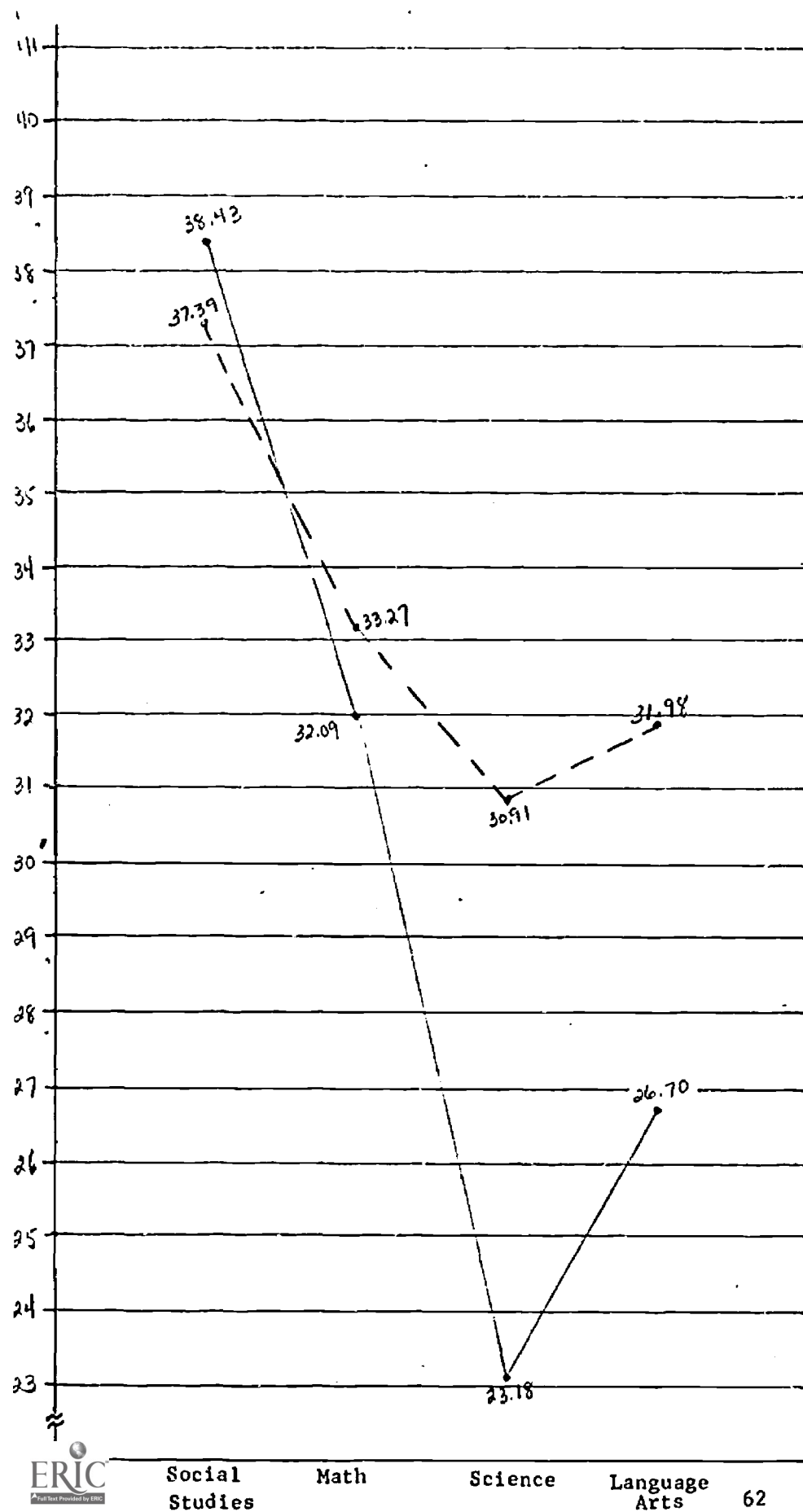
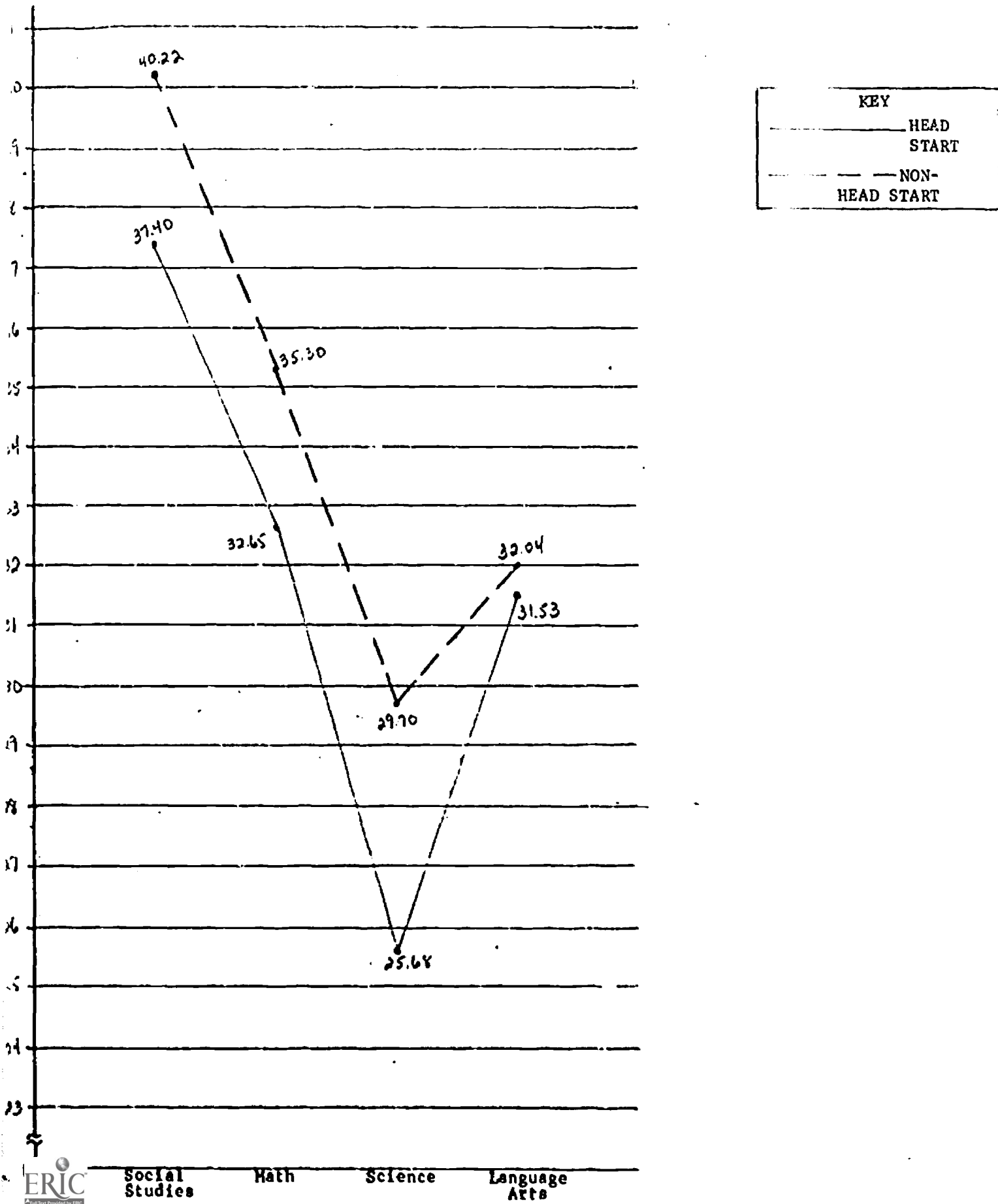


FIGURE 1
 MEAN SCORES OF FORMER HEAD START AND NON-HEAD START WHITE GIRLS IN KINDERGARTEN ON THE TESTS OF BASIC EXPERIENCE LEVEL



Achievement of Former Head Start and
Non-Head Start First Grade Pupils (Fall 1969)

In October 1969 selected Grade 1 pupils in the same 16 schools where kindergarten pupils were tested, were given the Lorge-Thorndike Intelligence Tests and the Metropolitan Readiness Tests. Lorge-Thorndike Intelligence Test scores were used to obtain an estimate of the ability level of the pupils which could be used as a control variable in an analysis of covariance.

All former Head Start pupils enrolled in first grade in these schools were tested and the comparison group of non-Head Start pupils tested were selected by project staff from information in school files. The selection of these pupils was based on ability and home background as compared to that of former Head Start pupils and was verified by school personnel. Former Head Start pupils were defined as any pupil who had been enrolled in Head Start and who had attended classes. No specified period of attendance was required to be included in this category. Table 14 shows the mean scores and standard deviations obtained by the two groups of pupils on the Lorge-Thorndike Test and on each of the subtests of the Metropolitan Readiness Test. The non-Head Start group has higher mean scores on all but two subtests. Head Start girls have slightly higher means on the Listening and Copying subtests of the Metropolitan Readiness Test. The Lorge-Thorndike scores are higher for both boys and girls in the non-Head Start group also.

An analysis of covariance was performed using the Lorge-Thorndike scores as the control variable, and the results appear in Table 15. No significant differences were found between the two groups on any of the six subtests of the Metropolitan Readiness Test or on total scores for the test. These findings indicate that readiness for beginning school work of one group was not significantly different from that of the other group.

TABLE 14

Scores of Former Head Start Pupils and Their Controls Tested in Grade 1 on the Metropolitan Readiness Test and the Large-Thorndike Intelligence Test

	HEAD START			NON-HEAD START		
	N	Mean	Standard Deviation	N	Mean	Standard Deviation
Race: Negro	122			46		
Caucasian	48			143		
Age in Months:						
Boys	97	76.19	3.49	110	75.66	3.45
Girls	73	76.27	3.62	79	76.10	3.40
Large-Thorndike Composite IQ:						
Boys	97	85.91	11.86	110	94.96	14.20
Girls	73	89.67	12.25	79	92.28	13.46
<u>Metropolitan Readiness:</u>						
<u>W. Meaning</u>						
Boys	97	6.77	2.77	110	8.27	2.87
Girls	73	7.05	2.31	79	7.54	2.84
<u>Listening</u>						
Boys	97	8.74	2.90	110	9.58	2.58
Girls	73	9.49	2.59	79	9.44	2.77
<u>Matching</u>						
Boys	97	5.13	3.16	110	7.58	3.25
Girls	73	6.56	3.04	79	7.58	3.25
<u>Alphabet</u>						
Boys	97	6.55	4.07	110	9.05	4.17
Girls	73	8.52	4.62	79	8.68	4.21
<u>Numbers</u>						
Boys	97	9.37	4.03	110	11.66	4.54
Girls	73	10.34	4.32	78	11.20	4.50
<u>Copying</u>						
Boys	97	3.42	2.73	110	5.02	3.10
Girls	73	4.68	2.98	78	4.44	2.82
<u>Totals</u>						
Boys	97	39.99	14.91	110	50.34	15.72
Girls	73	46.66	14.96	79	48.70	15.50

TABLE 15

Covariance Table:
Tests of Significance
of Observed Differences in Means of Former Head Start Pupils and
Their Controls Tested in Grade 1 on the Metropolitan Readiness Test
(Data Presented for Mean Scores on Six Subtests and Composite Scores)

NOTE: This is page 1 of a 2-page table

Subtest:	HEAD START	NON-HEAD START
<u>Word Meaning:</u>		
<u>Boys</u>		
Unadjusted mean	6.77	8.27
Adjusted mean	7.31	7.80
Adjusted F	1.86 ns	
Degrees of freedom	1,204	
<u>Girls</u>		
Unadjusted mean	7.05	7.54
Adjusted mean	7.18	7.43
Adjusted F	0.41 ns	
Degrees of freedom	1,149	
<u>Listening:</u>		
<u>Boys</u>		
Unadjusted mean	8.74	9.58
Adjusted mean	9.20	9.17
Adjusted F	0.01 ns	
Degrees of freedom	1,204	
<u>Girls</u>		
Unadjusted mean	9.49	9.44
Adjusted mean	9.61	9.33
Adjusted F	0.49 ns	
Degrees of freedom	1,149	
<u>Matching:</u>		
<u>Boys</u>		
Unadjusted mean	5.13	6.75
Adjusted mean	5.63	6.31
Adjusted F	2.29 ns	
Degrees of freedom	1,204	
<u>Girls</u>		
Unadjusted mean	6.56	7.58
Adjusted mean	6.69	7.46
Adjusted F	2.64 ns	
Degrees of freedom	1,149	
<u>Alphabet:</u>		
<u>Boys</u>		
Unadjusted mean	6.55	9.05
Adjusted mean	7.37	8.33
Adjusted F	3.55 ns	
Degrees of freedom	1,204	
<u>Girls</u>		
Unadjusted mean	8.52	8.68
Adjusted mean	8.70	8.52
Adjusted F	0.08 ns	
Degrees of freedom	1,149	

TABLE 15 continued
 Tests of Significance
 of Observed Differences in Means of Former Head Start Pupils and
 Their Controls Tested in Grade 1 on the Metropolitan Readiness Test

NOTE: This is page 2 of a 2-page table

Subtest:	HEAD START	NON-HEAD START
<u>Numbers:</u>		
<u>Boys</u>		
Unadjusted mean	9.37	11.65
Adjusted mean	10.36	10.79
Adjusted F	0.74 ns	
Degrees of freedom	1,204	
<u>Girls</u>		
Unadjusted mean	10.34	11.20
Adjusted mean	10.54	11.02
Adjusted F	0.53 ns	
Degrees of freedom	1,148	
<u>Copying:</u>		
<u>Boys</u>		
Unadjusted mean	3.42	5.02
Adjusted mean	3.91	4.59
Adjusted F	3.07 ns	
Degrees of freedom	1,204	
<u>Girls</u>		
Unadjusted mean	4.68	4.44
Adjusted mean	4.82	4.31
Adjusted F	1.39 ns	
Degrees of freedom	1,148	
<u>Totals:</u>		
<u>Boys</u>		
Unadjusted mean	39.99	50.34
Adjusted mean	43.80	46.98
Adjusted F	3.66 ns	
Degrees of freedom	1,204	
<u>Girls</u>		
Unadjusted mean	46.66	48.70
Adjusted mean	47.55	48.87
Adjusted F	0.02 ns	
Degrees of freedom	1,149	

The foregoing analysis of variance was for all pupils in Grade 1 of the cooperating schools who had attended Head Start for any length of time, plus their controls.

As a further check on the possible effect of attendance patterns on the foregoing outcomes, a second analysis was performed, this time eliminating all former Head Starters who had not attended their Head Start class at least 120 days out of the 160-day program. It was reasoned that any pupil who had attended at least 120 days, or about 75 per cent of the scheduled days for the Head Start program, should be able to demonstrate the impact of the program.

Of the 170 former Head Start pupils, 106 met this criterion. They were divided as follows:

Former Head Start Pupils Meeting Criterion

	<u>Negro</u>	<u>White</u>
Boys	46	14
Girls	37	9

Table 16 presents the results of this second analysis of covariance. This time one significant difference was found. The Negro Head Start girls had a significantly higher mean score on the Metropolitan Readiness Copying subtest than did the Negro non-Head Start girls. The Copying subtest covers skills similar to those used in handwriting such as visual perception and motor control. This subtest involves considerable judgment in scoring and since scoring was done by more than one person this may be the source of difference.

In summary, then, the readiness for first grade instruction between former Head Start and non-Head Start pupils does not differ significantly. The cautions mentioned previously regarding comparability of groups are, again, applicable here. Further test data will be obtained on the achievement of these two groups of pupils at the end of the first grade.

TABLE 16
Covariance Table :
Tests of Significance
of Observed Differences in Means of Former Head Start Pupils and
Their Controls Tested in Grade 1 on the Metropolitan Readiness Test
(Data Presented for Mean Scores on Six Subtests and Composite Scores)

NOTE: This is page 1 of a 2-page table

	NEGRO		WHITE	
	<u>HEAD START</u>	<u>NON HEAD START</u>	<u>HEAD START</u>	<u>NON HEAD START</u>
<u>Word Meaning:</u> <u>Boys</u>				
Unadjusted mean	6.74	6.73	7.36	8.50
Adjusted mean	6.83	6.75	7.81	8.04
Adjusted F	0.24 ns		0.07 ns	
Degrees of freedom	1,69		1,25	
<u>Girls</u>				
Unadjusted mean	6.97	6.00	7.33	8.44
Adjusted mean	6.68	6.55	7.38	8.40
Adjusted F	0.04 ns		0.61 ns	
Degrees of freedom	1,54		1,15	
<u>Listening:</u> <u>Boys</u>				
Unadjusted mean	8.61	9.19	8.64	10.07
Adjusted mean	8.71	9.01	9.20	9.52
Adjusted F	0.26 ns		0.11 ns	
Degrees of freedom	1,69		1,25	
<u>Girls</u>				
Unadjusted mean	9.40	8.05	10.00	9.77
Adjusted mean	9.19	8.46	10.11	9.67
Adjusted F	0.93 ns		0.13 ns	
Degrees of freedom	1,54		1,15	
<u>Matching:</u> <u>Boys</u>				
Unadjusted mean	5.48	5.04	5.64	7.86
Adjusted mean	5.56	4.90	6.13	7.37
Adjusted F	0.76 ns		1.41 ns	
Degrees of freedom	1,69		1,25	
<u>Girls</u>				
Unadjusted mean	6.59	5.55	7.44	8.22
Adjusted mean	6.35	6.00	7.46	8.20
Adjusted F	0.17 ns		0.25 ns	
Degrees of freedom	1,54		1,15	
<u>Alphabet:</u> <u>Boys</u>				
Unadjusted mean	7.22	7.85	6.86	9.07
Adjusted mean	7.37	7.58	7.44	8.49
Adjusted F	0.05 ns		0.58 ns	
Degrees of freedom	1,69		1,25	
<u>Girls</u>				
Unadjusted mean	9.54	7.05	9.22	8.11
Adjusted mean	9.21	7.66	9.29	8.04
Adjusted F	1.63 ns		0.44 ns	
Degrees of freedom	1,54		1,15	

TABLE 16 continued

Test of Significance
of Observed Differences in Means of Former Head Start Pupils and
Their Controls Tested in Grade 1 on the Metropolitan Readiness Test

NOTE: This is page 2 of a 2-page table

		NEGRO		WHITE	
		HEAD START	NON HEAD START	HEAD START	NON HEAD START
<u>Numbers:</u>	<u>Boys</u>				
	Unadjusted mean	9.56	9.12	9.64	12.28
	Adjusted mean	9.74	8.81	10.39	11.54
	Adjusted F	1.69 ns		0.38 ns	
	Degrees of freedom	1,69		1,25	
	<u>Girls</u>				
	Unadjusted mean	11.05	8.89	11.44	9.77
	Adjusted mean	10.66	9.66	11.56	9.66
	Adjusted F	0.55 ns		1.21 ns	
	Degrees of freedom	1,53		1,15	
<u>Copying:</u>	<u>Boys</u>				
	Unadjusted mean	3.59	3.81	4.14	5.57
	Adjusted mean	3.68	3.65	4.42	5.29
	Adjusted F	0.002ns		0.49 ns	
	Degrees of freedom	1,69		1,25	
	<u>Girls</u>				
	Unadjusted mean	4.95	2.47	5.44	3.55
	Adjusted mean	4.78	2.80	5.46	3.54
	Adjusted F	7.33*.05		2.86 ns	
	Degrees of freedom	1,53		1,15	
<u>Totals:</u>	<u>Boys</u>				
	Unadjusted mean	41.20	40.88	42.28	53.36
	Adjusted mean	41.87	39.70	45.39	50.25
	Adjusted F	0.68 ns		0.85 ns	
	Degrees of freedom	1,69		1,25	
	<u>Girls</u>				
	Unadjusted mean	48.43	37.90	50.89	47.89
	Adjusted mean	46.74	41.18	51.26	47.52
	Adjusted F	2.21 ns		0.38 ns	
	Degrees of freedom	1,53		1,15	
<u>Large-Thorndike Intelligence Scores</u>					
	<u>Boys</u>	86.76	89.35	88.14	94.57
	<u>Girls</u>	92.32	83.25	91.33	92.33

Classroom Adjustment of Head Start Pupils (Fall 1969)

Two months after the start of Head Start classes, teachers were asked to complete Classroom Adjustment Checklists for all Head Start pupils. The development and factor analysis of this instrument was described above. Head Start classes are in existence in 23 schools for the 1969-70 school year. Teachers returned checklists for 458 children. The original seven-point rating scale was converted to a five-point scale consisting of "always," "often," "usually," "seldom," and "never" for ease in rating.

The following values were attached to each rating:

- Always 5 points
- Often 4 points
- Usually 3 points
- Seldom 2 points
- Never 1 point

The average rating for each factor on the checklist was computed and is shown in the following table for Negro boys, Negro girls, white boys and white girls.

Negro: Boys	N	Social Orientation	Self-Control Active	Self-Control Passive	Speech Pattern	Personal Needs	Required Activities
Negro: Boys	124	3.31	3.31	4.08	3.23	4.17	3.55
Girls	120	3.25	3.39	3.69	3.21	4.20	3.63
White: Boys	106	3.40	3.38	3.74	3.24	4.44	4.09
Girls	108	3.29	3.40	3.92	3.36	4.28	3.49

The average ratings for each group are generally similar indicating all groups had about the same adjustment with regard to each factor.

Head Start teachers will complete Classroom Adjustment Checklists near the end of Head Start classes in June 1970. The ratings on those checklists will then be compared to the ratings reported above and analyzed to determine the differences in classroom adjustment after Head Start experience.

CONCLUSIONS AND RECOMMENDATIONS

The data comparing former Head Start students in kindergarten and Grade 1 with non-Head Start students of comparable background in the same classes does not at this point reveal much difference in achievement or classroom adjustment. However, the purpose of the study here reported was to develop and try out instruments for assessing these outcomes as well as to develop and try out instruments for describing Head Start program in progress through use of Head Start observations. A longitudinal study designed to continue beyond the phase here reported, through 1972 is projected as the medium for securing definitive information on the impact of Head Start on children.

The most important finding of this phase of the study is that the Head Start project has developed a curriculum with clearly observable purposes and with structure. The activity of teachers, volunteers, and aides is observed as purposefully directed at specific pupil outcomes. It is recommended that the detailed data on observations of classroom activities be examined to determine whether emphasis on different curriculum areas is balanced, particularly as regards the goal of language enhancement prior to entry into regular schools.

APPENDIX A

HEAD START GOALS

GOALS FOR CHILDREN

1. To develop patterns of behavior and expectations appropriate to school.
2. To increase use of language (more speaking in complete sentences, more dependence on words rather than gestures for communication).
3. To develop the ability to listen with understanding when others are speaking.
4. To sharpen perceptual discriminations - visual, auditory, tactile and olfactory.
5. To teach simple abstractions (e.g., simple directions in space and time - up and down, on and off, in and out, before and after, sooner and later, here and there, etc.).
6. To develop manipulative skills - small muscle development (pouring, fastening, tying, etc.) and hand-eye coordination (puzzles, drawing, etc.).
7. To develop a positive self-concept in each child so that he begins to think of himself as a being with increased control over the world.
8. To develop knowledge appropriate to four year olds (colors, games, rhymes and songs, stories, facts about the world around them).
9. To enlarge capacity for satisfying relationships with other children.
10. To stimulate curiosity, to encourage questioning and exploration.
11. To develop large muscle skills (running, hopping, throwing, etc.).
12. To identify special problems, physical, intellectual, emotional and social.
13. To help with special problems, either directly or through referral to appropriate community resources.

GOALS FOR PARENTS

1. To develop a sense of partnership between school and parent in relation to the growth of the child.
2. To develop knowledge about how children learn and the importance of the home's contribution.
3. To increase their sense of personal worth.

GOALS FOR SCHOOLS

1. To facilitate the entrance of these children into the regular school program through strengthening communication and sharing our knowledge of the children with receiving teachers.
2. To identify specific educational needs of our population and suggest changes or additions in curriculum and teaching techniques in the light of these needs.

GOALS FOR COMMUNITY

1. To give adult members of the poverty population an opportunity to develop skills as classroom aides.
2. To describe the special needs of the population we serve and provide an assessment of the adequacy of community resources in the light of these needs.
3. To heighten the awareness of the community to the existence of our poverty population through our Community Action Committee.

VARIANT

- 1 HEADSTART CLASSES
- 2 FIRST GRADE

YEAR OF STUDY

3 - (1969)
 ST. CODE NUMBER
 HEAD START CLASS = 99

STUDY

- 0 READING
- 1 FUNDAMENTAL EDUCATION
- 2 BUSHEY
- 3 SCIENCE
- 4
- 5 DEPARTMENTALIZATION
- 6 INITIAL TEACHING ALPHABET
- 7 HEADSTART
- 8
- 9 SEEP AND ANY OTHER STUDIES

OBSERVER NUMBER

- 01 09
- 02 10
- 03 11 SYDNEY ARZT
- 04 73 ANN SULLIVAN
- 05 WENDY WALL 74 VERA FOWLKES
- 06
- 07 ROSE SCHWARTZ
- 08 ELLEN ROLLER

NUMBER OF CLASSES

- 0 1 CLASS
- 1 1 CLASS AND PART OF OR PARTS OF CLASSES
- 2 2 CLASSES
- 3 3 CLASSES

NUMBER OF ADULTS

- 0 NO ADULT
- 1 1 ADULT
- 2 2 ADULTS
- 3 3 ADULTS

BLOCK 23 - HEAD START CLASSES ONLY
 NUMBER OF LINES PER OBSERVATION

MONTH

- 0 OCTOBER
- 1 JANUARY
- 2 FEBRUARY
- 3 MARCH
- 4 APRIL
- 5 MAY
- 6 JUNE
- 7 NOVEMBER
- 8 DECEMBER
- 9 SEPTEMBER

DESCRIPTION OF ADULTS WITH CHILDREN

- 0 NO ADULT
- 1 TEACHER(S)
- 2 AIDE(S)
- 3 VOLUNTEER(S)
- 4 STUDENT HELPER(S)
- 5 RESOURCE TEACHER, NURSE
- 6 AIDE AND VOLUNTEER/OR OTHER ADULT
- 7 TEACHER AND AIDE AND/OR OTHER ADULT
- 8 PRINCIPAL AND/OR SUPERVISOR
- 9 OTHER (COMMUNITY WORKER; PARENT)

APPENDIX B

Observer's Code Book

and

Classroom Observation Summary Sheet

ONE CLASSROOM

- 012 CHILDREN IN GROUPS AT THEIR TABLES
- 013 CHILDREN GROUPED AROUND TEACHER
- 014 BOOK TABLE/ CORNER
- 015 SCIENCE OR MATH CENTER
- 016 LISTENING CENTER
- 017 ART
- 018 SEVERAL OF THESE
- 019 MUSIC
- 213 SECRETARY'S ROOM
- 214 FURNACE ROOM
- 220 PRINCIPALS OFFICE
- 230 ART ROOM
- 240 BATHROOM
- 250 WATER FOUNTAIN

- 030 THE SCIENCE ROOM
- 060 THE ALL-PURPOSE ROOM
- 070 THE MUSIC ROOM
- 080 THE OUTDOOR AREA

- 081 OPEN AREA
- 082 PLAY EQUIPMENT
- 083 GARDEN AREA
- 084 WOODED AREA
- 085 WATER AREA
- 086 SAND AREA

- 090 THE LIBRARY
- 100 THE KINDERGARTEN
- 110 AUDIO-VISUAL ROOM
- 120 HALLWAY
- 130 UNASSIGNED CLASSROOM
- 150 FIELD TRIP
- 160 CAFETERIA
- 200 ACTIVITY AREAS

- 201 SAND TABLE
- 202 WATER TABLE
- 203 HOUSEKEEPING
- 204 DOLL CORNER
- 205 BULLETIN BOARD/CHALKBOARD
- 206 MIDDLE OF FLOOR
- 207 SINK

- 210 OTHER ROOMS IN THE SCHOOL

- 211 KITCHEN

080 ALL ABOUT ME

- 011 NAME, ADDRESS, PHONE No.
- 012 SEX, AGE
- 013 BODY IMAGE
- 014 IDENTIFYING PARTS OF BODY
- 015 FUNCTIONS OF BODY PARTS
- 016 COORDINATION OF BODY PARTS
- 017 HEALTH - PERSONAL CLEANLINESS
- 018 POSITIVE PERSONAL SELF-CONCEPT -- SELF CONFIDENCE; SUCCESS
- 019

020 MY CLOTHING

- 021 TYPES AND NAMES OF
- 022 PROTECTION
- 023 APPROPRIATENESS

030 MY FAMILY

- 031 MEMBERS OF FAMILY (NAMES AND RELATIONSHIPS)
- 032 RESPONSIBILITIES AND DUTIES OF MEMBER OF FAMILY (COOPERATION AND CARING FOR)
- 033 POSSESSIONS

040 MY SCHOOL

- 041 NAMES OF ROOMS, PERSONNEL
- 042 STANDARDS AND HABITS
- 043 SAFETY AND ORDERLINESS

050 ANIMAL LIFE

- 051 PETS
- 052 OTHER ANIMALS WATCHED (BIRDS, TADPOLES, TURTLES, CAGED PETS, GOLDFISH, GERBILS, ETC.)
- 053 FARM ANIMALS
- 054 WILD ANIMALS

060 COMMUNITIES

- 061 PLACES IN OUR COMMUNITY
- 062 WORKERS
- 063 OTHER PLACES

080 INTER-PERSONNEL RELATIONSHIPS

- 081 GOOD SPORTSMANSHIP
- 082 SOCIAL BEHAVIOR
- 083 RELATIONSHIPS WITH PEERS
- 084 RELATIONSHIPS WITH ADULTS
- 085 PREJUDICES
- 086 POLITENESS
- 087 TABLE MANNERS

090 ABSTRACT CONCEPTS

- 091 SPATIAL ARRANGEMENT
- 092 COLOR
- 093 SHAPES
- 094 LIKENESS (DIFFERENCES)
- 095 PATTERNING
- 096 LEFT TO RIGHT
- 097 COLORS AND SHAPES
- 098
- 099 VARIETY

100 MATH CONCEPTS

- 101 ROTE COUNTING (CARDINAL NUMBERS)
- 102 RATIONAL COUNTING (ONE-TO-ONE CORRESPONDENCE)
- 103 ORDINAL NUMBERS (FIRST, SECOND, ETC.)
- 104 SIZE AND QUANTITY
- 105 SETS AND RELATIONSHIP OF SETS
- 106 TIME
- 107 DIRECTION, LOCATION, AND SPACE
- 108 WEIGHT
- 109 DISTANCE

110 SCIENCE

- 111 SUN
- 112 PLANTS
- 113 RAINBOW
- 114 MOON AND STARS
- 115 EARTH
- 116 LIGHT AND SHADOW
- 117 CALENDAR - SEASONS; WEATHER

120 SELF-EXPRESSION

- 121 ART
- 122 MUSIC
- 123 PLAY
- 124 ROUTINE
- 125 NAME OF UNDETERMINED
- 126
- 127
- 128

CURRICULUM AREA

- 010 LANGUAGE ARTS
- 011 READING
- 012 PHONICS OR PHONETIC WORD ANALYSIS
- 013 SPELLING
- 014 HANDWRITING
- 015 COMPOSITION
- 016 MECHANICS OR LANGUAGE ARTS
(PUNCTUATION, CAPITALIZATION,
OUTLINING, CORRECT FORM AND USAGE)
- 017 SPEAKING
- 018 LISTENING (AS A SKILL)
- 019 LITERATURE
- 020 MATHEMATICS
- 030 SCIENCE
- 040 SOCIAL STUDIES
- 041 HISTORY
- 042 GEOGRAPHY
- 043 INTERPERSONAL RELATIONSHIPS
- 044 CIVICS
- 045 OTHER
- 050 HEALTH AND SAFETY
- 060 PHYSICAL EDUCATION AND/OR RECREATION
- 070 ART
- 080 MUSIC
- 090 FOREIGN LANGUAGE
- 100 ROOM AND SCHOOL ACTIVITIES
- 110 STANDARDS, STUDY SKILLS, AND HABITS
- 120 CLASSROOM ROUTINE
- 130 CURRICULUM AREA CANNOT BE DETERMINED
- 140 LIBRARY SKILLS
- 150 COMBINATION OF CURRICULUM AREAS
- 151 LANGUAGE ARTS -- SOCIAL STUDIES/SCIENCE
- 152 SOCIAL STUDIES--SCIENCE
- 153 ART--SOCIALSTUDIES/SCIENCE
- 154 MUSIC--SOCIAL STUDIES/SCIENCE
- 155 LANGUAGE ARTS--ART
- 156 ART--MUSIC
- 157 STUDY SKILLS--SOCIAL STUDIES/ SCIENCE
- 158 STUDY SKILLS--LANGUAGE ARTS
- 159 OTHER COMBINATIONS
- 160 COMBINATION OF LANGUAGE ARTS CURRICULUM AREAS
- 161 READING AND WORD STUDY/PHONICS
- 162 SPELLING AND PHONICS
- 163 SPELLING AND COMPOSITION
- 164 HANDWRITING AND COMPOSITION
- 165 READING AND ORAL EXPRESSION
- 166 READING AND SPELLING
- 167 MECHANICS OF LANGUAGE AND COMPOSITION
- 168 SPELLING AND HANDWRITING
- 169 OTHER COMBINATIONS
- 170 WORD STUDY (OTHER THAN PHONICS OR SPELLING)
- 171 VOCABULARY (MEANINGS-- SYNONYMS)
- 172 WORD ANALYSIS AND/OR SYLLABICATION
- 173 WORD STUDY AND READING
- 174 ALPHABETIZING

PUPIL ORGANIZATION

- 1. ALL INDIVIDUALS OR GROUPS OPERATING ON SAME ACTIVITY IN SAME WAY.
- 3. INDIVIDUALS OR GROUPS OPERATING ON SAME ACTIVITY, DIFFERENT LEVELS, WAYS, AND/OR USING DIFFERENT MATERIALS.
- 5. INDIVIDUALS OR GROUPS OPERATING ON DIFFERENT ACTIVITIES.

IX. TEACHER/AIDE INTERACTION

ONE OR NO TEACHER IS WITH CLASS

- 010 TEACHER INTERACTING WITH CLASS AS A WHOLE.
- 020 TEACHER INTERACTING WITH ONE PUPIL; OTHER PUPILS FUNCTIONING AS INDIVIDUALS AND/OR GROUPS.
- 050 TEACHER INTERACTING WITH A GROUP; OTHER PUPILS FUNCTIONING AS INDIVIDUALS AND/OR GROUPS.
- 080 TEACHER NOT INTERACTING WITH PUPILS; PUPILS FUNCTIONING AS INDIVIDUALS AND/OR GROUPS.
- 110 TEACHER ABSENT; PUPILS FUNCTIONING AS INDIVIDUALS AND/OR GROUPS.
- 120 TEACHER ABSENT; PUPILS FUNCTIONING (1) AS GROUPS, (2) AS WHOLE CLASS.

TWO OR MORE TEACHERS/AIDES WITH THE CLASS

140 TEACHER/AIDE CONDUCTING THE ACTIVITY

- 141 OTHER(S) HELPING
- 142 OTHER(S) OBSERVING
- 143 OTHER(S) NOT INTERACTING

150 TWO (OR MORE) TEACHERS/AIDES SHARING CONDUCT OF ACTIVITY

- 160 MORE THAN ONE TEACHER/AIDE IN AREA, EACH WITH DIFFERENT CLASS, GROUP, AND/OR INDIVIDUAL
- 161 MORE THAN ONE TEACHER/AIDE IN AREA, EACH WITH DIFFERENT CLASS, GROUP, AND/OR INDIVIDUAL, OTHER(S) NOT INTERACTING
- 170 MORE THAN ONE TEACHER/AIDE; NONE INTERACTING WITH PUPILS

NONE/UNDETERMINED40 DEALING WITH INFORMATION10 GATHERING INFORMATION

- 11 CONTENT
- 12 TAKING NOTES/RECORDING
- 13 LOCATING INFORMATION IN BOOKS
- 14 INTERPRETING SYMBOLS
- 15 LIBRARY SKILLS
- 16 RESEARCH TECHNIQUES
- 17 MEASURING
- 18 READING FOR DETAILS
- 19 SKIMMING FOR TOTAL EFFECT

20 WORD STUDY/STRUCTURAL ANALYSIS

- 21 AUDITORY PERCEPTION/DISCRIMINATION
- 22 VISUAL/PERCEPTION/DISCRIMINATION
- 23 RELATING VISUAL TO AUDITORY
- 24 PHONICS (RELATING LETTERS TO SOUNDS)
- 25 SYLLABICATION
- 26 ROOTS
- 27 PREFIXES/SUFFIXES
- 28 ENDING/INFLECTIONS
- 29 STRUCTURAL EFFECT ON MEANING

30 LANGUAGE

- 31 PRONUNCIATION
- 32 PARTS OF SPEECH
- 33 USAGE/CORRECT FORM
- 34 MECHANICS
- 35 SYNONYMS/ANTONYMS
- 36 VOCABULARY/MEANINGS
- 37 CHOICE OF WORDS/PRECISION
- 38 FIGURATIVE LANGUAGE
- 39 IMAGINATION/EXPANSION

70 WRITTEN COMMUNICATION / INCLUDES
TEACHER-PUPIL DIALOGUE RE.
WRITTEN COMPOSITION)

- 71 TITLE/LABEL/CAPTION
- 72 OUTLINE
- 73 SUBJECT MATTER/CONTENT
- 74 MAIN IDEA/TOPIC SENTENCE
- 75 PARAGRAPHS/SENTENCES
- 76 PUNCTUATION/CAPITALIZATION
- 77 STYLE
- 78 CORRECT FORM
- 79 EDITING/PROOFREADING

80 MISCELLANEOUS

- 81 FOLLOWING DIRECTION
- 82 MEMORIZING
- 83 ORAL EXPRESSION
- 84 ACCEPTABLE SOCIAL BEHAVIOR
- 85 ACCEPTABLE PERSONAL BEHAVIOR
(HEALTH AND HYGIENE)
- 86 SELF-RELIANCE (INDEPENDENCE)

60 ORGANIZING/COMMUNICATING INFORMATION

- 61 DESCRIBING
- 62 CLASSIFYING
- 63 EXPLAINING
- 64 ORGANIZING
- 65 COMPARING
- 66 GENERALIZING
- 67 SUMMARIZING
- 68 EXPRESSING IDEAS
- 69 CREATIVE EXPRESSION

90 MUSCULAR SKILLS

- 91 LARGE MUSCLE
- 92 SMALL MUSCLE
- 93 COORDINATION OF LARGE/SMALL MUSCLES
- 94 EYE/HAND COORDINATION
- 95 HANDEDNESS /FOOTEDNESS)
- 96 BALANCING
- 97 BASIC LOCOMOTOR
- 98 GAME SKILLS
- 99 MANIPULATING

II. AND IV. PUPIL ACTIVITIES

- 01000 SILENT READING (WITHOUT WRITING)
(INCLUDED "LOOKING AT BOOKS")
- 01010 SILENT READING WITHOUT DISCUSSION
01020 WITH DISCUSSION
01030 AND ORGANIZING MATERIALS IN A SPECIFIC WAY
01040 STUDYING
01050 AND SELECTING LIBRARY BOOKS
- 02000 ORAL READING (INCLUDES "LOOKING AT BOOKS" AND
"TELLING WHAT THE BOOK SAYS")
- 02010 OTHERS LISTENING OR "FOLLOWING ALONG" AS IN
READING GROUP
02020 ONLY TEACHER LISTENING
02030 WITH DISCUSSION
02040 READING TO CLASS
- 03000 READING AND WRITING
- 03010 ANSWERING QUESTIONS OR WORKING PROBLEMS
03020 FOLLOWING WRITTEN DIRECTIONS
03030 CORRECTING WORK
03040 CHECKING ANOTHER'S WORK
03050 COPYING (CHART, ETC.) OR COPYING AND COMPLETING
03060 BEING TESTED
03060 MATCHING OR INDICATING ORDER -- MAKING A LIST
- 04000 READING AND ILLUSTRATING
- 05000 READING, WRITING, AND ILLUSTRATING
- 06000 WRITING
- 06010 RECORDING INFORMATION (AS FROM A MOVIE, TRIP,
DEMONSTRATION OR RESEARCH ACTIVITY)
06020 STORY, POETRY, LETTER, INVITATION, COMPOSITION
NOTICE, ORIGINAL WORK PROBLEM
06030 LISTING OR WRITING IN ORDER
06040 PRACTICING (IMPROVING FORM), PENMANSHIP
06050 CONSTRUCTING SENTENCES/WRITING DEFINITIONS
06060 LABELING
06070 PLAYING A WRITING GAME
06080 WRITING A BOOK REPORT
06090 VARIETY
- 07000 WRITING AND ILLUSTRATING
- 08000 LISTENING
- 08010 TO MECHANICAL DEVICE -- RADIO, TAPE, PHONOGRAPH
OR MUSICAL DEVICE, ETC.
08020 TO TEACHER, VISITING TEACHER, ANOTHER ADULT
08030 TO PUBLIC ADDRESS SYSTEM, MESSENGER
- 09000 LISTENING, SPEAKING, READING, AND WRITING (IN RESPONSE TO
DIRECTIONS OR ANSWERS, PUPILS ENGAGE IN ONE OF THE FOLLOWING)
- 09010 CORRECTING WORK
09020 ANSWERING QUESTIONS OR PROBLEMS/TESTING
- 10000 LISTENING/OBSERVING AND WRITING
- 10010 TAKING DICTATION
10020 TAKING A TEST
10030 PRACTICING
10040 TAKING NOTES
10050 ANSWERING QUESTIONS OR PROBLEMS/FOLLOWING DIRECTIONS

AND IV. PUPIL ACTIVITIES (CONTINUED)

- 11000 LISTENING AND OBSERVING
- 11010 AUDIO-VISUAL MATERIALS (INCLUDING STORY WITH PICTURES)
- 11020 TEACHER DEMONSTRATION, ILLUSTRATION
- 11030 SOMEONE CORRECTING WORK
- 12000 LISTENING OR OBSERVING AND SPEAKING (ALL LISTENING/OBSERVING AND SPEAKING; A PUPIL OR SOME PUPILS PARTICIPATING ACTIVELY, OTHERS LISTENING/OBSERVING)
- 12010 PUPILS ANSWERING AND/OR QUESTIONING
- 12020 PUPILS DICTATING (AS FOR AN EXPERIENCE CHART)
- 12030 PUPILS EXPLAINING, DEMONSTRATING, ILLUSTRATING, DESCRIBING, REPORTING, "SHOW AND TELL", TELLING A STORY
- 12040 VERBAL GAMES
- 12070 DRILLING (REPEATING)
- 12080 CONFERRING (ONE-TO-ONE)
- 12090 DISCUSSION (FREE FLOW, RATHER THAN ANSWERING QUESTIONS)
- 13000 SPEAKING (ALL RECITING OR CHORAL SPEAKING)
- 13010 FINGER PLAY
- 14000 OBSERVING OR VIEWING (VISUAL MATERIALS, SOMEONE CORRECTING WORK, VISUAL DEMONSTRATION, PANTOMIME, EXHIBITS, OTHER PUPILS WORKING OR PLAYING)
- 15000 OBSERVING AND EXAMINING OBJECTS
- 15010 EXPLORING OR HANDLING
- 16000 OBSERVING AND SPEAKING
- 17000 EXPERIMENTING AND OBSERVING
- 17010 WATER PLAY
- 18000 ENGAGING IN LARGE MUSCLE ACTIVITY/RECREATION
- 18010 GAMES (WITHOUT MUSIC)
- 18020 COMPETITIVE SPORTS (RELAYS, BASEBALL)
- 18030 CALISTHENICS OR GYMNASTICS
- 18040 PLAYING WITH TOYS, GAMES, LARGE BLOCKS OR PLAY EQUIPMENT
- 18050 RUNNING, JUMPING, SKIPPING, ETC.
- 19000 LISTENING AND MOVING (MOVEMENT RELATING TO RHYTHM, DRUMMING, CLAPPING, TONAL PATTERNS, MUSIC, ETC.)
- 19010 FOLK OR SQUARE DANCING
- 19020 CALISTHENICS TO RHYTHM
- 19030 MUSICAL GAMES
- 19040 CREATIVE DANCING
- 19050 RHYTHMICAL MOVEMENT (OTHER THAN DANCING)
- 19060 CREATIVE ART -- MUSIC
- 20000 MAKING OR CONSTRUCTING
- 20010 MAPS, GLOBE
- 20020 GRAPH TABLE, DIAGRAM, NUMBER LINE/SET, FRACTIONAL PARTS, ARCHITECTURAL DRAWING
- 20030 CHART, BOOKLET
- 20040 PICTURE, DESIGN, ILLUSTRATION, MURAL, PRINT
- 20050 HANDICRAFTS
- 20060 MODEL, USEFUL OBJECT, STRUCTURE, PUPPET, ETC.
- 20070 ORGANIZING, ARRANGING A DISPLAY
- 20080 GARDEN, AQUARIUM, TERRARIUM
- 20090 SHAPES, FORMS

AND IV. PUPIL ACTIVITIES (CONTINUED)

31000 MANIPULATING MATERIAL (SMALL MUSCLE ACTIVITY - COLOR CONES, CUBES)

- 21010 MEASURING
- 21020 ORGANIZING MATERIALS OR MATCHING ITEMS
- 21030 COMPUTING
- 21040 COUNTING
- 21050 OTHER (SAND)
- 21060 PLAYING WITH SMALL TOYS, GAMES
- 21070 FEELING MATERIALS OR OBJECTS (INCLUDES SAND, CLAY, BEADS, ETC.)

22000 SINGING, PLAYING MUSICAL INSTRUMENTS, MOVING TO RHYTHM WHILE SINGING (INCLUDING PUPILS PARTICIPATING ACTIVELY WHILE OTHERS LISTEN, OR LISTENING FOLLOWED BY ACTIVE PARTICIPATION)

23000 BEING IN-ATTENTIVE TO ORGANIZED ACTIVITY (SOCIALIZING)

- 23010 "ACTING-UP," CLOWNING, ANNOYING OTHERS
- 23020 DAYDREAMING (WATCHING OR INACTIVE)
- 23030 ENGAGING IN DIFFERENT ACTIVITY
- 23040 CRYING
- 23050 HIDING, (REFUSING TO PARTICIPATE)

24000 ENGAGING IN ADDITIONAL ACTIVITY

25000 RESTING

- 25010 RESTING, AND LISTENING TO STORY/MUSIC
- 25040 WAITING
- 25050 BEING DISCIPLINED

26000 HELPING

- 26010 HELPING TEACHER
- 26030 HELPING OTHER PUPIL(S)

27000 DOING ROUTINES (CLASSROOM)

25000 MOVING TO ANOTHER AREA FOR INSTRUCTION

29000 FIELD TRIP

30000 ADDITIONAL VARIETY OF ACTIVITY

34000 EATING AND/OR DRINKING ACTIVITIES

- 34010 WITH TALKING AND/OR LISTENING
- 34020 WITHOUT TALKING OR LISTENING

35000 PREPARING AND CLEANING UP FOR EATING

- 35010 SETTING TABLE OR ARRANGING TRAYS
- 35020 PASSING OUT FOOD
- 35030 CLEANING UP

36000 DOING PERSONAL ROUTINES

- 36010 CLOTHING
- 36020 HYGIENE

37000 PRACTICING HABITS OF SOCIETY (SAYING THANKYOU, PLEASE, WAITING TURN, BEING POLITE, ETC.)

38000 DRAMATIZING (PRETENDING, PLAYING WITH PUPPETS, PLAYING HOUSE, DRAMATIZING STORIES, ETC.)

39000 DEVELOPING VOCABULARY (ADDING NEW MEANINGS, WORDS, ANALYZING)

40000 DIGGING AND/OR GARDENING

41000 ABSENT

1. TEACHER PURPOSE (EMPHASIS--FOCUS--WHAT SHE IS TRYING TO TEACH)NO TEACHER INVOLVEMENT10 NO IDENTIFIABLE TEACHER PURPOSE20 IMPROVING WORKING SITUATION

- 21 BEHAVIOR OF STUDENT(S)
- 22 ENVIRONMENT (PHYSICAL)
- 23 ORGANIZATION OF STUDENTS
- 24 INSTRUCTIONAL MATERIALS
- 25 ATMOSPHERE--INTERACTION--ATTITUDES
- 26 FLEXIBILITY
- 27 PERSONAL HABITS (HEALTH)
- 28 SOCIAL HABITS
- 29 PUPIL VERBALIZATION

30 IMPROVING LEVEL OF STUDENT OPERATION

- 31 STANDARDS
- 32 CORRECT FORM
- 33 STUDY HABITS
- 34 INDIVIDUALIZING
- 35 DRAWING ON PRIOR EXPERIENCE OR KNOWLEDGE OF STUDENT(S)
- 36 SETTING EXAMPLE FOR STUDENTS
- 37 CORRECT USAGE
- 38 EFFECTIVENESS--EXPANSION
- 39 DETAILS

40 COUNSELING AND ADVISEMENT OF STUDENTS

- 41 APPEARANCE
- 42 PERSONAL GOALS
- 43 LANGUAGE
- 44 INDEPENDENCE
- 45 SELF-CONFIDENCE
- 46 SELF-RESPECT
- 47 SELF-CONTROL
- 48 EDUCATIONAL GOALS
- 49 AESTHETIC APPRECIATION

50 MOTIVATING

- 51 CREATING INTEREST
- 52 OPENING NEW APPROACHES
- 53 IDENTIFYING GOAL(S)
- 54 IDENTIFYING NEED/PURPOSE
- 55 DEMONSTRATING/SHOWING HOW/ILLUSTRATING
- 56 STIMULATING IMPROVEMENT
- 57 RAISING QUESTIONS OR HYPOTHESES
- 58 USING EMOTION, GESTURE, POSTURE, DRAMATIZATION, SHOCK
- 59 PRAISE

60 DEVELOPING CONCEPTS

- 61 PREDICTING
- 62 DRAWING INFERENCES
- 63 CRITICAL THINKING
- 64 COMMUNICATION
- 65 REASONING/LOGICAL THINKING
- 66 APPROPRIATENESS
- 67 RELATIONSHIPS
- 68 AWARENESS
- 69 VALIDITY

70 DEVELOPING SKILLS

- 71 GATHERING INFORMATION
- 72 RESEARCH
- 73 ORGANIZING INFORMATION
- 74 COMMUNICATING INFORMATION
- 75 EXPRESSING IDEAS
- 76 PROBLEM SOLVING
- 77 ANALYZING
- 78 DIFFERENTIATING ACCORDING TO PURPOSE
- 79 PRECISION

80 REINFORCEMENT OF LEARNING

- 81 REVIEWING
- 82 PRACTICING
- 83 APPLYING TO NEW SITUATIONS/MATERIAL
- 84 RESTATING
- 85 VERIFYING
- 86 EXPLORING
- 87 RELATING TO OTHER LEARNINGS
- 88 MULTI-SENSORY/F. CURSES OF SPEECH

89 INSIGHT

90 EVALUATING

- 91 TEACHER GOAL(S)
- 92 STUDENT GOAL(S)
- 93 STUDENT PRODUCT
- 94 INFORMATION/CONTENT
- 95 STYLE
- 96 FORM
- 97 ACCURACY
- 98 SOURCES
- 99 USAGE

- CONFERRING WITH PRINCIPAL, ANOTHER TEACHER, OR ADULT
- 020 PARTICIPATING WITH PUPILS IN ON-GOING ACTIVITY (PLAYING GAMES, MOVING TO RHYTHM)
- 030 DEMONSTRATING (A MUSICAL OR MECHANICAL DEVICE, AN ACT OR PROCESS AS IN ART, PHYSICAL EDUCATION, FOREIGN LANGUAGE, HANDWRITING, OR AN OUTCOME OF A SCIENTIFIC OR SOCIAL SITUATION)
- 040 DIRECTING (TEACHER DIRECTING MUSIC, CHORAL SPEAKING, PHYSICAL EDUCATION, CLASS MOVEMENT, PREPARING FOR ANOTHER ACTIVITY)
- 050 MAINTAINING ORDER (STANDING, WALKING, OR SITTING WITH NO OTHER OBSERVABLE ACTIVITY)
- 060 ROUTINE (HOUSEKEEPING, FIRST AID)
- 070 LISTENING TO AND/OR OBSERVING (PANEL DISCUSSION, PANEL PRESENTATION, RECITATION, FILMS, RECORDS, AUDIO-VISUAL MATERIALS, ETC.)
- 080 OBSERVING ACTIVITY OR PUPIL(S) (PANTOMIME, DANCE, ETC.)
- 090 OPERATING AUDIO AND/OR VISUAL EQUIPMENT
- 100 READING (ORAL)
- 120 TALKING AND OBSERVING
- 130 TALKING AND WRITING (EXPLAINING AND WRITING)
- 140 TALKING AND ILLUSTRATING (WITH PICTURES, MAPS, DIAGRAMS, CHARTS, TABLES, WORDS, OR WORD COMPONENTS)
- 150 TALKING AND LISTENING (CONFERRING, DISCUSSING, QUESTIONING AND ANSWERING)
- 160 TALKING
- 170 WRITING (OTHER THAN ROUTINE)
- 180 WRITING AND LISTENING/TALKING (RECORDING DISCUSSION, EXPERIENCE CHART, HELPING A CHILD WITH WRITTEN WORK OR CHECKING AND EVALUATING)
- 190 NOT IN ROOM
- 200 HELPING PUPIL, SMALL GROUP
- 210 MOVING ABOUT ROOM, STOPPING TO HELP CHILDREN
- 220 DIRECTING READING USING MANUAL
- 230 DIRECTING READING, CALLING ON PUPILS TO READ, ETC.
- 240 READING SILENTLY
- 250 SINGING
- 260 EATING AND/OR DRINKING
- 270 PRAISING AND ENCOURAGING PUPIL(S)
- 280 COMFORTING PUPIL(S)
- 290 DISCIPLINING PUPIL(S)
- 300 HELPING PUPIL(S) WITH PERSONAL ROUTINE
- 310 PRETENDING
- 320 ADMINISTRATIVE ROUTINES (COLLECTING MONEY, ROLL CALL NOT INVOLVING CHILDREN)
- 330 INSTRUCTIONAL ROUTINE (DISTRIBUTING OR COLLECTING MONEY, ASSIGNING TASKS; SERVING FOOD)

BOOKS

010 TEXTBOOKS (SAME TITLE AND BY WHOLE GROUP)

011 READING

020 VARIETY OF TEXTBOOKS

021 DIFFERENT CURRICULUM AREAS

022 READING -- VARIETY OF TITLES

028 SOME TEXTS -- SOME TRADE BOOKS

030 TRADE BOOKS

031 VARIETY OF TITLES

032 SAME TITLES (USED BY VARIETY OF PUPILS)

033 TRADE BOOK AND NOTEBOOK

034 TRADE BOOK - ONE TITLE

040 DICTIONARIES

041 ONLY DICTIONARIES

042 TEXTS AND DICTIONARIES

043 TRADE BOOKS AND DICTIONARIES

050 REFERENCE

053 NEWSPAPER

054 MAGAZINES

056 OTHER

057 VARIETY

058 CARD CATALOGUE

060 OTHER

063 SETS (AS SRA)

066 WEEKLY READER/ANY OTHERS

067 CHILDREN'S MAGAZINES

069 VARIETY

CHARTS (HAND-MADE DISPLAYED ON BLACK-BOARD OR CHART PAPER ON WALL, RACK, OR BULLETIN BOARD)

070 GROUP EXPERIENCE CHART

080 INDIVIDUAL EXPERIENCE CHART

090 READING CHART MADE BY TEACHER

100 WORK CHART TO BE COMPLETED BY PUPIL

110 DIRECTIONS AND/OR STANDARDS PLANS

120 PHONICS CHART (NOT PHONO-VISUAL)

130 WORD LIST

140 QUANTITY CHART, GRAPH TABLE OR DIAGRAM

150 VARIETY OF CHARTS

WORKSHEETS, ETC.

160 TEACHER-MADE WORKSHEETS -- SAME FOR GROUP

170 VARIETY OF TEACHER-MADE WORKSHEETS

180 COMMERCIALY-MADE WORKSHEET -- SAME FOR GROUP

190 VARIETY OF COMMERCIALY-MADE WORKSHEETS

200 WORKBOOKS

201 SAME ASSIGNMENT FOR GROUP

202 VARIETY OF ASSIGNMENT

210 TESTS (TEACHER-MADE)

220 TESTS (COMMERCIALY-MADE)

PUPILS' OWN WORK

230 WRITTEN WORK (BY PUPIL(S))

231 PAPERS

232 NOTEBOOK(S)

240 MODEL, DIORAMA, ETC. (BY PUPIL(S))

250 PICTURE (BY PUPIL(S))

260 MAP, GRAPH, DIAGRAM (BY PUPIL(S))

270 BOOKLET (BY PUPIL(S) INCLUDES PICTURE BOOKLET)

SKILL DEVELOPMENT

280 PHONO-VISUAL

281 WORKBOOK - SAME PAGE

282 WORKBOOK - VARIETY

283 CHARTS

284 WORD CARDS

285 LETTER GAMES

286 VARIETY

FUNCTIONAL MATERIALS IN USE (CONTINUED)FLASH CARDS

- 291 ARITHMETIC
292 VOCABULARY
293 PHONICS
294 VARIETY
295 PICTURE CARDS

310 GAMES, ETC.

- 311 MATCHING GAMES
312 WORDS GAMES
313 SPELLING GAMES
314 ARITHMETIC GAMES
315 PUZZLES
316 PHONICS
319 ALPHABET

MAPS, GLOBES, CHARTS, (COMMERCIAL)320 MAP330 GLOBE340 CHARTS - COMMERCIAL350 MATHEMATIC DEVICES

- 352 QUANTITY MEASURING DEVICES
(PINTS, LBS.)
354 COUNTING DEVICES (ABACUS)
358 CLOCK FACES
359 VARIETY

360 SCIENCE

- 361 THERMOMETER
362 SCALE-WEIGHTS
363 MICROSCOPE
364 WEATHER INSTRUMENTS
365 SPECIMENS (ROCKS, EARTHWORMS,
TWIGS, ETC.)
366 MAGNIFYING GLASS
367 VARIETY
368 ANIMALS
369 PLANTS (SEEDS)

370 ART MATERIALS

- 371 CRAYONS
372 PAINT
373 PAPER
374 SCISSORS AND PASTE
375 CHALK
376 MODELING MATERIALS (CLAY,
PLASTICINE, DOUGH)
377 TOOLS (SPONGES, COOKIE
CUTTERS, ETC.)
378 MISCELLANEOUS (STRAWS, TOOTH-
PICKS, EGG CARTONS)
379 WOOD

380 PHYSICAL EDUCATION EQUIPMENT

- 381 BALLS, BEAN BAGS
382 BARS
383 ROPES
384 RING TOYS
385 WHEEL TOYS, BIKES, WAGONS, CARS
386 SAND BOX AND SAND BOX TOY
387 VARIETY
388 BALANCE BEAM
389 SWINGS, SLIDES

390 MUSIC

- 391 DRUM
392 AUTO HARP
393 BAR BELLS
394 RHYTHM INSTRUMENTS (TAMBOURINE,
TRIANGLE, STICKS)
395 VARIETY
397 PIANO

400 AUDIO VISUAL EQUIPMENT

- 401 FILM STRIPS
402 FILMS AND PROJECTOR
403 RECORDINGS
404 TAPES
405 TV
406 RADIO
407 SLIDES
408 PICTURES - COMMERCIAL
409 VARIETY

410 OTHER

- 411 CHALKBOARD
412 FLANNEL BOARD
413 TYPEWRITER
414 PROGRAMMED LEARNING DEVICE
415 CALENDAR/WEATHER
416 KNOCK OUT BENCH FOR POUNDING
417 MAGNETIC BOARD (MATRIX)
418 VARIETY (COMBINATION OF 410)
419 RESTING MAT, TOWEL

420 VARIETY OF MATERIALS IN USE
(OTHER THAN PAPER AND PENCILS)

550 OFFICE MATERIALS (CONTINUED)

- 430 MAGNETS
- 432 SIMPLE MACHINES (STAPLER, PENCIL SHARPENER, ETC.)
- 433 HAND LENS

560 OTHER AUDIO VISUAL MATERIALS

- 263 OVERHEAD PROJECTOR
- 264 OPAQUE PROJECTOR
- 265 PUBLIC ADDRESS SYSTEM

570 FOOD SERVICE, FOOD AND BEVERAGE

- 531 PLASTIC BOWLS FOR SERVING
- 532 TRAYS AND PLATES
- 533 FORKS AND SPOONS
- 534 NAPKINS, STRAWS
- 535 FOOD
- 536 BEVERAGE

540 FLOOR PLAY EQUIPMENT (FLOOR)

- 541 UNIT BLOCKS
- 542 HOLLOW BLOCKS AND BOARDS
- 543 TRUCKS
- 544 TRAILER TRACTOR
- 545 ROCKING HORSE
- 546 RUBBER ANIMALS
- 547 RUBBER FIGURES
- 548 WOODEN PLAY BUILDING MATERIAL (INCLUDES WHEELS)
- 549 TOYS

550 HOUSEHOLD & DRAMATIC PLAY

- 551 DOLLS AND DOLL PLAY EQUIPMENT
- 552 SMALL TABLE
- 553 KITCHEN EQUIPMENT (STOVE, SINK, CUPBOARD)
- 554 TOY DISHES AND UTENSILS
- 555 FULL LENGTH MIRROR
- 556 IRONING BOARD & IRON
- 557 DRESS-UP ARTICLES
- 558 PROPS
- 559 PUPPETS

560 TABLE ACTIVITIES - GAMES

- 561 PEGS AND PEGBOARD
- 562 PARQUETRY BLOCKS
- 563 COLOR CONES
- 564 COLORED CUBES
- 565 COLORED BEADS
- 566 LOTTO GAMES
- 567 ASSOCIATION CARDS
- 568 SEQUENCE CARDS
- 569 NUMBER CARDS

570 WATER PLAY AREA EQUIPMENT

- 571 PLASTIC DISH PAN
- 572 PITCHERS, FUNNELS, EGG BEATERS
- 573 SOAP
- 574 HOSE

580 BUILDING AND GARDENING EQUIPMENT

- 581 WORK BENCH
- 582 HAMMERS, NAILS
- 583 SAWS
- 584 GARDENING/DIGGING TOOLS

590 PEABODY LANGUAGE DEVELOPMENT K

- 591 PICTURES
- 592 DISCS

610 PERSONAL MATERIALS

- 611 CLOTHING
- 612 TOOTHBRUSH/TOOTH PASTE
- 613 COMB/BRUSH
- 614 SOAP, WATER, PAPER TOWELS

- 0 OTHER
 - 1 NO TALKING (TEACHER ENFORCED)
 - 2 SILENCE (PUPIL ENFORCED) LISTENING WHEN APPROPRIATE
 - 3 QUIET, ORDERLY TALKING (INCLUDES MISPERFORMING)
 - 4 RELEVANT TALKING - (INCLUDES SINGING, READING)
 - 5 DRAMATIZING (PRETENDING)
 - 6 SOCIALIZING
 - 7 DISRUPTIVE, INAPPROPRIATE TALKING
 - 8 NOISE (CONFUSION)
 - 9 TALKING INVOLVING TEACHER TALKING (COMMENTARY, DISCUSSING, ANSWERING QUESTION, ASKING QUESTION)
- TEACHER
- 000 NO TALKING
 - 010 NEUTRAL
 - 011 CONFERRING WITH ANOTHER ADULT
 - 012 SOCIALIZING
 - 020 DICTATING (OTHER THAN TESTING)
 - 030 READING ORALLY
 - 031 TELLING A STORY, RECITING
 - 040 MAKING ASSIGNMENT OR AN ANNOUNCEMENT
 - 050 CALLING ON PUPILS TO SPEAK, REPORT, READ, ETC.
 - 060 TESTING, DICTATING QUESTIONS
 - 070 ASKING QUESTIONS WITH PREDICTED ANSWERS
 - 080 ANSWERING PUPIL'S QUESTION ON INQUIRY
 - 090 COMMENTING ON PUPIL'S IDEA OR CONTRIBUTION
 - 091 COMMENTING ON PUPIL'S LANGUAGE
 - 100 SUPPORTING OR RE-ENFORCING A PUPIL'S STATEMENT
 - 101 PRAISING, ENCOURAGING
 - 102 USING PUPIL FEELINGS, JOKING (POSITIVE/NON-THREATENING)
 - 103 LAUGHING TOGETHER
 - 110 CLARIFYING PUPIL(S) STATEMENT(S) OR CONCEPTS
 - 111 CLARIFYING PUPIL LANGUAGE
 - 112 RAISING STANDARDS TO PROPER OR ACCEPTABLE LANGUAGE
 - 113 FURNISHING WORDS FOR PUPIL-ADDING TO VOCABULARY
 - 120 GIVING DIRECTIONS, EXPLAINING
 - 121 SUMMARIZING, REVIEWING
 - 122 MAKING SUGGESTIONS
 - 123 PLANNING
 - 124 STATING FACTS, INFORMATION
 - 125 DIRECTING (AS MUSIC, CHORAL SPEAKING, FINGER PLAY, ETC.)
 - 130 QUESTIONING TO STIMULATE THOUGHT AND/OR DISCUSSION
 - 140 ASKING QUESTIONS REQUIRING THOUGHTFUL ANSWER
 - 150 CONFERRING WITH PUPIL(S)
 - 160 LECTURING
 - 161 LECTURING (PREPARED PRESENTATION)
 - 170 EVALUATING (POSITIVE TOWARD PUPIL SUCCESS)
 - 171 EVALUATING (CHECKING PUPIL WORK)
 - 180 CRITICIZING
 - 181 CRITICIZING PUPIL WORK
 - 182 CRITICIZING PUPIL LANGUAGE
 - 190 CORRECTING STUDENT BEHAVIOR, DISCIPLINING
 - 200 USING DEROGATORY (PERSONAL) REMARKS
 - 210 USING SARCASM RIDICULE, TALKING-DOWN, EMBARRASSING REMARKS
 - 220 REFERRING TO SELF--FEELING OPINION OR EXPERIENCE
 - 230 VERSALIZATION (TYPE UNDETERMINED)
 - 240 OTHER
 - 250 SINGING
 - 260 SINGING
 - 270 SINGING
 - 280 SINGING
 - 290 SINGING
 - 300 SINGING
 - 310 SINGING
 - 320 SINGING
 - 330 SINGING
 - 340 SINGING
 - 350 SINGING
 - 360 SINGING
 - 370 SINGING
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 - 980 SINGING
 - 990 SINGING
 - 1000 SINGING

PERSONAL RELATION TRAITS

- (cc 23) INDEPENDENCE
1. ABOVE AVERAGE
 2. AVERAGE
 3. BELOW AVERAGE
 4. POOR
- (cc 24) ACCEPTS RESPONSIBILITY
1. ABOVE AVERAGE
 2. AVERAGE
 3. BELOW AVERAGE
 4. POOR
- (cc 25) SHOWS INTEREST
1. ABOVE AVERAGE
 2. AVERAGE
 3. BELOW AVERAGE
 4. POOR
- (cc 26) CONFIDENCE
1. ABOVE AVERAGE
 2. AVERAGE
 3. BELOW AVERAGE
 4. POOR

SOCIAL REACTION PATTERNS

- (cc 33) PARTICIPATION
1. ABOVE AVERAGE
 2. AVERAGE
 3. BELOW AVERAGE
 4. POOR
- (cc 34) SELF CONTROL
1. ABOVE AVERAGE
 2. AVERAGE
 3. BELOW AVERAGE
 4. POOR
- (cc 35) COOPERATION
1. ABOVE AVERAGE
 2. AVERAGE
 3. BELOW AVERAGE
 4. POOR
- LEVEL OF PUPIL VERBAL BEHAVIOR
- (cc 36) COGNITIVE DEVELOPMENT
1. MEMORY-RECALL
 2. COMPREHENSION AND KNOWLEDGE
 3. RELATIONSHIPS
 4. CREATIVITY (SEEING NEW RELATIONSHIPS
OR NEW MEANINGS)
 5. NOT TALKING
 6. NOT APPLICABLE

CLASSROOM OBSERVATION

SUMMARY

STUDENT CODE OR HEAD START		SCHOOL CLASS NO.		TEACHER		VARIANT		YEAR		STORY		DAY OF WEEK		DATE		OBSERVER NO.		TIME OF OBSERVATION		NO. OF CLASSES		NO. OF ADULTS		PERSONAL RELATIONS	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
								3	7																

CLASSROOM ENVIRONMENT

CONFIGURATION

VI PUPIL ORGANIZATION

IX TEACHER INTERACTION

LEVEL OF

VERBAL BEHAVIOR

SOCIAL REACTIONS

27 28

36 37

30 31 32

33 34 35

DESCRIPTION OF ADULTS	NO. OF PUPILS		SPACE USE		CONCEPTS OR CURRICULUM TOPIC		I SKILLS		III AND IV PUPIL ACTIVITY		VIII TEACHER PURPOSE ACTIVITY		XIII MATERIALS		XV PUPILS		XI VERBAL INTERACTION TEACHER																				
	29	30	41	42	43	44	45	46	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75			

APPENDIX C

Classroom Adjustment Checklist

MONTGOMERY COUNTY PUBLIC SCHOOLS
ROCKVILLE, MARYLAND

DEPARTMENT OF RESEARCH
JUNE, 1969

CLASSROOM ADJUSTMENT CHECKLIST

SCHOOL _____

STUDENT ID _____

NAME OF STUDENT _____

HEAD START _____ GRADE ONE _____
(CHECK ONE)

NAME OF HOMEROOM TEACHER _____

SECTION _____

NAME OF LANGUAGE ARTS TEACHER _____

	HOW FREQUENTLY IS STATEMENT TRUE							
	ALWAYS	ALMOST ALWAYS	USUALLY	2 OF TIME	SOMETIMES	ALMOST NEVER	NEVER	
	(ONE CHECK PER ITEM)							
1. SPEAKS AS LOUDLY OR AS QUIETLY AS THE SITUATION REQUIRES.								
2. VOLUNTEERS ANSWERS TO QUESTIONS FROM ADULTS.								
3. REPLIES TO DIRECT QUESTIONS FROM ADULTS.								
4. TALKS WITH OTHER CHILDREN.								
5. TALKS WITH ADULTS.								
6. PARTICIPATES IN TALKING ACTIVITIES.								
7. HAS ENERGY AND DRIVE.								
8. APPEARS CONFIDENT THAT HE CAN DO WHAT IS EXPECTED OF HIM.								
9. IS GENUINELY CURIOUS ABOUT THE WORLD AROUND HIM.								
10. MAINTAINS HIS RIGHTS TO TAKE HIS TURN IN GAMES OR TO USE MATERIALS.								
11. FOLLOWS DIRECTIONS.								
12. RESPONDS APPROPRIATELY TO CORRECTION OR HELP.								
13. PARTICIPATES IN LISTENING ACTIVITIES.								
14. REMAINS QUIET AT APPROPRIATE TIMES.								
15. IS CONTENT WITH MODERATE ADULT ATTENTION.								
16. IS CONTENT WITH MODERATE PEER ATTENTION.								
17. ALLOWS OTHER CHILDREN TO CARRY ON SCHEDULED ACTIVITIES WITHOUT INTERFERENCE.								

18.	CONTROLS VERBAL AGGRESSIVE BEHAVIOR TOWARD ADULTS.									
19.	CONTROLS VERBAL AGGRESSIVE BEHAVIOR TOWARD OTHER CHILDREN.									
20.	CONTROLS PHYSICAL AGGRESSIVE BEHAVIOR TOWARD ADULTS.									
21.	CONTROLS PHYSICAL AGGRESSIVE BEHAVIOR TOWARD OTHER CHILDREN.									
22.	SHARES MATERIALS AS THE SITUATION REQUIRES.									
23.	WAITS FOR HIS TURN TO SPEAK.									
24.	TAKES REASONABLE CARE OF INSTRUCTIONAL MATERIALS.									
25.	COMPLETES ASSIGNMENTS OR TASKS.									
26.	SPEAKS WITH NORMAL VOICE QUALITY.									
27.	SPEAKS FLUENTLY.									
28.	USES CONVENTIONAL SPEECH FORMS FOR EVERYDAY SPEECH.									
29.	ARTICULATES SPEECH SOUNDS EXPECTED OF AGE GROUP.									
30.	ENUNCIATES WORDS CLEARLY.									
31.	FEEDS SELF WITHOUT REQUIRING EXCESSIVE HELP. (HEAD START ONLY)									
32.	ATTENDS TO TOILET NEEDS WITHOUT REQUIRING EXCESSIVE HELP. (HEAD START ONLY)									
33.	ATTENDS TO DRESSING NEEDS WITHOUT REQUIRING EXCESSIVE HELP.									
34.	APPEARS TO UNDERSTAND WHAT THE TEACHER IS SAYING WHEN DIRECTIONS, CORRECTIONS OR INSTRUCTIONS ARE NOT INVOLVED.									
35.	APPEARS TO UNDERSTAND SIMPLE DIRECTIONS, CORRECTIONS OR INSTRUCTIONS.									
36.	PARTICIPATES IN LARGE MUSCLE ACTIVITIES.									
37.	PARTICIPATES IN SMALL MUSCLE OR MANIPULATIVE ACTIVITIES.									
38.	IS INDEPENDENT OF HELP FROM ADULTS.									
39.	IS INDEPENDENT OF HELP FROM OTHER CHILDREN.									
40.	SEEMS INTERESTED IN THE GENERAL QUALITY OF HIS PERFORMANCE.									
41.	SEEMS INTERESTED IN HIS PERSONAL APPEARANCE.									