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ABSTRACT

The purpose of the study reported here was to investigate the effectiveness of the language experience approach to beginning reading instruction when used with pupils described as culturally deprived. Ten teachers of first grade classes in inner-city schools in Indianapolis volunteered to participate. Five teachers agreed to continue using a modification of the programs advocated by the authors of the basal series they were currently using. Five teachers volunteered to use the language experience approach. An observation scale was used to guide the monthly observation of each teacher. A log sheet was developed and completed by each teacher in order to control the reading time variable. The Otis-Lennon Mental Abilities Test was administered in January 1970. An adaptation of the Primary Pupil Reading Attitude Inventory was administered in March 1970, in order to assess attitude differences. In May 1970, the California Reading Test was administered. The results of all statistical analyses suggest that there were no significant differences in attitude toward reading between the two groups. The results of this study corroborate those of the majority of the First Grade Studies, in which the language experience approach was not found to be significantly superior in terms of reading achievement. (Author/JM)

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THE LANGUAGE EXPERIENCE APPROACH TO TEACHING BEGINNING
READING TO CULTURALLY DISADVANTAGED PUPILS

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Lafayette, Indiana 47907

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SUMMARY

The purpose of this study was to investigate the effectiveness of the language experience approach to beginning reading instruction when used with pupils described as culturally deprived.

An obvious advantage of this approach to beginning reading with culturally deprived youngsters appears to be the close relationship established between speech and print. The child sees his words written almost as soon as they are spoken. Moreover, the content of the reading material is of greater relevance and significance to the child than that of many if not most pre-primers.

Research reported from the First Grade Studies yielded conflicting evidence regarding this approach. Harris and Serwer (1967) concluded that culturally disadvantaged pupils "can learn to read" using the language experience approach. They found no experimental evidence favoring this approach, however, theirs is the only study concerned exclusively with pupils of the type described as culturally disadvantaged. Particularly in view of opinions expressed by Baratz, Stewart, and Shuy (1969) it seemed important to investigate further the validity of an approach to beginning reading instruction based upon the oral language of children classified as culturally disadvantaged.

The hypotheses of this study were as follows:

1. The achievement of pupils using the language experience approach will be superior to the achievement of pupils using more traditional approaches, generally classified as modified basal reader approaches, when achievement is measured by standardized tests.
2. The attitudes of pupils using the language experience approach will be superior to that of pupils being taught by modified basal reader methods.

Ten teachers in inner-city schools in Indianapolis, Indiana volunteered to participate in this study. Five teachers agreed to continue using a modification of the programs advocated by the authors of the basal series

they were currently using. Five teachers volunteered to use the language experience approach.

To lend objectivity to the monthly observations of each teacher, Medley and Smith's Observation Scale and Rating-Reading (1964) was used.

A log sheet was developed and completed by each teacher, in an effort to control the reading time variable.

The Otis-Lennon Mental Abilities Test was administered in January, 1970. An adaptation of the Primary Pupil Reading Attitude Inventory (AERA, 1969) was administered in March in order to assess attitude differences. In May the California Reading Test was administered.

Two versions of BMED programs for analysis of covariance were made with the two criteria variables, the reading achievement and the attitude data. The independent and control variables were sex of pupils, intelligence, reading method, teacher experience and education, teaching style, and reading time in class. In one program (BMD03V) classes were treated as units, in the other (BMD04V) pupil units were the bases for analysis. Data were also analyzed using one way analysis of variance (BMD01V).

The results of all the analyses suggest that there were no significant differences in attitude toward reading between the two groups. In two factors, total read-girls and I.Q. girls, the Experimental I pupils scores at a significantly higher level than the Experimental II pupils, when achievement and attitude were the major variables.

The results of this study corroborate those of the majority of the First Grade Studies, in which the language experience approach was not found to be significantly superior in terms of reading achievement.

CONCLUSION

The results of this study involving ten first grade inner-city classes fail to lend strong support to the position taken by Baratz, Stewart, Shuy, and others, that the oral language of culturally disadvantaged pupils forms the most effective basis for beginning reading instruction. The two experimental groups did not differ in achievement or in attitude toward reading. Neither hypothesis was supported.

CHAPTER I
THE PROBLEM, IT'S NATURE AND SIGNIFICANCE

I. INTRODUCTION

There is a clear need for more effective beginning level reading programs. Ultimately, success in school depends in large measure upon the development of adequate reading skills so that textbook instruction in the content fields can be comprehended. Culturally disadvantaged children have reading deficiencies. It is a problem which has been recognized for some time.

One means by which this problem has been attacked has been through development of special instructional materials. Major publishers have released basal reading series containing selections which are purported to be relevant to life in the ghetto and which portray non-Caucasian characters. However, such changes have apparently had little impact on the acquisition of reading skills by culturally disadvantaged children.

Therefore, it appears worthwhile to look at the problem from the language aspect. Black (1965) summarizes Metfessel's findings relating to characteristics of the language of ghetto children as follows:

1. Ghetto children understand more language than they use.
2. Ghetto children's vocabularies are not representative of school and the school culture.
3. The "labeling" facet of language is quite limited for ghetto children.
4. Vocabularies of ghetto children are limited. Fewer words are used and with less variety.
5. Sentences generated by ghetto children are simple and less mature.
6. Ghetto children learn less from what they hear; they shut out that which is annoying, irrelevant or unpleasant.

One of the major difficulties in teaching culturally disadvantaged pupils to read is the marked differences between the middle class language of the textbook and the language of the ghetto. Baratz and Stewart (1969)

proposed the development of materials in which phonological elements of ghetto dialects could be recorded in pre-primers. This appears to be impractical, as there are many such dialects. At least two potentially severe problems might arise from such an approach. One is the economical impracticality of creating books having extremely limited market appeal. Secondly, as this approach would require unique graphic coding, the pupils would be faced with transfer from the unique code to traditional orthography within a few years. There is some reason to believe that not all pupils find it easy to make such a transfer. McDavid (1969) writes:

Whatever the disadvantages of our current system of writing down English, we are not likely to find a better one generally adopted. We must assume that students in our schools are going to have to use the conventional English alphabet when they read. While we should not discourage the experimental use of such devices as the Pitman augmented alphabet we must allow for a systematic phasing out and the mastering of our conventional system. Furthermore, any such interim device must be tested in terms of its adequacy in representing the units of the sound system that contrast in the various standard dialects of American English (p. 8).

As an alternative to using a different orthographic system traditional orthography could be used to reflect syntactical elements of the language of the children being taught. A Language Experience Method of the type described by Lee and Allen (1963) is designed to capitalize on relating the childrens' oral language to the graphemic representation of speech:

...the procedure from the first requires the individual to express his own thoughts, ideas, aspirations and ideals. This the child does through speaking, painting, writing and other means. The teacher works with individual contributions to help the child move from oral and pictorial expression of his ideas to expression through writing (p. 43).

However, evidence regarding the success of the Language

Experience approach is limited. Methodological shortcomings seem to characterize much of the research attempted in this area. Two principal limitations seem to characterize such studies: (1) the teaching time variable frequently was not adequately controlled; and (2) teachers who used the language experience approach appeared to need more structure and guidance than they generally received.

Hahn (1967) compared the initial teaching alphabet (ITA), the language experience, and one of several widely used basal series approaches. Thirty-six volunteer teachers participated with each receiving extensive in-service training. No significant differences were found in the results of a reading attitude survey administered to each of the three groups. The Stanford Achievement Test (SAT) was used to measure reading achievement. Hahn summarized his findings thus:

ITA and language experience approaches yielded significantly higher scores than the basic reader approach on the Word Reading Test, but no significant differences in speed and accuracy were found. The capacity relationships were strongest for language arts in Paragraph Meaning and for ITA and Language Arts in Word Study. Further, there seemed to be some advantage to dropping the use of readiness workbooks together with pre-primers and primers and allowing the children to grapple with their own thoughts and to dictate and record their own ideas. More meaningful reading vocabularies were developed and the children's capacities for interpretation were better exploited (p. 33).

A study known as the CRAFT Project of beginning reading was directed by Harris and Serwer (1966). Forty-eight volunteer teachers were assigned randomly to one of four methods. Each received a stipend for attending training workshops and for maintaining a log indicating time spent on activities in which pupils were engaged relating to the reading program. The Observation Scale and Rating-Reading (OSCAR-R) was employed to make evaluation of teaching effectiveness more objective. The nature and use of the OSCAR-R

is described in detail elsewhere. The four treatment methods in the CRAFT Project were:

1. A skills-centered method using basal readers and close adherence to the associated teachers' manuals.
2. A skills-centered method utilizing basal readers but substituting the phonovisual method of teaching word attack skills.
3. A language experience method in which the beginning reading materials were developed from the oral language of the children.
4. A language experience method with extensive supplemental use of audio-visual procedures.

The San Diego Inventory of Reading Attitude and the SAT, Primary I, were administered to 1,146 pupils enrolled in the 48 classes involved. The results are of special significance because of the care with which the study was conducted. The investigators noted that results indicated that culturally disadvantaged pupils can learn how to read and that many methods and materials which appeal to middle class pupils are also appropriate for urban, Negro, disadvantaged youngsters. Harris and Serwer (1967) further concluded:

The basal reading method employed held a slight but significant lead among the four methods in meaningful silent reading comprehension. It was highest also on the San Diego Inventory of Pupil Attitude.

The phonovisual method did not demonstrate any superiority.

The language experience approach with audio-visual supplementation showed significantly higher scores on several tests than audio-visual supplementation. In grade level scores the A-V method matched the means of the skills centered approach on most of the reading tests and was slightly higher on one test.

The skills centered approach's slight superiority to the language experience approach is due to the language experience method's relatively poor showing (p. 39).

(However,) adequate control of instructional time is essential if controlled research or methods of instruction is to have any validity. Despite strenuous effort in the training program there were both wide differences in instructional time within each method and significant differences between the approaches. The skills centered teachers spent 55.5 percent of their language arts time in direct reading activities. The language experience teachers spent only 39 percent of their language arts time in direct reading activities (p. 40).

The authors then concluded that differences among methods were sufficiently small as to be inconclusive. Replication and continuation studies failed to lend additional support to one method as contrasted with the others (Robinson, 1968).

Another of the "First Grade Studies" was conducted by Kendrick and Bennett (1966). Fifty-four teachers in San Diego, California, participated in this comparison of the language experience approach and a "traditional method," using the Ginn Basic Readers. Each teacher used the approach she had been using and had been judged to be using effectively. In-service sessions were held. One-hundred-twenty minutes per day were scheduled for directed reading, literature, writing, etc. There was no indication of the extent of adherence to this schedule.

The groups using the "traditional approach" made higher scores on the Paragraph Meaning section of the SAT. Lower class males using the language experience approach exhibited more interest in reading. Pupils using the language experience approach excelled in writing and in the ratio of different words to total words spoken regardless of socio-economic background. The authors concluded that of 30 comparisons made, ten favored the "traditional method," five favored the language experience approach, and no differences were significant in the remaining fifteen.

Bond and Dykstra (1967) summarized the results of the several "First Grade Studies." They noted relatively few significant differences to have been found between the language experience and basal approaches. Significant differences which were found generally favored the

language experience approach. However, these differences were not of such a nature as to indicate much practical significance in terms of actual reading achievement.

The language experience approach appears to hold much promise for use with culturally disadvantaged pupils. The material is almost certain to be relevant and of at least some interest to the child, since the language used, even the topic discussed, is largely of his choosing. When 'breaking the code' refers to traditional orthography, this task, too, should be simplified when the vocabulary, the morphological and the syntactical elements of the child's language are recorded carefully, accurately, and without reference to the non-standard character of his language.

The relatively inconclusive results of studies in which the effectiveness of the language experience approach was studied may be due to limitations of teacher competence, inadequately compensated for in pre-service and in-service work, as well as poor controls on time spent and observational techniques employed by the researcher. It is not clear that the evidence gathered so far reflects accurately the effectiveness of the language experience approach when used with culturally disadvantaged pupils. Clearly, there is a need for further study, in which efforts are made to avoid some of the shortcomings noted in research done to date.

II. RATIONALE

The purpose of this study was to investigate the effectiveness of the "language experience" approach to beginning reading instruction when used with "culturally disadvantaged" pupils. Achievement of pupils using this approach was compared with achievement of pupils using other approaches to reading instruction.

The language experience approach to reading, at the beginning levels, consists of the following steps in succession:

1. The child dictates his reaction to an experience.
2. The teacher records this reaction, utilizing the child's own language, and makes no effort to "correct" or change the pupil's wording.
3. The written record of his experience becomes the child's reading material. He reads the language he has just spoken.

One advantage of this approach to beginning reading instruction with culturally deprived youngsters appears to be the closer relationship between speech and print. Reading materials which directly reflect the child's speech should afford more meaningful text upon which to base reading instruction. This relationship should be evident to the child who sees his words written almost as soon as they are spoken. The content of such reading material should take on more relevance for the individual child than material typically found in basal reading texts. This relevance, coupled with the child's involvement with his own interests as reflected in his speech, should provide a more effective means to pique his interest in the reading process than could be expected to be found if texts of unfamiliar associations were employed.

III. RESEARCH HYPOTHESIS

The broad, general hypothesis proposed for this study was that urban, first grade "disadvantaged children" learning to read by the "language experience" method would learn to read better and have a better attitude toward reading than their peers taught by conventional methods. Two specific hypotheses were tested to evaluate those general contentions:

1. The first grade children being taught to read by the "language experience" method will attain higher scores on a standardized reading test than will those taught by other methods.
2. The first grade children learning to read by the "language experience" method will have a measurably better attitude toward reading in general than those being taught by other methods.

CHAPTER II

THE EXPERIMENTAL DESIGN AND METHODOLOGICAL PROCEDURES

In the original proposal,¹ twenty classes were specified as the population for the study, ten which would be considered Experimental I, and ten which would be considered Experimental II. The Director of Research and Evaluation for the Indianapolis Public Schools supplied the writer with a list of the names of nineteen elementary school principals. These principals had received no information about the study, and the writer was informed that obtaining a population for the study was dependent upon her contacts with these principals.

Visits were made to each of the nineteen schools. Principals were most generous in arranging for the writer to meet with interested first grade teachers, as a group. In these meetings, the purposes of the study were discussed and materials related to the language experience approach as well as copies of the proposal were distributed and left with the teachers. They were told they could volunteer for either group, and were informed about the honorarium and the money which would be available for materials and supplies. By the time the writer was informed of funding, school had started, "intact groups" were already organized, and randomization would have been difficult if not impossible. Therefore, in addition to arranging to handle the data, statistically, in such a manner as to compensate for this, it was considered important to have each teacher participant in the project utilize a method she had selected. As a result of the meetings, ten teachers agreed to participate in the study, five volunteering to use the language experience approach and five choosing to continue using the modifications of the basal approach with which they were already familiar. The teachers who joined the project at the beginning and the two who joined at mid-year were cooperative, enthusiastic and very supportive. In no case can the results of this research be said to reflect apathy or lack of conscientious effort in teaching reading.

¹Proposal for Research and/or Related Activities submitted to the U.S. Commissioner of Education through authorization of the Bureau of Research "The Language Experience Approach to Teaching Beginning Reading to Culturally Disadvantaged Pupils" (submitted by writer, July 1, 1969) p. 7.

Experience and Education of Teachers

Teachers who volunteered to participate in the project completed a questionnaire related to their educational background and experience.

For the teachers in the Experimental I (Language Experience) group, the range of number of years of professional training was 4.5 to 5.5 years, $\bar{X}=5.0$. For the teachers in the Experimental II (Modified Basal) group, the range was from 4.0 to 5.0, $\bar{X}=4.6$. Every teacher had taken courses in the teaching of reading, and most had taken language arts, remedial reading, and children's literature courses as well.

There was a greater variation in the years of teaching experience for the two groups. The range for Experimental I was from two to eight years, $\bar{X}=5.4$. For the Experimental II teachers, the range was from 0-9 years, $\bar{X}=4.0$. It will be noted later when the achievement and attitude data are summarized that the variation did not prove to have a significant effect upon the outcomes of the study.

I. THE INSTRUMENTS

The Otis-Lennon Mental Abilities Test, Primary 2 Level, was administered in January, 1970 to assess differences in I.Q. among classes. National norms for the test were obtained from a representative sample of pupils in American schools in 1966-67. A composite socio-economic index was one variable used to determine the stratification of school systems. This test is not designed especially for disadvantaged youngsters, but was recommended by the publisher as an appropriate instrument for measuring intelligence of disadvantaged children.

The Observation Schedule and Record - Reading (OSCAR-R) Medley and Smith (1964) was used during monthly visits to each classroom, October through April. This instrument yielded data regarding variations in teaching style, and made possible judgments regarding general teaching effectiveness. The ratings were accomplished by the principal investigator. Each visit, using the OSCAR-R forms, consisted of three ten-minute consecutive observations. Notation was made concerning materials used in the classroom and verbal interaction between teacher and pupils.

OSCAR-R has as its purpose the recording of teaching style demonstrated during reading-language arts periods and was used in the First Grade Reading Project (CRAFT). It is designed to yield information about similarities and differences in teacher behavior in periods of reading instruction.

The basic unit of observation is a ten-minute period. Three minutes are spent describing the range and variety of activities and materials and how they are used in the classroom. The remaining seven minutes are focused on verbal behavior; patterns of teacher statements and interchange between teacher and pupils. The following is a description of the instructions for using each side of the OSCAR-R:

Detailed Procedure - Static Side

The eight small boxes at the upper right are used for identifying code numbers for this Office's First Grade Reading Project. The following information is coded: Observer, Visit Number, Time Period within Visit, Visit Number Given by Observer, Variable, Consultant, School within District, Teacher within Variable. This section is completed before the observer enters the classroom.

Immediately below these boxes is a section in which use of the following audio-visual equipment is to be checked: Motion Picture Projector, Slide/Strip Projector, Tape Recorder, Phonograph, Overhead Projector, Camera. These items are checked only if such equipment is in use at the time when the block is checked. By choosing the "S" or "D" column, the observer indicates whether the equipment was in use at the beginning of the Static or the Dynamic phase of the period.

Below the audio-visual block there appears a section which is used for recording the group structure of the classroom. A different row is used by the observer to record each discernable functional group which appears in the classroom at the beginning of each of the two phases (Dynamic and Static). The observer counts the number of children in each group he sees, and writes this number in one of the cells in Column S or D as the case may be. If only one group appears in the classroom (the entire class), the observer records the

total number in the entire classroom in the top box. A check is made in the adjoining box (column headed "T") to indicate which group the teacher is with.

The blank box in the lower right-hand side, labelled "RMKS" is used to record brief summary comments about the activities occurring during the entire observation period, particularly anything unusual which might occur.

The main body of the Static side, which appears to the left of these small sections, consist of a two-way classification: what activities occur during the three-minute period and what materials are used in these activities?

Each activity which occurs during the Static Phase of an observation period should be recorded by a check mark in the cell opposite the activity category in which it fits and under the material category in which whatever material is involved belongs. If no material is involved in the activity, the check mark is made in the column headed NO MAT. If materials of two or more types are involved in one activity the activity is tallied twice.

Only one check is entered in any cell on the Static side, regardless of how many behaviors that fit that cell are observed.

Detailed Procedures - Dynamic Side

The dynamic side of OScAR-R differs sharply from the Static side in that during the 6 minutes in which it is used an attempt is made to record each verbal statement made by the teacher and each interchange between teacher and pupil. Figure 3 shows in schematic form the discriminations which must be made by the observer in coding verbal behavior.

The observer attends primarily to the teacher. As soon as the teacher utters a verbalization, the observer makes two judgments: (1) is the statement related to reading, to other language-arts, or to neither? (2) does the statement get a task for an individual pupil to which he is supposed to make an immediate response?

Language Arts here means any teacher whose apparent goals involve language symbols; if the symbols are visual language symbols, the verbalization is classified under Reading; otherwise, under Other Language Arts. Teacher verbal behaviors concerned with numbers, concepts related to science, art, etc., or with classroom management are classified as Non-Language Arts.

The decision that the teacher's verbal behavior falls into one of these categories leads the observer to one of the three major sections of the dynamic side of the schedule.

The decision that what the teacher says does not call for an immediate pupil response identifies it as a statement; a decision that it does call for a pupil reply identifies it as an entry to an interchange.

Statements are classified into six categories according to their apparent purpose.

Motivational statements are tallied as "Positive" or "Negative". "Positive" statements are intended to increase a pupil's motivation to learn, to reduce tension; or more simply, to make him feel better. Statements which might be tallied here are: "This is going to be a lot of fun;" "Oh, that's quite alright, don't worry about that," etc.

Negative motivational statements include statements which tend to make a pupil feel bad; most of them consist of a teacher's correction or criticism of pupil behavior. Statements varying widely in degree of severity are tallied in this category. The range extends, roughly, from a neutrally-stated: "Don't do that" (when such a statement does not appear to be a procedural instruction) to punitive shouting.

Problem-centered statements fall into three types: Problem-structuring-Meaning; Problem-structuring-Form, and Exposition.

Problem-structuring statements pose a problem to the class as a group, for example, "I wonder if anybody can tell me what the first sentence says?"

"Problem-structuring-Meaning" is tallied when the problem involves understanding or interpretation of words or sentences. "Problem-structuring-Form" tallies represent teacher statements concerned with the form, structure, or rote repetition of a letter, word, as for example, "What is the first word on page 3?"

"Exposition" is tallied when the teacher statement simply provides information to the pupils. Story-reading or story telling by the teacher would be tallied in this category. So would explanations of how to do something.

Procedural statements are classified as Directive or Descriptive. Both involve statements about what is to be done which are empty of content; the difference between them lies in the degree to which pupil behavior is restricted. "Today we are going to read a story" is descriptive; "Open your books" is directive.

Interchange. An interchange is an episode which normally begins with a teacher question, continues with a pupil response, and ends with a reply from the teacher, usually evaluative of the pupil response. One tally is made for each interchange under the type of entry, and opposite the type of evaluation.

By the entry to an interchange is meant the question asked by the teacher which initiates the episode. Entries are classified according to the type of task set the pupil; when it involves interpretation of a word, sentence, or other symbol, so the pupil must understand the symbol in order to execute the task, the entry involves meaning; if he need only recognize the symbol, it involves form only.

This same distinction is made in classifying Problem-structuring statements (see above). The difference between a Problem-structuring statement and the task-setting behavior which opens an interchange lies in the fact that the former does not call for a pupil response immediately. It sets a problem, usually for a class as a whole; but it does not set any individual pupil the task of answering a specific question.

No tally of an interchange is made until the teacher has evaluated (or failed to evaluate) the pupil's response. Basically, the teacher may either reject or accept the pupils response.

When a teacher is teaching in a manner such that responses are specified to be correct or incorrect, incorrect responses are typically rejected.

"Negative Rejection" differs from "Positive Rejection" in that the former is less gentle and friendly. The negative rejection category will receive tallies representing a considerable range in emotive tone. Harsh rejections will be tallied here, as will be a naturally stated "No, that's not right."

A "Positive Rejection" will usually imply that there was some merit in the response, even though it was not the one sought. "No, that's not quite right," "That's very good, does anyone have another idea?"

Acceptance is indicated by such replies as "That's right" "O.K.", etc. Unless there is some praise for enthusiasm, an interchange so evaluated is tallied as "Acceptance Indicated." If the teacher says "Fine!" "That's exactly right!" or otherwise goes beyond mere feedback, the interchange is tallied opposite "Support."

Many teachers often neither accept or reject a pupil response but go right on to ask another question. Such an interchange is tallied as "Non-evaluated."

If a teacher goes ahead after an interchange has been terminated and uses the pupil's response in some way, e.g., writes it on the board, or asks another pupil to comment, a second tally is made opposite "Use."

In general, each statement is tallied once, and each interchange once, except in this one instance of "Use" in which two tallies will appear for interchange.

Although, clearly, the OSAR-R leaves much room for recorder bias, it is felt that observations were recorded in a much more objective and standardized manner than

would have been true had no guidelines been followed. Further, in contrast to Interaction Analysis, IOTA, or other widely used rating scales, the OScAR-R was specifically designed for the observation of reading classes.

Log sheets were used to measure the reading-language arts time variable. Logs were originally used in the First Grade Reading Project (CRAFT), and were adapted for use in this project. Each teacher maintained a daily log for one week a month for seven months, October through April. These logs indicated how much time was spent in all aspects of the language arts.

The Primary Pupil Reading Attitude Inventory was administered in March to measure differences in reading attitude. The principal investigator and a graduate assistant gave the survey to classes as a group.

The original survey was validated by Eunice Askov on 94 second and third grade pupils. The children taking the survey as well as the pictures on the survey were white. A modification of this instrument was made changing the pictures to portray black children. No other modifications were made. Black children in the study received test booklets with black children portrayed. White children received booklets featuring white children. Boys booklets and girls booklets provided different choices, appropriate for each sex.

This survey was developed to measure attitudes towards recreational reading. It requires no reading or writing on the part of the pupils.

The survey consists of forty picture-choice items showing children in reading and non-reading activities. Each of three reading pictures is paired with each of nine non-reading pictures allowing a choice between a reading activity and some non-reading activity twenty-seven times. The remaining thirteen items are distractors pairing non-reading activities. Therefore, a perfect reading preference score is 27 and a total non-preference score is 0.

As validated by Askov, the instrument was shown to distinguish between high and low attitude toward reading. It was found to have concurrent validity and to be reliable by a test-retest coefficient.

The California Reading Test, Lower Primary was administered in May, to assess reading achievement. It was administered to class groups by the principal investigator and graduate assistant. The tests were hand-scored.

The California Reading Test is a sub-test of the California Achievement Tests. It was standardized in 1957 and norms currently in use are those established in 1963. Although for the purpose of this study achievement measurement of the CRT was the only concern, the tests were returned to the teachers for diagnosis and evaluation. This test was preferred over the Stanford Achievement Test because it yields more information about pupils' reading achievement.

II. WORKSHOPS

In September 1969, the investigator began a series of workshops with the ten study teachers. They met at the Indianapolis Public Schools administration building. These workshops were held monthly September through May for the purpose of teacher training and support, discussion of problems, and disseminating study information such as test findings and final evaluation.

The five Experimental I teachers received training in the use of the language experience approach to reading. They shared chart stories and related activities aimed at word analysis skills, techniques for enlarging vocabularies, etc. The Experimental II teachers received training in effective teaching methods using a basal series. They discussed games and devices to aid in teaching phonics and comprehension skills. Both groups spent equal time in workshops, at times meeting together. Comprehension skills, phonics understandings, and critical reading were some of the topics discussed by both groups. Following is an outline of the topics discussed in the eight meetings:

Experimental I Topics -

1. Shared stories and related activities aimed at rhyming words, initial consonant work, comprehension skills, etc.
2. Guidance in teaching the language experience with presentation of published materials available (Lee & Allen, Learning to Read through Experience, Encyclopedia Britannica units, etc.)

Experimental II Topics -

1. Games and devices for teaching basic skills.
2. Discussion of phonetic and structural analysis accompanied by a teacher phonics inventory with resulting discussion.
3. Language Programs for the Culturally Disadvantaged, N.C.T.E., 1965, was purchased for and distributed to this group. It was discussed in workshop sessions.

Topics discussed by both groups together -

1. Two first grade teachers, one familiar with the language experience approach and the other experienced in the use of a basal series, shared their ideas about teaching first grade reading.
2. Discussion of the importance of comprehension skills and how to use them.
3. Discussion of aspects of critical reading pertinent to first grade.
4. Discussion of aspects of children's language relevant to teaching reading.
5. Study business -
 - collected teacher information forms and teacher judgments of intellectual functioning and reading attitude.
 - collected teacher supply orders and distributed supplies.
 - explained and collected log sheets.
 - scheduled testing dates and OScAR-R visits.
 - discussed test, survey and inventory scores as they became available.

Prior to each monthly meeting a letter was sent to each teacher with an outline of proposed agenda for the workshop. Teachers were thus able to anticipate testing and observation dates and be reminded of the theme to be discussed at the workshop. The discussion topic for the final meeting in May focused on evaluation of the study by both the investigator and teachers.

III. THE SAMPLE

The initial proposal indicated that twenty classes would form the study population. Unfortunately, as previously noted, it was not possible to enlist the cooperation of this number of classroom teachers, although every effort was made to do so. Ten teachers and their first grade classes in the Indianapolis, Indiana Public School System were subjects for this study. Five of the teachers volunteered to use the language experience approach to the teaching of reading, none had prior experience with using the method exclusively. They had without exception, had experience in recording pupil-dictated material. Five teachers volunteered to participate in the study, using the teaching method with which they were already familiar. These methods can be considered basal reader oriented, although two of the teachers used Unifon (Malone, 1962), a unique orthographic system which purports to aid the child in solving phoneme-grapheme correspondence problems at the beginning level. Both of these teachers used a standard basal series (Ginn, 1963; Macmillan, 1966). Two of the Experimental II teachers resigned their positions at mid-year, and the teachers who replaced them were brought into the study. All participating teachers received a stipend of \$120 for participating in the study. Further, approximately \$50 per teacher was budgeted and spent for teaching materials (games, paper, charts, flash-cards, etc.). This seemed to please the teachers nearly as much as the stipend.

The student population approximated 314 at the beginning of the study. Complete data were analyzed on 236 students at the end of the study. It may be of interest to note that one child, a black male, transferred twice during the year, but was enrolled each time, fortunately and by chance, in an Experimental II class!

Pupils in the study were 87% black and presumed to be representative of disadvantaged children living in the inner city neighborhoods of Indianapolis. With the exception of one, all pupils in the Experimental I group were black.

During the course of the study these children were administered the Otis-Lennon Primary Mental Abilities Test. Differences in the mean measured I.Q. of the two groups was within the standard error of measurement of the instrument. No other indices of similarity of the basic student populations were available.

CHAPTER III

RESULTS AND ANALYSIS

The hypotheses of this research stated in the proposal were as follows:

"It is hypothesized that the groups using the language experience approach will perform at a significantly higher level than the pupils in the other groups and that their attitudes toward reading will be significantly better."¹

The data were analyzed using analysis of covariance and analysis of variance models.

First Analysis

For the series of analyses using classes as the unit of analysis the method employed was "BMD03V, Analysis of Covariance for Factorial Design."²

The basic design was a two factor one in which membership in either the Experimental I or the Experimental II group and sex of the pupils were the independent variables. The dependent variable for evaluating achievement was the raw score, Total Achievement sub score, of the California Achievement Test Reading Scale. The dependent Variable for the assessment of attitude was the number of choices which favored reading as an activity on the Primary Pupil Reading Attitude Inventory. A two by two factor analysis of covariance design was employed. Eight covariates were included. Seven of these were:

1. Mean deviation I.Q. scores on the Otis Lennon for each sex by class.
2. The number of years and part years of formal professional education of each teacher.
3. The number of years and part years of teaching experience for each teacher.

¹Proposal, op.cit. P. 9.

²B.M.D. Biomedical Computer Programs, W. J. Dixon, editor. Los Angeles, California, University of California, Los Angeles, 1965.

4. The three covariates representing the mean scores of interchange on the OScAR-R.
5. Total scores from the "Static" side of the OScAR-R rating card.
6. Total scores from the "Dynamic" side of the OScAR-R rating card.
7. Mean scores representing time allotments for various facets of the reading program, as reported on the log sheets maintained by each teacher.

The final covariate was the alternate dependent variable, the mean Total Reading Scores by sex and class, when evaluating attitude, and the mean Primary Pupil Attitude Inventory Scales by sex and class, when evaluating achievement. Table I is a summary of the findings when data were analyzed in this manner:

TABLE I

ANALYSIS OF DATA, DEPENDENT VARIABLES:
SIGNIFICANCE OF FINDINGS: CLASS UNITS

Variable I (Attitude)

Source of Variation	Degrees of Freedom	Mean Square	F	P
Method	1	7.33	2.74	ns
Sex	1	1.37	<1.00	ns
Method x Sex	1	5.12	1.91	ns
Within Replicates (error term)	8	2.68		

TABLE I (cont'd)

Variable II (Achievement)

Source of Variation	Degrees of Freedom	Mean Square	F	P
Method	1	13.85	1.45	ns
Sex	1	16.29	<1.00	ns
Method x Sex	1	11.86	1.24	ns
Within Replicates (error term)	8	9.58		

In Table II, regression coefficients for the two variables are reported:

TABLE II

REGRESSION COEFFICIENTS FOR VARIABLE I (ATTITUDE)
AND VARIABLE II (ACHIEVEMENT): CLASS UNITS

Variable I

I.Q.	Askov Score	Teacher Education	Teaching Experience	Static	Oscar-R Dynamic	Interact.	Log Data
.23177	-.24215	-1.94674	-.14456	-.00952	.01919	-.01187	.00263

Variable II

I.Q.	Askov Score	Teacher Education	Teaching Experience	Static	Oscar-R Dynamic	Interact.	Log Data
.98045	.55334	10.57862	-2.22681	.28990	.03433	.09789	-.06012

In no case did difference between the two groups prove to be significant at the .05 level when the data were analyzed in this manner. Clearly, the hypotheses regarding relative levels of achievement and attitude were not supported.

Second Analysis

A second analysis, Analysis of Covariance with Multiple Covariates, (BMD04V)³ used pupils rather than classes as units. Each pupil's score on the California Reading Test and his score on the Primary Pupil Reading Attitude Inventory were the dependent variables. The covariates included the teacher preparation and experience data, log sheet time allotment data, pupils' I.Q. scores, and mean class scores on the OScAR-R (Mean scores were used because the teacher rather than an individual pupil is the focus of the observation).

Although the population for this study remained unusually stable (78% of the pupils who were enrolled in September were in the same class or in a class using the same approach in June), not all pupils whose scores were used in the previous analysis were present or enrolled during the three major data gathering sessions or series of sessions (administration of the Attitude Inventory, the Otis Lennon, and the California Reading Test). The populations for the analysis presently discussed were restricted to those pupils who had participated in the program without interruption, from January through June, 1970. Pupils for whom one or more of these scores were not available were excluded from the data base for this analysis.

This analysis requires an equal sample size for each cell in the matrix. Therefore, the group having the smallest number of members was included, in toto. Excess data for the other three cells were randomly discarded prior to analysis. Table III includes the findings for the Total Reading (Achievement) Scores, Boys, two methods contrasted, with null hypothesis, no significant differences between the two groups.

³Dixon, op.cit.,

TABLE III
ANALYSIS OF COVARIANCE TABLE:
TOTAL READING, BOYS

Source	df	YY	SS (Due)	SS (About)	df	MS	F	p
Treatment (Between)	1	72.25						
Error (Within)	98	21353.06	11113.35	10239.70	90	113.77		
Treatment + Error (Total)	99	21425.31	9941.22	11484.09	91			
Difference for Testing Adjusted Treatment Means...	1		1244.38		1	1244.38	10.94	<.01

The null hypothesis is not supported, and the difference between the two groups Total Reading, Boys, favors the Experimental II group, with the difference significant at the .01 level.

Attitude data for boys are reported in Table IV.

TABLE IV
ANALYSIS OF COVARIANCE TABLE:
ATTITUDE, BOYS

Source	df	YY	SS (Due)	SS (About)	df	MS	F	p
Treatment (Between)	1	50.41						
Error (Within)	98	3224.10	192.01	3032.09	90	33.69		
Treatment + Error (Total)	99	3274.51	235.42	3039.09	91			
Difference for Testing Adjusted Treatment Means...			7.00		1	7.00	.21	ns

There was no significant difference in attitude as measured by the inventory, between the two groups of boys. The null hypothesis is supported.

Achievement and Attitude data for girls are reported in Tables V and VI.

TABLE V
ANALYSIS OF COVARIANCE TABLE
TOTAL READING, GIRLS

Source	df	YY	SS (Due)	SS (About)	df	MS	F	p
Treatment (Between)	1	11.56						
Error (Within)	98	18229.40	8096.46	10132.94	90	112.59		
Treatment + Error (Total)	99	18240.96	7162.41	11078.55	91			
Difference for Testing Adjusted Treatment Means...				945.61	1	945.61	8.40	<.01

The differences are significant at the .01 level,
and the differences favor the Experimental II girls.

TABLE VI
ANALYSIS OF COVARIANCE TABLE:
ATTITUDE, GIRLS

Source	df	YY	SS (Due)	SS (About)	df	MS	F	P
Treatment (Between)	1	1.00						
Error (Within)	98	2018.76	314.07	1704.69	90	18.94		
Treatment + Error (Total)	99	2019.76	312.90	1706.86	91			
Difference for Testing Adjusted Treatment Means...				2.16	1	2.16	.114	ns

The differences between the two groups of girls are not significant, and the null hypothesis is supported.

In summary, the results of the analyses of covariance, pupil units, found significant differences in achievement for boys, favoring the Experimental II pupils and in achievement for girls, also favoring Experimental II pupils. No significant differences in attitude were apparent when data were analyzed in this manner.

Third Analysis

Two of the classes utilized Unifon, a unique orthographic system (Malone, 1962), which, although it involves the use of a graded series of reading materials and thus might be properly considered one of the modified basal approaches, also involves much recording of pupils own dictated material. To see whether or not significant differences might appear, Unifon groups were treated as different from the other two. Tables VII through X (BMD04W, Version of April 1, 1966)⁴ present the findings when data were analyzed in this manner. In each case, the null hypothesis was tested, that is that there would be no significant difference between the three groups, Experimental I, Experimental II (without Unifon) and Unifon.

⁴Dixon, op.cit..

TABLE VII
 ANALYSIS OF COVARIANCE TABLE:
 ACHIEVEMENT, BOYS (3 METHODS)

Source	df	YY	SS (Due)	SS (About)	df	MS	F	p
Treatment (Between)	2	3728.36						
Error (Within)	69	14451.42	5353.12	9098.30	61	149.15		
Treatment + Error (Total)	71	18179.78	8737.66	9442.12	63			
Difference for Testing Adjusted								
		Treatment Means...	343.82		2	171.91	1.15	ns

The difference between the three groups is not significant, and the null hypothesis is supported.

TABLE VIII
ANALYSIS OF COVARIANCE TABLE:
ATTITUDE, BOYS (3 METHODS)

Source	df	Y _T	SS (Due)	SS (About)	df	MS	F	P
Treatment (Between)	2	254.33						
Error (Within)	69	2197.17	179.58	2017.58	61	33.08		
Treatment + Error (Total)	71	2451.50	388.18	2063.32	63			
Difference for Testing Adjusted Treatment Means...			45.74		2	22.87	.69	ns

The difference between the three groups is not significant, and the null hypothesis is supported.

TABLE IX

ANALYSIS OF COVARIANCE TABLE:
ACHIEVEMENT, GIRLS (3 METHODS)

Source	df	YY	SS (Due)	SS (About)	df	MS	F	p
Treatment (Between)	2	1928.11						
Error (Within)	69	11106.88	4121.06		61	114.52		
Treatment + Error (Total)	71	13034.99	5623.12	7411.87	63			
Difference for Testing Adjusted Treatment Means...				426.05	2	213.03	1.86	ns

While there is not strong support for any method, the null hypothesis is not supported, and there is implied superiority of both the basal and Unifon methods when compared with the language experience.

TABLE X
ANALYSIS OF COVARIANCE TABLE:
ATTITUDE, GIRLS (3 METHODS)

Source	df	YY	SS (Due)	SS (About)	df	MS	F	P
Treatment (Between)	2	55.03						
Error (Within)	69	816.08	73.83	742.25	61	12.17		
Treatment + Error (Total)	71	871.11	105.52	765.59	63			
Difference for Testing Adjusted Treatment Means...			23.34		2	11.67	.99	ns

The difference between the three groups of girls is not significant. The null hypothesis is supported.

Fourth Analysis

An Analysis of Variance, One Way Design (BMD01V)5 was computed, in an attempt to remove interaction effects. Table XI reports the results of this analysis.

TABLE XI
COMPARISON OF MEAN SCORES,
DEPENDENT VARIABLES,
CONSIDERED WITHOUT INTERACTION

Variable	Exp. I	Exp. II	F Ratio
I.Q. - boys	84.7455	82.3231	1.0243
I.Q. - Girls	88.7000	84.0303	4.7474*
Attitude - boys	9.6909	9.4769	<1
Attitude - girls	10.0600	10.3333	<1
Teacher education	5.0000	4.6000	2.6667
Teacher experience	5.7200	5.1200	<1
OScAR-R, statement	177.0000	171.0000	<1
OScAR-R, static	122.4000	130.8000	<1
OScAR-R, interchange	173.6000	134.2000	1.1691
Log Data	153.0760	144.4400	<1
Total Read - girls	49.6000	44.4400	4.1768*
Total Read - boys	45.2000	43.2769	<1

*significant at the .05 level

When interaction effects are removed, an analysis of variance indicates that Experimental I Girls are superior in terms of scores on the Otis Lennon and total reading scores on the California Reading Test.

Other Data

Eunice Askov used teacher ratings of pupils attitudes toward reading in validating data for her inventory (Askov, AERA Presentation, 1969). Teachers involved in the study reported here were asked to rate the attitudes of their pupils toward reading, using a Likert-type Scale, a rating of 5 indicating the most positive attitude, 1 the most negative. Two groups not enrolling black pupils exclusively were not included in this part of the study. The eight teachers who completed ratings did not have the Askov results at their disposal. A Pearson product moment correlation was computed. Table XII reports the results of this analysis.

TABLE XII
CORRELATION: TEACHER RANKINGS OF
PUPILS' ATTITUDES TOWARD READING WITH SCORES ON THE
PRIMARY PUPIL READING ATTITUDE INVENTORY

	N	r
Black Females	104	.02942
Black Males	112	.14242

Dr. Askov may have had ample reason for using teacher judgment as validating data. In interpreting the findings reported above, it should not be inferred that teachers are not effective judges of pupil attitudes, nor that the Primary Pupil Reading Attitude Inventory is an inaccurate instrument. Table XII does indicate that the scores on the attitude inventory for black pupils in the study reported here do not correlate highly with the rankings of the teachers involved in this phase of the project.

Teachers were also asked to rank their pupils according to general intellectual competence, brightest to slowest. These rankings were correlated with pupils' scores on the Otis Lennon. In Table XIII, the results of this analysis are reported.

TABLE XIII

CORRELATION: TEACHER RANKINGS OF
PUPILS' GENERAL INTELLECTUAL PERFORMANCE,
SCORES ON THE OTIS LENNON INTELLIGENCE TEST

<u>Experimental I Classes</u>	Teacher	r
	A	.74974
	B	.46054
	C	.40756
	D	.38369
	E	.30164
<u>Experimental II Classes</u>		
	F	.75491
	G	.74007
	H	.52828*
	I	.52253
	J	-.69110*

*Rankings by teachers who began participating in the project at the beginning of Semester II.

It is clear that there is tremendous variability in the correlations. Teachers A, F and G apparently used criteria generally similar to criteria for success on the Otis Lennon. Although, they had not seen the test scores prior to establishing the requested rankings, the correlations were quite high. It is interesting, if not surprising, to note that Teacher J, whose ranking correlated negatively with the test scores, was reasonably accurate in the rankings at the extremes. The discrepancies occurred in the middle ranges, and, obviously, were great. It is not suggested that the teachers were not competent judges of their pupils intellectual performance, or that the Otis Lennon was not an effective instrument for use with pupils of the type involved in this study. Clearly, in some cases, the relationship is close. Where there were discrepancies, all that can be stated is that teachers rankings and test scores were not close, and

possibly, different criteria were applied in the assessment. Mean correlations for the two groups, Experimental I, .46023, Experimental II, .48867, were not significantly different. The difference was greater when the correlation for Teacher J was eliminated.

CHAPTER IV

CONCLUSIONS AND INTERPRETATION OF FINDINGS

It cannot be claimed that the hypotheses, particularly the hypothesis related to attitude, received strong support, regardless of the analytical procedures used.

Conclusions

To review, the findings, when analyses of covariance were used, they were as follows:

1. When classes were treated as units, no significant differences between the two groups were observed. This was true for both the achievement and the attitude variables.
2. When pupils were treated as units, achievement differences, for boys and girls, favored the Experimental II groups (Modified Basal).
3. When the Unifon classes were treated as a third group, differences between the three groups were not statistically significant. There was an implied superiority of the basal and Unifon methods, achievement, girls when contrasted with the Language Experience Approach. The similarity of the Unifon and the Language Experience Methods evidently did not "contaminate" the data.
4. When analysis of variance was used, findings indicate that the Experimental I (Language Experience) girls were significantly superior in Total Reading and in I.Q., as measured by the Otis Lennon.
5. Rank order correlations were computed to ascertain the relationship between teachers rankings of pupils, in terms of general intellectual functioning, and pupils' scores on the Otis Lennon. The correlations, from .7591 (closest relationship) to -.69110 (a moderately strong negative relationship) indicate great variability. It is not suggested that one measure is more accurate than the other, merely that some teachers appear to judge pupils' intelligence

on the basis of criteria similar to those on which the Otis Lennon is based, and others clearly use very different criteria.

Correlations between the pupils' Primary Pupil Reading Attitude Inventory scores and the teachers' reading attitude rankings of black pupils were quite low, suggesting the application of different criteria in making the rankings than those on which the Primary Pupil Reading Attitude Inventory is based.

Interpretation of Findings

As noted, the hypotheses did not receive strong support from the analyses of the data collected for this study. It cannot be claimed that the language experience approach has clear superiority as a procedure for organizing reading programs for pupils of the type included in this study. Of the several possible explanations for these findings which will occur to the reader, the most obvious, and the first to be discussed, will be the instrumentation.

So much has been written about the inappropriateness of most standardized tests for culturally disadvantaged pupils that little more needs to be said here. An effort was made to choose instruments which were the most appropriate of those available.

The California Reading Test was selected because it provides more data for use in assessing reading achievement than the Stanford Battery used in the First Grade Studies. It was highly recommended by the publisher, and this publisher's catalog includes several group reading tests. The norms used were established for urban populations, and were based on data collected within the past five years.

Nevertheless, the children found the test extremely difficult, and there was much evident frustration as well as the expected apathy. Almost every teacher insisted her pupils "knew" material they missed on the test. An effort was made to analyze miscues, but so few items were completed and errors were so prevalent, that this did not prove to be fruitful. Achievement differences might have been greater had the pupils in the two groups been generally more successful on the test.

The Otis Lennon presented similar problems. This test asks for evidence of thinking strategies with which

these pupils, for the most part, were unfamiliar. In addition, it asks for identification of pictured objects outside pupils' experiential background. A common error, amusing to and understood by those familiar with Indiana residents' fondness for basketball, was the selection of the basketball hoop as a "slot" rather than the narrow horizontal opening in a door for the delivery of mail. Predictably, the brightest pupils, regardless of treatment, had the highest reading scores.

The Askov Primary Pupils Reading Attitude Inventory is also middle class in its orientation. The leisure time activities pictured, climbing trees, swinging, reading comics, are options not open to many of these pupils. The use of an instrument on which some normative data were available was considered desirable, and to have changed the pictures to any extent beyond providing black forms for black pupils would have rendered the instrument valueless in this respect. The inventory is very long, and was considered boring and tedious by many pupils. There is a clear need to assess the interest of pupils in reading in some objective manner, and hopefully, attitude inventories appropriate for use with culturally disadvantaged pupils will be developed.

The OSAR-R proved to be a reasonably effective means of structuring observations and providing data, related specifically to reading instruction, which can be quantified. The weaknesses of the instrument, its focus on the teacher rather than the learner, and its lack of provision for entirely pupil centered activities, were not particularly inhibiting in this project.

Teachers showed a great deal of independence in completing the logs, and less uniformity than was hoped for was achieved, in spite of training sessions. Nevertheless, the log served at least two very useful functions; teachers were aware of the need for identifying and classifying the many facets of reading instruction and the logs also made it possible to exert some control over the time spent in teaching reading in the two groups. There were not significant differences between the two groups in terms of the log data, activities involved and amount of time spent in reading instruction.

Teaching experience and years of training, professional education appeared to have little bearing on the results, in whatever manner data were analyzed. As noted before, the teachers involved in this project were, without exception, enthusiastic and cooperative. Apathy was never a problem, nor did one teacher ever express the

commonly held concept that "these children can't learn, so why bother." All five of the language experience teachers expressed the intention to use the "approach" again during the next academic year, and it is known from brief follow-up conversations with three of the five that they are, in fact, using the language experience approach this year.

To summarize, although a great deal of time and effort were devoted to attempting to solve the problems related to selecting and using appropriate instruments in a project involving a non-middle class population, it is clear that several of the limitations of this study relate to the measurement devices and techniques which were utilized. The problems were recognized but, apparently, not solved.

Implications

There would be little point in claiming that the findings reported here provide additional and necessary focus for the solution of the large group of problems related to teaching culturally disadvantaged pupils to read. It should not be concluded that the language experience approach was ineffective with these pupils. Harris and Serwer's summary comment might well serve to summarize the results of the project reported here; disadvantaged children can learn to read using the language experience approach.¹ However, it is clearly not the panacea a few would claim it is.

The teacher education function served by this project deserves special comment. The workshops, the planning which almost certainly preceded the scheduled observations and the examination of program which accompanied completion of the log sheets and the enhancement of professional self concept which accompanied being involved in a federally sponsored project were desirable and significant concomitants to the research findings.

In view of the apparent "holding power" of the three project schools, it is planned to re-test the pupils this spring, to assess any residual effects of the approaches used in grade one.

¹Harris, A. J. and Serwer, B. L. "Comparing Reading Approaches in First Grade Teaching with Culturally Disadvantaged Children." In First Grade Studies: Findings of Individual Investigations, R. G. Stauffer, ed., Newark, Delaware, The International Reading Association, 1967, pp. 36-41.

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APPENDIX A
Observation Schedule and Record-Reading

APPENDIX B
Log Sheet

Teacher _____ Class _____ School _____

Date _____

Please note the starting time and stopping time for each activity related to reading which you employ during the day, at the completion of the activity.

If there is more than one period for a particular heading, put down the times for each period.

Reading Activities	Times		Summary in Minutes
	Begin	End	
Basal Reader Activity (Vocab. intro., silent, oral reading)			
Experience Chart (dictation and rereading)			
Sight Word Drill (flash cards, wkbk., chalkbd., etc.)			
Phonics Work:			
Other Reading Activity (Specify)			
Supporting Activities			
Storytelling			
Discussion			
Writing			
Dramatization			
A-V Activity			
Other Language Arts (Specify)			

APPENDIX C

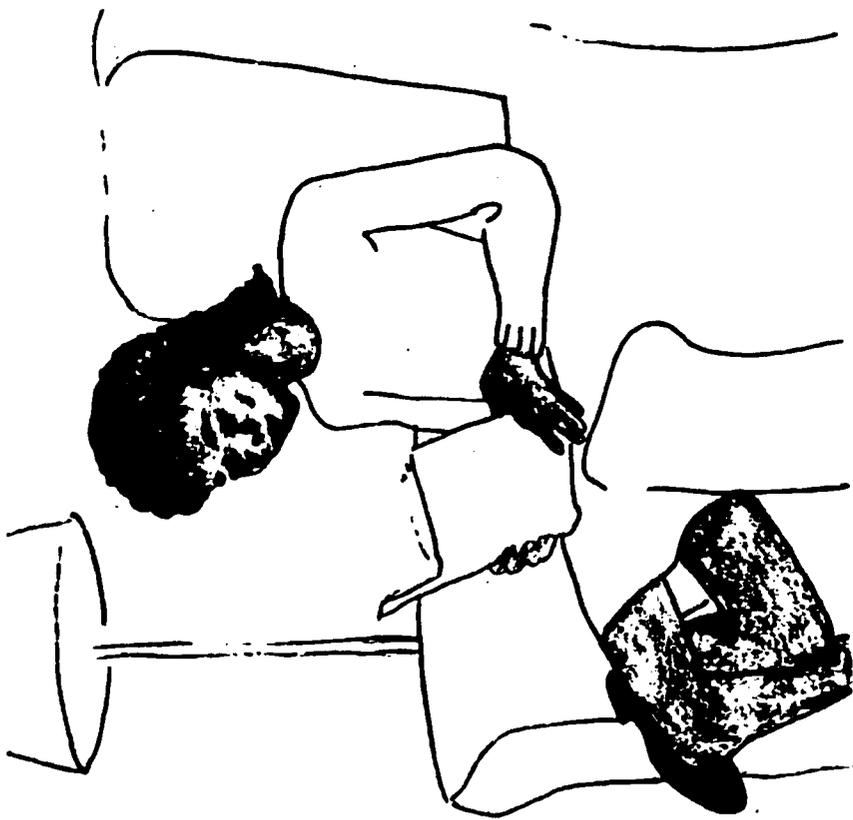
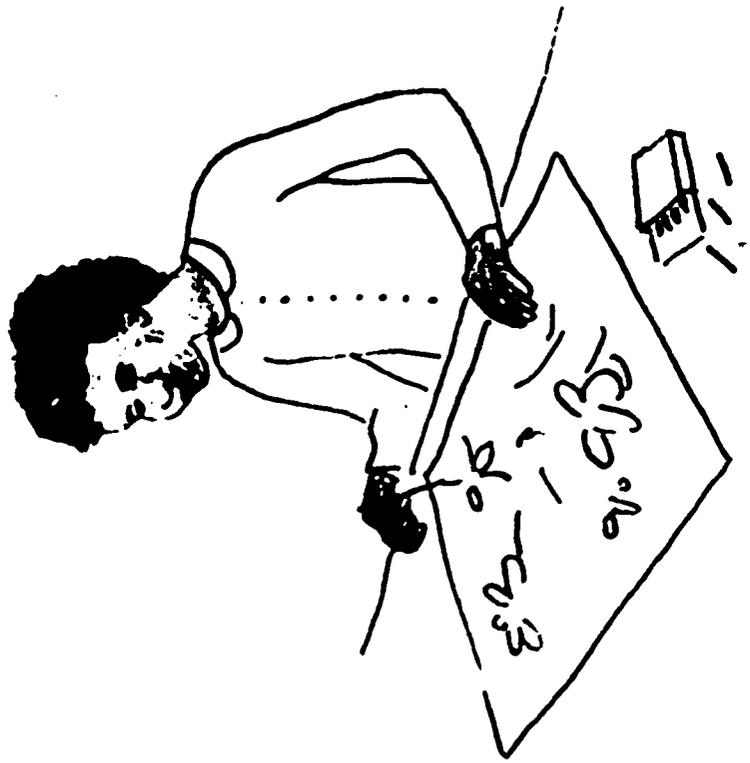
Primary Pupil Reading Attitude Inventory

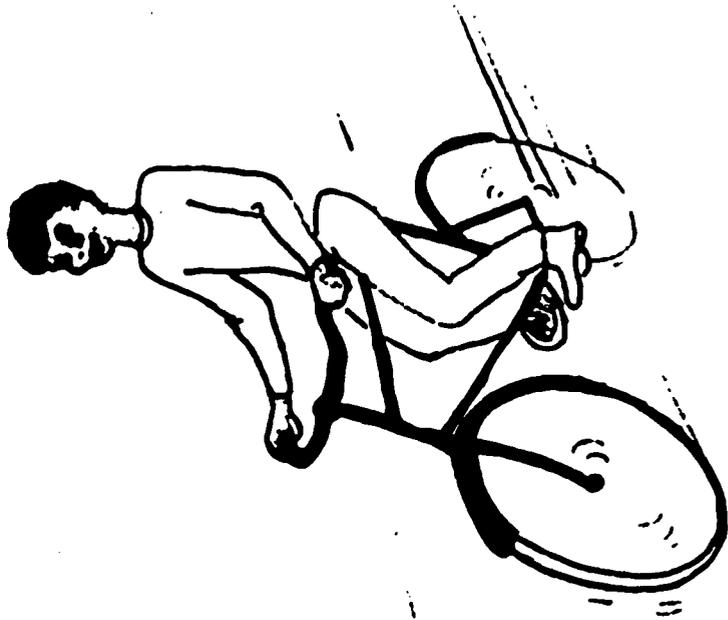
Sample 1 - Black girls

Sample 2 - Black boys

Sample 3 - White girls

Sample 4 - White boys





7.1

