THE EFFECT OF A SHORT TERM INTENSIVE ENRICHMENT PROGRAM ON THE READING IMPROVEMENT OF THE EDUCABLE MENTALLY RETARDED

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CHAPTER I

THE PROBLEM

Introduction

The ability to read is of such importance that the United States Government has inaugurated programs such as the Right-to-Read Clinics to help improve the reading level of school children. Methods are constantly being devised, revised, and evaluated to combat this national problem which affects the so-called normal children as well as those who are below normal in intelligence. Included in this latter group are the educable mentally retarded (EMR) who have been described as those persons who operate sub-average in general intellectual function, which originates during the developmental period and is associated with impairment in adaptive behavior (Heber, 1961). The I.Q. range of this group is from 50-79. Whereas the etiology of most atypical mental development is multiple and diverse, the educable mentally retarded arrive primarily from organic sources and cultural deprivation (Cruickshank-Johnson, eds., 1967).

One such impairment in adaptive behavior is the inability to read written forms of communication, which may cripple any individual in society and make it more difficult for him to function independently. Without a basic knowledge of the various reading techniques, the non-reader has more difficulty using commercial transportation, obtaining a vehicle operators license, obtaining gainful employment, or even more

importantly, moving about independently without endangering himself and others.

Reading requires the ability to interpret abstract symbols and patterns in order to gain their full meaning and to interpret written messages of other individuals. The importance of reading in American culture is second only to the ability to communicate orally, and since the mentally retarded individual reads out of necessity rather than for pleasure, his reading experiences should be both realistic and functional. Even for these experiences, however, the mentally retarded child has to be motivated to read. He has experienced failure of varying degrees in various situations, and he may view reading as another potential failure even though he may seriously want help. He associates unhappy feelings with reading and with books in general. Because of his failures, he views himself as no good or maybe even stupid (Cohn and Cohn, 1967). He must have success to be remotivated to want to learn to read. His experiences must be realistic, visible, tangible, and functional rather than vague and abstract; and these experiences must be guided by a teacher who, by his faith, attitude, and dedication, conveys to the retarded child the idea that he can develop competency in reading (Karlin, 1971).

Reading is probably the single most important skill taught in school, and the mentally retarded child must master as many skills as possible to help insure for him an effective life, for he has some of the same values of reading as the normal child. These values, in summary, are as follows:

1) Effective reading is necessary to become well informed on pertinent issues and to acquire specific information in

practically all subjects. Disciplines such as English, social studies, mathematics, and the sciences are examples of courses which necessitate skillful application of reading competence. Skillful reading and success academically seem to be positively related.

2) Through skillful reading, one may become a more interesting person, thus he is welcomed as a friend.

3) Reading is essential for most people to prepare for work and to advance in their work. The ability to read materials quickly, critically, and with a high degree of understanding is necessary for initial and continued success in many of today's jobs.

4) Enjoyment of experiences and events which cannot be witnessed first hand is one of the most valuable reasons for competence in reading. Even though television may have made reading less appealing to some, a person can still find pleasure in reading about historical triumphs and failures, the daring adventures of space travel, the conquering of dreaded diseases, and the apprehensions of the future (Witty, Freeland, and Grotberg, 1966).

For the mentally retarded child, all of these values of reading may not be realized because of his repeated failures in reading. Also, those values which can be realized through special help will not be attained to the same degree by the mentally retarded child as that of the normal child because of the differences in intelligence; however, some of these values are possible at his mental level.

An extensive review of the literature by Dunn (1954) indicated that most investigators have found that educable mentally retarded children in special classes read below their expectancy or mental age level. Where special emphasis is placed upon reading, however, there is no basic reason to assume that this must be true. Studies also revealed that most classes for the educable mentally retarded were made up of children from the lower socio-economic faction of ethnic minority groups (Young, 1969, and Mercer, 1971). Some few studies (Hegge, 1934, and MacIntyre, 1937) indicate that where intensive remedial instruction has been provided to educate mentally retarded children reading significantly below their mental age level, rapid and significant gains in reading ability have been accomplished. The indications are that a more definite and more organized approach to reading is essential in a program for the educable mentally retarded if they are to achieve the competence required in this skill and to make effective use of it as is possible.

Statement of the Problem

The problem of this study is the effect of a short term intensive enrichment program on the reading improvement of the educable mentally retarded.

Purpose of the Study

The mentally retarded child has been the focus of many programs and research projects in the past few years, but the practical application of such programs has not brought the desired results in the special education classroom. With the lower socio-economic groups comprising

a significant part of those who are labeled mentally retarded, efforts need to be made to increase the financial independence of these people. The ability to read is important in preparing for this independence; therefore, the purposes of this study are (1) to ascertain the effect of a short term enrichment program on the reading improvement of educable mentally retarded youth; (2) to analyze the data for counselors, teachers, administrators, and others who are interested in the maximum learning potential of the EMR; and (3) to offer recommendations to persons in the field of education who may implement certain practices for the improvement of the reading skills of the culturally disadvantaged educable mentally retarded person.

Definition of Terms

The terms used in this study are defined as follows:

1) Educable Mentally Retarded is the term used to describe that group of children who have certain traits in common. Heber (1963) has listed these traits as follows:
   a) General intellectual functioning is below the average range of the general population.
   b) A predicted or demonstrated inability to cope with the regular school curriculum at the typical age.
   c) A potential for achievement of a minimal but significant level of basic academic skills when provided with a curriculum and teaching techniques appropriate to their level and rate of intellectual development.
   d) A potential for achievement of those social and occupational skills essential to independent adult living.

The educable mentally retarded population also constitutes about 25 per 1,000 children of school age (Sellin, 1966). The President's Panel on Mental Retardation (1963) found that of these children, about twenty percent are in special education classes or special schools, and the remainder are in regular public school classrooms.

For the purpose of this paper, the term "educable mentally retarded" refers to those children who have subaverage general intellectual functioning which originated during the developmental period and is associated with impairment in adaptive behavior. The I.Q. range of this group is from 50 to 79 as measured by the Weschler Intelligence Scale for Children (WISC). This means that children with this I.Q. range progress mentally at a rate of from one-half to three-fourths that of a child who has an I.Q. of 100 (Karnes, 1963).

2) Short Term Intensive Enrichment Program is one lasting eight weeks during which time reading is taught through the language-experience method. The reading material is directly derived from the oral conversations on the various trips taken.

3) Cultural Enrichment is exposure to various aesthetic experiences that otherwise would not be in a person's immediate environment because of the expenses involved in attending such events.

4) Aesthetic Experiences are those involved in exposing and understanding the arts of the various cultures. Examples of such experiences are visits to the Cowboy Hall of Fame,

concerts, arts foundations and centers, museums, planetariums, operas, etc.

5) Culturally Disadvantaged is a term which has other terms either closely related to it or synonymous with it, such as terms "culturally deprived" and "socially disadvantaged." The children who are described as culturally disadvantaged are usually those (1) whose families are very poor economically, and (2) who live in large city slum areas or who live in rural communities. Because of these conditions, the culturally disadvantaged usually have other characteristics which set them apart from the middle or upper class children. These children (1) often show little motivation to excel academically; they are less inclined to forego immediate gratification for future gains; they do not demonstrate persistence in completing or achieving an academic task or goal; (2) who are culturally disadvantaged are less prepared in language development both quantitatively and qualitatively; their language has more concrete and functional connotations rather than abstract categories, perceptual discriminations are also more difficult for these children; their social interactions are different in that they tend to distrust strangers and are more aggressive with peers but are more passive in interactions with authority figures; and (3) have a general state of physical health which is below that of other children because of poverty, overcrowding, poor eating habits, and unsanitary conditions in many disadvantaged children's homes (Klaus and Gray, 1965).

For the purpose of this paper, "culturally disadvantaged" refers to those people who are in environments which transmit cultural behaviors which do not prepare an individual for a full life in the total American society.

6) Reading Achievement is the reading level that is measured by the Gates-MacGinitie Reading Test.

7) Middle School is the description given for grades six through eight in the Oklahoma City Public School System.

Hypothesis

To carry out the purposes of the study, the following hypothesis is formulated in the null:

There is no significant difference in reading achievement of the control group as compared to the experimental group as a result of the intensive cultural enrichment program.

Basic Assumptions of the Study

The following basic assumptions are formulated:

1) Most EMR classes are composed of culturally disadvantaged people.

2) Culturally disadvantaged children have had less exposure to aesthetic experiences.

3) Motivation plays an important part in the reading improvement of culturally disadvantaged children.

4) Culturally disadvantaged children are less motivated to read than so-called "normal" children.

5) Enrichment programs can increase motivation, thus improving the reading level of culturally disadvantaged educable mentally retarded children.

Organization of the Study

Chapter I presents an introduction to the problem to be studied. It includes the need for the study, the statement of the problem, the purpose of the study, the hypothesis, basic assumptions of the study, the definition of terms as used in the study, and the organization of the study.

Chapter II reviews the literature which is related to the problem being studied.

Chapter III describes the population studied, the design of the study, instruments used and their application to the study, material and instructional techniques used in the study, testing procedures, statistical methods utilized, and summary.

Chapter IV contains a statistical analysis of the data which presents an analysis of the results and indications of the degree to which the hypothesis was found to be significant.

Chapter V presents a discussion of the results of this study including conclusions and recommendations regarding future studies in this area.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

Reading theories and approaches for teaching reading to children of normal intelligence have been the object of numerous research projects over the years. The literature abounds with such studies. Reading for the mentally handicapped child, however, especially the educable mentally retarded, has sufficient literature on studies involving the pre-school and elementary school levels, but the junior high level--middle school level in some cities--seems to be the group which is represented far less in the literature. The bulk of the studies pertaining to this level dealt with developing material which was on the student's reading level but which was compatible with the interest for his chronological age.

Most of the investigators seemed to be in general agreement that improvements in the reading level of educable mentally retarded students can be made from either individualized or group instruction. There were also studies which indicated that the pre-school experiences of most EMR students may be atypical or impoverished (Karnes, 1963; Jordan, 1969). Similarly, the literature indicated that most classes for the EMR are made up from lower socio-economic groups such as Negroes, Mexican-Americans, American Indians, etc. (Young, 1961), and that there is a tendency for teachers to place children in special education

classes for a variety of reasons especially for the culturally different child or one who speaks English as a second language (Sabatino et al., 1973). There appeared to be sufficient studies on the relationship of incentives or reinforcements (monetary gifts, praise, blame, etc.) to the mentally retarded for their reading achievement, but the bulk of the literature pertained to the relationship that cultural or social factors have on the general intellectual functioning of mental retardates.

Concerning the effect of an intensive cultural enrichment program on the reading level of the educable mentally retarded, the literature was very meager, and such literature specifically pertaining to the junior high school or middle school age group appeared to be non-existent. The literature reviewed for the purpose of this study concerned the research which had been done on reading for the educable mentally retarded, and also research on the reading activities of the culturally disadvantaged, specifically in the areas of motivation, incentives, and placement of these children in special classes. In addition to these, few studies were reviewed for their related value concerning reading disabilities of junior high school students who were not labeled as educable mentally retarded.

Reading and the Educable Mentally Retarded

Sheperd (1967) compared the reading ability of forty mentally retarded boys--twenty who were reading at their mental age level and twenty who were not. He administered a battery of tests in order to measure selected factors in the reading process which were silent and oral reading ability, patterns of reading errors, fund of basic information, ability to use context clues, memory of designs, visual closure,

ability in psycholinguistic functions, handedness-eyedness-lateral dominance, personal adjustment, and home conditions. The subjects were described as adequate or inadequate readers.

Sheperd's conclusions were that there are marked individual differences in the reading process and related factors in a group of educable mentally retarded students, and these differences center around the seemingly lack of word attack skills and the use of contextual clues by the inadequate readers. He also concluded that direct teaching and continuous focus on these deficiences are necessary for the total educational development of the mentally retarded child.

Baker (1966) reported that through the use of individualized instruction, a group of primary level educable mentally retarded students were able to successfully read through high-interest books. The first book read and displayed to create interest was The Three Little Pigs. After several students realized they could read the book, other attractive books were displayed. Reading skills were taught individually and in groups to the children in need of them. The children kept records of the books read, and they had an award system for children who had read the most books. They also took books home to read to their parents, and the parental comments proved helpful for them. The idea of this approach was that the children's reading ability could be improved if they became interested enough in the material and thus, they proved to themselves that they could master the material. Through this experience, they were also learning to read for enjoyment.

Sellin (1966) adapted a basic reading series for the educable mentally retarded which would be both educational and interesting to them. The purpose of such an adaptation was to emphasize even to

elementary school EMR students vocational and occupational education rather than "relief, happiness, salvage, or busy work" programs which had once been the educational practice. The reading program stressed three areas pertaining to vocational education which were attitude formation, related vocabulary, and job information. The story used as an illustration of this technique was "Mr. Mac's Store" from Unit III of the Ginn first reader. The subheadings for the three main categories were attitude formation--dependability and mutual helpfulness and cooperation; related vocabulary--names of things or places, action words, names of persons, food, clothing, or shelter; job information--kind of job, duties of job, personal qualifications for job, importance of job, and places job is available. Sellin emphasized that this method was not designed to replace a type of reading instruction, but rather to give a new dimension to helping the EMR student to see that reading can be meaningful and applicable to real situations.

Karnes (1963) emphasized certain things that the teacher can do to improve the reading of educable mentally retarded students. The suggestions are as follows:

1) The teacher must be sure that all reading experiences are meaningful and that the students can experience success.
2) Words must be introduced in a meaningful context, and the teacher should seize every opportunity to incorporate the words learned into the speaking vocabulary.
3) In introducing new words, use as many senses as possible.
4) The teacher should strive to make every reading experience as concrete and functional as possible and to help the child to see a real purpose for reading.

5) After reading silently, the teacher should help the child draw conclusions, make inferences, see relationships, and make generalizations.

6) The teacher must evaluate the work of the mentally retarded child very frequently and help him acquire the correct responses, for he does not learn from his mistakes but will make the same ones over and over.

7) Mentally retarded students should read orally more often than more able children, but since they make more mistakes than children of average intelligence, they need more assurance from their peers.

8) Any creative ability recognized in the mentally retarded child should be encouraged.

In a brief article on the academic problems of educable mentally retarded students in the junior high school, Turner (1967) emphasized the error which some reading programs have which is having reading materials which are "offensive" to the students because of the simple nature of those materials. Turner stressed giving the students materials which are on a low readibility level with a high interest level. If these criteria are met, these EMR students can become confident readers at their own capacity, and they can be helped to read at the newspaper level. Also, if these criteria are met, their ability to read will help them to become better citizens by being able to support themselves at many jobs they could not have done without their reading at their potential level.

Yates (1969) reported a procedure to use in teaching reading to disadvantaged EMR students in junior high school to develop word

recognition and meaning of key words in a story to be read. The equipment used was a tape recorder and listening stations. The words to be read were pronounced; the students had to recognize the words and then write them; and a definition test was given. The students then read the story using the words they had just head and written. This technique was successful, according to Yates, in teaching reading to EMR students for the following reasons:

1) Most disadvantaged EMR students at early secondary level appear to have a positive attitude toward audio-visual equipment.
2) The lesson is carefully structured, and the forced choice answering on the first six blanks almost always assures correct answers and provides its own reinforcement.
3) The students are not just listening; they are "doing" as well.
4) They can turn the teacher off--literally--until they catch up or understand.

Cawley (1966) conducted a brief study to find discrepancies in the criteria measures and the diagnostic data of previous studies of mentally retarded students described as either "good" or "poor" readers. His basis for the research was that the tight circularity of the characteristics assigned to these readers are frequently so closely related to the measure by which the subjects were labeled until the contribution of the diagnostic battery was limited. Cawley stated that

> ... unless discrepancies are noted, remedial reading programs for the individual should be molar in composition and attention directed to the development of a complete program of improvement rather than the search for deficiencies in isolated skills.

He administered three tests (The Developmental Reading Test, The Silent

Reading Diagnostic Test, and the Phonics Mastery Test) to sixty-seven mentally handicapped children with an I.Q. range of fifty to eighty.

He concluded that with the tight circularity of the reading process, there are implications for improving both developmental and remedial reading programs for the mentally retarded. For developmental programs, considerations should be given to those elements which have the greatest influence on the student's reading performance. For the remedial programs, examinations should be made of educational, diagnostic, and treatment procedures; and in the educational procedures, special attention should be given toward the identification of the psyche-motor correlates of reading disability and ways of increasing sight vocabulary and comprehension. With attention to these two facets of the educational procedures, Cawley purports that treatment procedures can be developed rather than simply the measurement of educational performance of the mentally retarded.

In a study on the incidence and treatment of reading disabilities in institutionalized educable mentally retarded children, Daly and Lee (1960) cited a study by Hegge which was done in 1937 in which he stressed the same goals of reading for these students as there are today. Hegge had stressed the importance of remedying reading difficulties as part of the total rehabilitation program for the EMR in order to prevent social inadequacies. Daly and Lee concluded that during the correction of the reading difficulty, the individual treatment the student receives can act as a therapeutic measure in terms of mental health and personality stability because of the attention and direction given by the teacher.

Daly and Lee also noted that usually the reading ability of EMR children can improve measurably with individual or group remedial assistance. Phase II of their study dealt with ascertaining whether there is any significant difference in reading level with speed as a factor between retardates who are homogeneously grouped according to reading grade level and those who are heterogeneously grouped. They found no significant difference in the two groups but they noted that the weaknesses of the study could have been a factor in the results.

Jordan (1969) commented on the importance of developing comprehension in reading for the EMR student by stating that "since reading can be functional only to the extent that it is meaningful, the development of comprehension is essential if instruction is to be worthwhile." Initial reading instruction for the normal child, Jordan pointed out, is different from that of the mentally retarded child even though some teachers of these students pattern their instruction as if no difference existed. With normal students, very little emphasis is placed on the meaningfulness of reading, and it is assumed that only a slight reminder is needed for them to surface their readiness for comprehension which comes from past experiences with books and their language development. With mentally retarded children, however, their inadequate language development and practically no past experience with books make such an approach unfeasible, but Jordan noted that this is usually how retarded children are taught.

The apparent lack of understanding of what is read by mentally retarded students is obvious by several factors outlined by Jordan. These factors are (1) expressionless reading, (2) dropping of the voice at the end of a line rather than at the end of a sentence, (3) no

reaction when a sense-destroying error is made, (4) inability to follow directions, and (5) not gaining information from what is read. Most mentally retarded students do not expect what has been read to make sense and are not surprised when they do not understand the material. According to Jordan, this is the reason they do not stop and repeat a word which has been mispronounced.

For the mentally retarded child to read with greater comprehension, Jordan developed the following needs:

1) A vocabulary adequate in both the number and complexity of its concepts.
2) The expectation of meaning (should be the first thing taught in reading before individual words are memorized).
3) A background of familiar experiences to which to relate the material to be read.

McCormick et al. (1969), reported a study designed to improve the reading level of approximately 268 seventh graders in reading classes in a suburban junior high school of San Francisco. Even though these students were not labeled as educable mentally retarded, they were reading from one to four levels below their grade placement. Also, the teachers were not experienced or prepared in the teaching of reading, but they found themselves teaching reading classes. They chose the Macmillan Reading Series for the fourth, fifth, and sixth grade levels which had a comprehensive coverage of basic reading skills, and the students had not seen or used the texts in previous grades. The series also had stories of interest to junior high school students, and the text was accompanied by a comprehensive teacher's manual.

In addition to the basal readers, charts were used extensively to reinforce visual and auditory skills. Tape recorders and listening posts were set up for the students to record their oral reading and to listen as it was played back. The classes were kept small in number in order for teachers to work more closely with the students. The results of this reading program were that the students had a change in attitude about reading and a change in their self-concept because of their success in reading; of the 268 students who started the program, 243 students had a yearly mean gain of 1.1 years compared with the earlier .6 yearly gain.

A similar study by Wilson and Parkey (1970) was done with poor readers of Somers Middle School in Charles County, Maryland. The authors used the language-experience approach exclusively with all school subjects--no textbooks were used. Their conclusions were that the students showed overall progress, had an improved self-concept, and made some progress in reading skills. They noted that the progress was very slow, but these students did make progress.

Reading and the Culturally Disadvantaged

Wallin (1961) reported that as early as 1914, a few cases of mild deficiency could be attributed to an impoverished social and educational environment. Mercer (1971) conducted a study on the socio-cultural factors involved in the placing of Mexican-American and Negro children in special education classes in Riverside, California. In the epidemiology of mental retardation, disproportions by socio-economic level and ethnic group appeared in the case register of 812 retardates labeled by community organizations and public schools. Forty-one

percent of these persons who were nominated as retarded by formal organizations in the community were living on census blocks for which the median value of housing was under $10,720. The public schools labeled an even larger percentage (fifty-three percent) of this group as being mentally retarded.

Anglos comprised eighty-two percent of the population of Mercer's study but made up only fifty-four percent of the labeled retardates. Mexican-Americans comprised nine and one-half percent of the population but contributed thirty-two percent of the labeled retardates. Negroes, who constituted seven percent of the population of the community, contributed eleven percent of the labeled retardates.

Zigler (1967), like Mercer, drew the same conclusions that children from these lower socio-economic groups are exposed to a greater risk of organic damage because of poor diet, less adequate medical care, and other health hazards which are more prevalent in such environments than in more advantaged homes. Mercer further concluded that the genetic theorists' argument that the downward drift of the genetically inferior accounts for differentials by socio-economic level is not a sufficient explanation for the surplus of Mexican-Americans and Negroes among the labeled retardates because they have never had equal access to the opportunity structure of American society nor have they ever held higher social status from which the poorly endowed could drift downward.

In a study on the psychological factors related to early reading behavior of educable mentally retarded and nonretarded children, Blackman and Burger (1972) concluded from their study that EMR and nonretarded children rely on memory processes in their acquisition of reading skills. Their study had been conducted on 172 subjects from eleven public schools

in the disadvantaged areas of the Bronx in New York City; this included ninety-four EMR students and seventy-eight students in the nonretarded group. They found visual wordness to be the most significant contributor to the prediction of the reading achievement criterion.

Chandler (1966) did an extensive study on the literature available concerning reading disability and socio-economic status. He outlined a study done by Coleman which showed the relationship between socio-economic status and performance of junior high school students in three groups--Group I, the high status group; Group II, normative; Group III, low status. He sampled forty-three cities and various types of schools and communities and found that as a group the poor readers were children of low socio-economic status. In a cited Denver, Colorado, study, Granzow stated that in fifty-one of the sixty-nine schools surveyed, the following information was learned:

1) The underachievers in reading came from homes of lower socio-economic status.
2) The percentage of parents who were indifferent to reading was higher for the underachievers in reading.
3) The parents of the underachievers in reading had fewer educational advantages.

Chandler stated that the studies he surveyed indicated that if intelligence is held constant, the differences between the higher and lower social strata result largely from the differences in experimental backgrounds. One such study related was done by Almy who found a significant positive correlation between success in reading and experiences such as looking at magazines and books, having interest created in words, letters, and numbers, and having someone to read to them. Similarly,

Herr did an experiment with Spanish-speaking children by giving them pre-first grade training for reading readiness. From the success of her project, she noted that "... a large percentage of failures could be eliminated in the lower grades if all Spanish-speaking children were given a year of preparatory training."

The elementary school curriculum, according to Chandler, mirrors the values of the middle class, and the reading material of the lower-income children largely reflects the vocabulary, interests, and experiences of the upper classes. As an example, he cited a study by Sexton which noted that the zoo of Big City was located in the middle-class neighborhood of the town, and practically no Negroes visited it. The reading readiness test used by the town, however, included animals which the city children would see in the zoo. Chandler concluded the study by stating that there are several significant questions which need answering "... before some of the socially-oriented correlates of reading ability can be resolved."

Williams et al. (1968), made a study of the effectiveness of two types of programmed presentation--teaching machine and programmed textbooks--on the verbal skills of word recognition, phrase recognition, sentence reading, and paragraph reading of three groups of second grade, low socio-economic students in Tampa, Florida. The traditional classroom method was used with one group and the programmed presentations with the other two groups. Their conclusions were that both groups using the programmed approaches made "dramatic" gains in word-recognition and paragraph reading. The teaching machines had a salutary effect of creating interest in reading. The group using the classroom approach also made some gains in verbal skills, but they were very

slight. The authors pointed out that the programmed method was not intended to replace the classroom instruction but rather to supplement it, for all groups were exposed to both conditions. The significant gains with the programmed presentations suggested that they can facilitate learning of verbal material and can improve motivation for other school work.

Kodman (1970) conducted a study on the effects of preschool enrichment on the intellectual performance of Appalachian children. He observed that because of the unfamiliarity of the school situation, these children need more help and individual attention to build self-confidence in learning. His experimental group was a group of twenty children in the four and five year old age bracket in eastern Kentucky with a new enriched group being added each year for the three-year study. The educational program emphasized sensorimotor skills and speech, language, perceptual and cognitive development. The enriched environment (two-room classroom) included modern toys and games, and the learning experiences of the children were permissive, pupil-centered, and innovative with self-confidence, trust, creativity, and feelings of personal worth being stressed. The overall conclusions drawn from the study were (1) the enriched gained I.Q. points while the control group lost points during the first year of the project, and (2) the second and third year enriched groups showed significant gains in intellectual performance.

In a study comparing first and second grade children in a continuing reading program described as the CRAFT Project, the authors (Harris et al., 1967) used two approaches to reading (skills-centered versus language-experience) and four teaching methods (basal reader,

phonovisual, language-experience, and language-experience audio-visual). The study was conducted on twelve schools in the New York City area with the bulk of the children coming from Negro ghetto neighborhoods. Their conclusions on this comparative study were as follows:

1) The disadvantaged urban Negro children who had been in the CRAFT classes for both years scored somewhat better than those who were in other second grade classes.
2) Neither approach was significantly better than any other method as measured by the Metropolitan Upper Primary battery.
3) The study revealed that the teacher was a far more important influence than any particular one of the four methods used.

Della-Dora (1962, 1963) conducted two studies on the educational implications of certain social-cultural phenomena found in present society. In commenting on the implications the social-cultural differences have on the total effectiveness of the school, he stated that many of the culturally disadvantaged children lack interest in school and show evidence of low motivation. Apathy, emotional and social maladjustment among parents, lack of books or other learning media, and little opportunity for travel all contribute to an educationally sterile home environment. If the schools are to continue to function academically in a democratic society, he emphasized that a solution to equate or to make allowances for these differences must be found.

The effects which positive incentives have on retarded and normal readers were studied by Lyle and Goven (1971). Their research specifically dealt with visual recognition tasks. The subjects were twenty-eight retarded readers and twenty-eight normal readers from six primary schools in an outer London borough. The Schonell Graded Word Reading

Test was used to assess reading ability, and the A.C.E.R. Lower Grades General Ability Scale was used to measure I.Q.

The stimuli used in the learning trials were pairs of geometrical shapes. As subjects were required to learn which two shapes went together, the stimuli had to be relatively easy to discriminate. Lyle and Goven concluded that the incentives--monetary gifts, encouragement to do better, knowledge of results--did have positive reinforcement value for young children. They further pointed out that the visual associate learning task was not considered as being analogous to the task of learning to read.

Girardeau (1971) conducted research on the effects of positive and negative reinforcements on cultural-familial retardates. He observed that the middle class parent and the parent of the cultural-familial used reinforcers differently or not at all by the cultural-familial parent because of the unavailability of these reinforcers to the latter. For example, the middle class parent who has a good income may use money or trips (which require money) as reinforcers for desirable behavior, whereas the parent of the cultural-familial usually does not have the money necessary for reinforcement. Such a reinforcer limitation can be overcome by developing a synthetic reinforcer system (those reinforcers added to the environment for specific behavioral development purposes). The main reinforcer problem, however, may be that parents of these children do not know about the effectiveness of positive reinforcers and, even if they did, would not develop effective synthetic systems without the assistance of professional persons.

Girardeau noted that the lack of use of positive reinforcers following intelligent behavior by the cultural-familial retardate may

be viewed as a two-fold problem:

1) Adding reinforcers to the environment so they can be used.

2) Educating parents and other personnel regarding their effectiveness and lack of deleterious side effects.

Another problem which exists is that the parent of the cultural-familial retardate probably relies much more on punishment as a means of control than the parents of other children. The use of physical punishers may be a major factor in the low rate of intelligent behavior by the cultural-familial retardate, not only in specific situations, but also because of its possible extensive side effects.

Girardeau concluded that a behavioral approach to cultural-familial retardation can accomplish its aim rather than one which has an assumption of genetic differences as some writers contend. He noted that the cultural-familial retardate may be functioning ineffectively for several reasons and remedial programs can be set up to use these bases of disfunction. For example, if a child is receiving very little food at home, a remedial program which uses food as a positive reinforcer may be extremely effective; thus, the effective remedial program may take advantage of such natural deficiencies in the environment and, where possible, may provide reinforcers which are also discriminative stimuli for other desirable, intelligent behavior. For example, books or trips to the zoo are perfect reinforcers because they may also provide an occasion for the child to emit other intelligent behavior which may be positively reinforced, Girardeau contended. The lack of such reinforcers in the environment of the cultural-familial retardate and their use, contingent on intelligent behavior, are probably the major problems, although not the only ones.

In noting the part motivation plays in the education of the culturally disadvantaged children, Epps (1970) suggested that low achievement motivation may be a result of the failure in the socialization process in the home of minorities, especially of the Negro with the matricentric family structure. He pointed out that anxiety levels are created as a result of the home environment. People with low anxiety levels perceive a probability of success, and people with high anxiety levels have a fear of failure.

Epps concluded that since the educational difficulties of the culturally disadvantaged children seem to be based on low achievement motivation and high anxiety levels, among other things, steps should be taken to improve the educational environment for culturally disadvantaged students.

Summary

The review of the literature reflects that the educable mentally retarded child may be reading on his mental age level or he may be reading far below this level. With different instructional techniques and materials, gains have been made in improving the reading level of the EMR child. One significant factor which occurred throughout the literature in improving the reading level, improving self-concept, or destroying the "failure syndrome" was interest. On the junior high school level, high-interest materials with a low readability level are a must for helping the EMR.

The literature reflects the general consensus among the authors that those groups who are labeled as culturally disadvantaged are also labeled as mentally retarded by a higher percentage than other groups

in American society. Also, the home environment of the culturally disadvantaged may be directly related to the intellectual behavior of the members of these groups with their reading skills being included in this intellectual behavior.

There has not been enough research on the effect enrichment activities have on the reading level of the educable mentally retarded. Specifically, on the effect an intensive cultural enrichment program has on the reading level of EMR in the junior high school age range, the literature is very meager. The progress these students make in the communicative skills during these years may have an effect on whether they become productive citizens or dependent citizens. If the educable mentally retarded can become more independent and more productive as a result of intensive cultural enrichment, then these findings will have new implications for teachers, counselors, and other persons interested in the maximum learning potential for the educable mentally retarded.

CHAPTER III

DESIGN AND METHODOLOGY

Introduction

This chapter contains a description of the population, design of the study, instruments used and application to the study, and materials and instructional techniques used in this study. Testing procedures and statistical methods utilized are also included.

Description of the Population

The population of this study consisted of 30 students from special education classes at Harding Middle School, Oklahoma City, Oklahoma. The Oklahoma City Public School System, which has over 100,000 students, was selected because of the diversity and mixture of its population. Such diversity provided a better sampling which perhaps lends itself to greater reliability.

The subjects, who were randomly selected, were seventh and eighth graders and were identified as educable mentally retarded (EMR). They had an I.Q. range of 50 to 79 as measured by the Wechsler Intelligence Scale for Children (WISC) (see Appendix A), and their chronological ages ranged from twelve to fourteen years. The determining factors of these students' being placed in special education were the scores made on the WISC, psychological examinations, counselor recommendations, teacher recommendations, and physical examinations. The subjects were

randomly selected for a control group (Group B) and for an experimental group (Group A) with fifteen students in each group. The complete composition of both groups were as follows: (1) Group A had seven boys and five girls; of these students, nine were black and six were white; (2) Group B had ten boys and five girls; of these, eight were black and seven white.

Design of the Study

As stated, subjects for the experimental and control groups were randomly selected from all seventh and eighth grade EMR students at Harding Middle School. Group A was subjected to eight weeks of intensive enrichment activities while Group B received only regular instruction.

The language-experience approach was the method used for Group A. This approach involved the instructional framework of orientation--activity--language comprehension. The subjects were oriented on what to expect on the different excursions. The writer fully explained the nature of the activity and gave each subject an opportunity to tell what he knew about the planned event.

There were eight enrichment activities--one per week. These were, in order of occurrences, (1) Horace's Supper Club, (2) Springlake Amusement Park, (3) Cowboy Hall of Fame, (4) Six Flags Over Texas, (5) Oklahoma City Zoo, (6) Oklahoma City Planetarium, (7) Red Rock Canyon (camping trip), and (8) bowling (see Appendix B).

After each activity, the writer's primary objective was to focus on language comprehension. This involved having the subjects relate experiences which were recorded. Words used by the subjects in

describing the activity were placed on flash cards for visual identification. In identifying the words, the writer would hold up cards for both individual and group response. An experience-related story (see example of story in Appendix C) was developed by the writer and then read by the subjects. For comprehension of the story, questions were placed on cards and each subject was asked to respond. These post-activity sessions took place in three periods ranging from forty-five to ninety minutes each.

As previously stated, Group B received the traditional approach and was not directly or indirectly involved with Group A. This group received basic instruction in reading, spelling, arithmetic, and specialized instruction in such areas as swimming, music, art, and home economics.

Instruments Used and Application to Study

Three instruments were used in this study. These were the Informal Vocabulary Test, Dolch Basic Vocabulary, and Gates-MacGinitie Reading Test (Primary A, Form 1).

Informal Vocabulary Test

The Informal Vocabulary Test (see Appendix D), which was developed by the writer, consisted of fifty vocabulary words selected on the basis of activities in which the subjects participated. Although this instrument had not been subjected to item analysis for reliability or validity, it was developed to determine if Group A would learn more vocabulary.

Dolch Basic Vocabulary Test

The Dolch Basic Vocabulary Test is a list of 220 words which make up fifty percent or more of the reading matter used on the elementary school level. The test is categorized into preprimer, primer, first, second, and third grades. The instrument was used to determine the amount of vocabulary knowledge both groups had at each grade level. Since the achievement level of most EMR students in reading is third grade and below, the Dolch Basic Vocabulary Test was selected because of its reliability at the lower grade level.

Gates-MacGinitie Reading Test

The Gates-MacGinitie Reading Test (1964), is a standardized instrument which covers kindergarten through twelfth grade. Although this test consists of eight batteries--Readiness Skills, Primary A, Primary B, Primary C, Primary CS, Survey D, Survey E, and Survey F--Primary A, Form 1 was selected because of its high validity of reliability at the lower grade level. It was also selected because it identifies a grade level and determines vocabulary and comprehension scores. The vocabulary section of this instrument consisted of forty-eight vocabulary words, and the task for each subject was to circle one of four words which identified the picture. The comprehension section consisted of thirty-four sentences in either question or statement form which required the subject to identify one of four pictures as the correct response.

Materials and Instructional Techniques

The major purpose of this study was to determine if EMR students could show greater achievement in reading if subjected to an intensive enrichment program. As such, the investigation was begun by becoming acquainted with Group A. The purpose of this was to develop rapport which would lend itself to optimum interaction between investigator and subjects.

The language-experience approach was selected for use in this project because of its unique adaptability for EMR students. These students tend to be limited in their environment as they are less exposed to the so-called "normal" activities in which the average child (I.Q. range of 100 to 110) participates. As most EMR students have a greater oral than written communication, it was expected that this approach would decrease this gap. This approach is also a motivational technique which capitalizes on student interest and develops a sense of self-confidence.

Generally, the language-experience approach is a method of instruction by which students learn to read through the use of their own experiences. For example, after a planned excursion to a dairy farm, students may become involved in various learning situations centered around the initial activity such as developing a story based on the experience, having a health unit on the nutritional value of dairy products, or initiating a science unit on the milk-producing cycle. Through this approach, the visual and mental experiences are combined for greater understanding.

The activities used in this research were determined by two means: (a) presenting a list to the subjects from which they could select, and

(b) asking subjects to give names of activities in which they would like to participate. From these lists, eight activities were selected on the basis of those in which interest was greatest.

Each activity was preceded and followed by group sessions. The pre-session was designed to orientate the subjects to the type of activity. Since most activities were instituted in an informal manner, the subjects were able to concentrate on individual interests. In two instances, however, the subjects followed a structured procedure. For example, in the case of the visit to the Cowboy Hall of Fame, the subjects were given a guided tour, and they were not allowed to spend additional time concentrating on special interests.

The post sessions (three for each activity) were used for several purposes. First, the subjects were asked to discuss their likes and dislikes about the experience. In order to generate discussion, each student was requested to respond to questions such as (a) What did you like best about the trip?, (b) What was most exciting about the trip?, (c) What did you dislike most?, (d) Would you like to go again? If so, why?, (e) Can you think of other things that happened that were not mentioned? All responses were recorded and a story was developed around each activity utilizing the students' vocabulary and their conception of the activity.

Second, instruction was given through the use of flash cards which consisted of isolated words from each experience. Third, the subjects were given the story to read. Where reading difficulty was apparent, individualized instruction was given. Fourth, comprehension questions were placed on flash cards for the subjects to answer individually and

in groups. After post sessions were completed, the entire enrichment process was repeated with each new activity.

Testing Procedures

Several preliminary measures were taken in testing the subjects in this study. In most testing situations, students, especially at the lower grade level, have a tendency to perform better in familiar surroundings. As a result, the instruments were administered in the regular classroom by a special education teacher who taught both experimental and control groups. This one examiner was used because a lack of consistency in administering the instruments could cause confounding variables and lack of reliability. In administering the Informal Vocabulary Test and the Dolch Basic Vocabulary Test, the examiner gave each subject a list of words to identify all the words that were known. The number of correct and incorrect responses were recorded by the examiner. On the vocabulary section Gates-MacGinitie Reading Test, the subjects were asked to circle one of four words which correctly identified the picture presented. On the comprehension section of this same test, the subjects were asked to read a sentence and identify one of four pictures which was associated with the sentence. The responses were recorded by the subjects and were tabulated by the examiner.

Statistical Treatment of Data

The hypothesis of this study is that no significant differences in reading achievement exist in the control group as compared to the experimental group as the result of an intensive cultural enrichment program. The results of the tests, Gates-MacGinitie Reading Test, Dolch

Basic Vocabulary Test and the Informal Vocabulary Test, administered at the end of the eight-week enrichment period were handscored and means were calculated for the total scores for the control and experimental groups. Fisher's *t* for independent samples was used to test significant differences between groups. The .05 level of significance will be required.

Summary

This chapter has presented a description of the population, the design of the study, materials and instructional techniques, testing procedures and statistical methods utilized. Thirty, seventh and eighth grade EMR students were selected by random sampling from Harding Middle School, Oklahoma City, Oklahoma. The experimental group was subjected to an intensive enrichment program in which the language-experience approach was used. The instruments used at the culmination of the enrichment period were the Informal Vocabulary Test, Dolch Basic Vocabulary Test, and Gates-MacGinitie Reading Test. The statistical measure used to analyze data was Fisher's *t* with a .05 significance level.

CHAPTER IV

TREATMENT OF DATA

Introduction

The purpose of this chapter is to present a detailed description of the statistical treatment of the data and a statement of the results. The primary concern of this study was to determine if significant differences existed in reading achievement of the control group as compared to the experimental group as a result of a short term intensive enrichment program. Raw scores of the instruments administered (Informal Vocabulary Test, Dolch Basic Vocabulary Test, Gates-MacGinitie Reading Test) were analyzed using Fisher's t test formula. The .05 level of significance was required using the two-tailed test. The facilities of the Langston University Computer Center were used for computing all results. In the analysis below, Group A will always designate the experimental group while the control group will be designated by Group B.

Analysis of Data

Informal Vocabulary Test

The Informal Vocabulary Test was developed by the researcher on the basis of each of the experiences of Group A. Subjects in both groups were asked to identify the words which were familiar on the word list.

The raw scores are presented in Table I. These scores ranged from seventeen to forty-eight for Group A while those for Group B ranged from ten to forty-eight. Approximately twenty-one percent of the subjects in Group B scored below all subjects in Group A. Specifically, it should be noted that the lowest three scores made by Group A were seventeen, nineteen, and twenty; whereas, the three lowest scores made by Group B were ten, twelve, and fourteen, thus indicating some gain for Group A. The mean scores for Group A and Group B were 33.29 and 29.07, respectively.

TABLE I

INFORMAL VOCABULARY TEST: RAW SCORES

Subjects	Experimental Group	Control Group
A	40	10
B	37	35
C	42	27
D	39	34
E	41	48
F	43	25
G	20	14
H	30	36
I	-	12
J	19	32
K	17	43
L	32	24
M	26	-
N	48	20
O	42	47

Control Group Mean = 29.07
Experimental Group Mean = 33.29

A graphic presentation of the raw scores is in Figure 1. There is an average distance of five points between the two groups. This is indicative of some gain having been made in vocabulary by Group A. In statistically analyzing the raw scores, it was determined that the t value for this instrument was 1.38. The results may be seen in Table II.

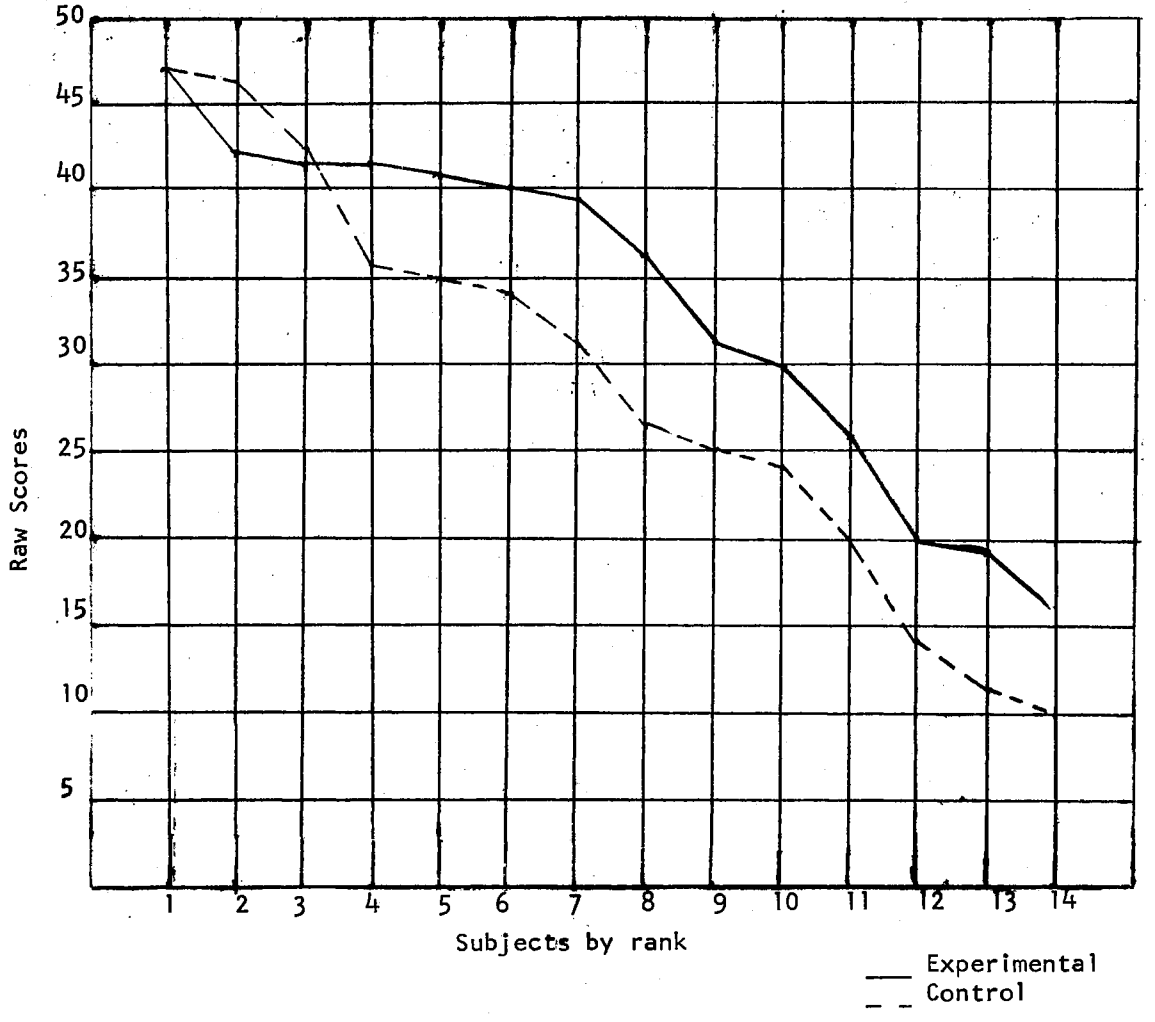

Figure 1. Informal Vocabulary Test: A Comparison of Raw Scores of Groups A and B by Rank

TABLE II

INFORMAL VOCABULARY TEST: A STATISTICAL COMPARISON OF GROUPS A AND B

Group	No.	S.D.	Mean Score	t Value
A	14	10.31	33.29	1.38 NS
B	14	11.95	29.07	

No significant difference was found in the vocabulary scores as a result of the intensive enrichment experiences, thus accepting the null hypothesis.

Dolch Basic Vocabulary Test

The number of subjects who were administered the five batteries was fourteen rather than fifteen because two subjects were unable to take the instruments, one each for the control and the experimental groups.

The raw scores for the Dolch Basic Vocabulary Test are found in Tables III and IV for Groups A and B, respectively. These scores showed that in each battery, the lowest scores of Group A were higher than the lowest scores of Group B. At the pre-primer level, approximately twenty-one percent of Group B's scores were lower than the least score of Group A. The percent scores of Group B below the least score of Group A for primer, first, second, and third levels were approximately twenty-nine, twenty-nine, forty-three, and thirty-six, respectively. These comparative differences indicated some improvement in vocabulary.

TABLE III

DOLCH BASIC VOCABULARY TEST: RAW SCORES FOR GROUP A

Subjects	Pre-Primer (40 words)	Primer (52 words)	1 (41 words)	2 (46 words)	3 (41 words)
A	40	50	39	43	40
B	37	50	39	37	34
C	40	52	41	44	38
D	40	52	36	42	34
E	40	51	39	40	39
F	39	52	38	44	35
G	37	36	29	32	18
H	40	52	34	32	26
I	-	-	-	-	-
J	35	44	30	29	30
K	39	46	36	34	29
L	40	51	38	42	36
M	37	44	25	31	29
N	40	52	40	46	41
O	38	36	29	29	28

TABLE IV

DOLCH BASIC VOCABULARY TEST: RAW SCORES FOR GROUP B

Subjects	Pre-Primer (40 words)	Primer (52 words)	1 (41 words)	2 (46 words)	3 (41 words)
A	40	31	21	19	16
B	36	44	31	25	18
C	40	52	41	41	35
D	39	52	38	37	30
E	37	48	25	22	15
F	40	52	41	46	41
G	40	52	34	34	38
H	32	33	20	18	12
I	31	33	20	18	12
J	40	52	38	40	37
K	40	52	37	40	38
L	-	-	-	-	-
M	25	31	23	16	14
N	40	52	41	46	40
O	40	52	40	41	37

Because there were five batteries of tests—pre-primer, primer, first, second, and third grade levels—each battery was analyzed separately in order to determine if differences existed at a particular grade level. At the pre-primer grade level, the raw scores were compared as presented in Figure 2.

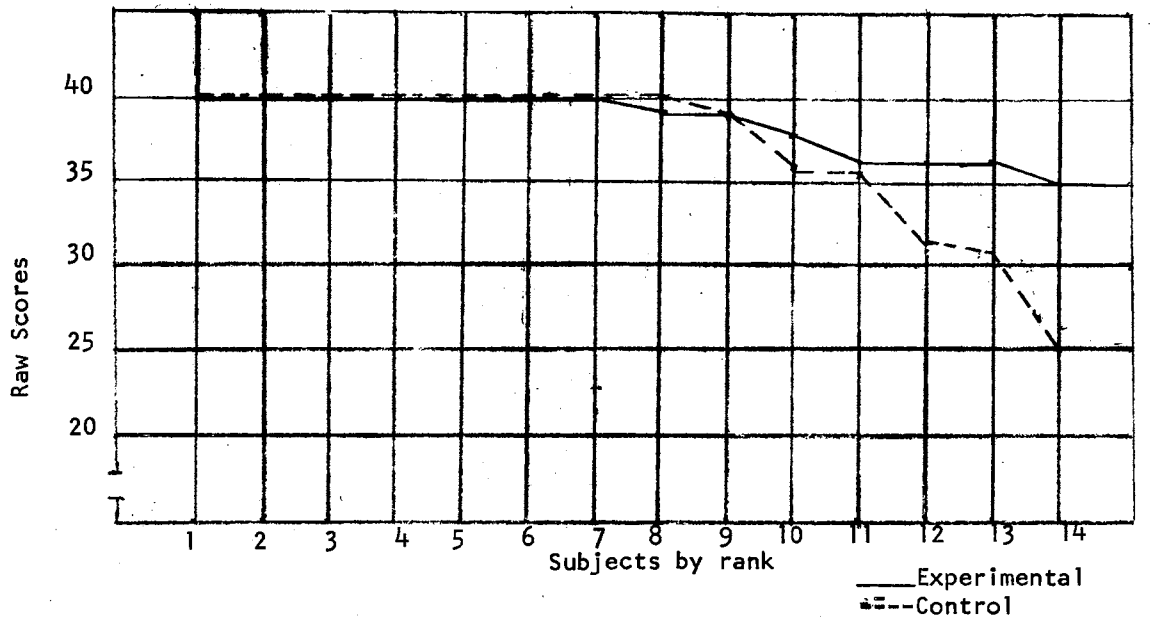

Figure 2. Dolch Basic Vocabulary Test: A Comparison of Raw Scores of Groups A and B on the Pre-Primer Battery

Fifty percent of the subjects received the same scores at the pre-primer level. A deviation of at least five points in instrument results was evident for only twenty-one percent of the subjects; thus, it appears that the differences between the two groups were slight at this

level. Group A's mean score was 38.71 while that for Group B was 37.14. The results of the Fisher's t test are found in Table V.

TABLE V

DOLCH BASIC VOCABULARY TEST: A STATISTICAL COMPARISON OF GROUPS A AND B AT THE PRE-PRIMER LEVEL

Group	No.	S.D.	Mean Score	t Value
A	14	1.58	38.71	1.025 NS
B	14	4.49	37.14	

The t test result of 1.025 at the pre-primer level indicated that there was not a significant difference between the scores of the two groups at the .05 level, thus accepting the null hypothesis.

A comparison of the raw scores for the primer grade level of the Dolch Basic Vocabulary Test is presented in Figure 3.

No differences existed in the reading scores of approximately thirty-six percent of the paired subjects. An average variation of approximately ten points was present in the case of twenty-nine percent of the paired subjects, while extremely close scores were apparent in the remaining thirty-six percent. Although some difference existed in the raw scores, no significant difference was found between the two groups on the primer battery of the Dolch Basic Vocabulary Test. The results of the statistical analysis are shown in Table VI.

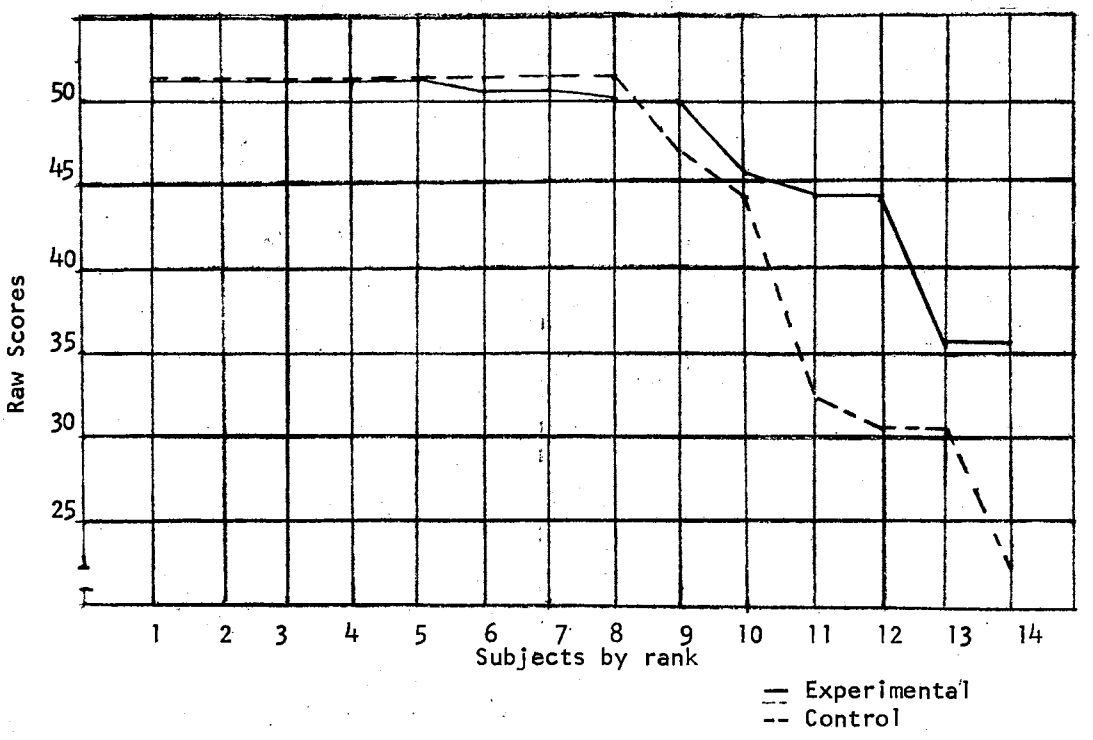

Figure 3. Dolch Basic Vocabulary Test: A Comparison of Raw Scores of Groups A and B on the Primer Battery

TABLE VI

DOLCH BASIC VOCABULARY TEST: A STATISTICAL COMPARISON OF GROUPS A AND B AT THE PRIMER GRADE LEVEL

Group	No.	S.D.	Mean Score	t Value
A	14	5.53	47.71	0.77 NS
B	14	8.72	41.43	

In comparing the t value with the table value of 2.056, it was determined that there was a difference of 1.286, thus accepting the null hypothesis.

The raw scores of the subjects at first grade level on the Dolch Basic Vocabulary Test are compared in Figure 4.

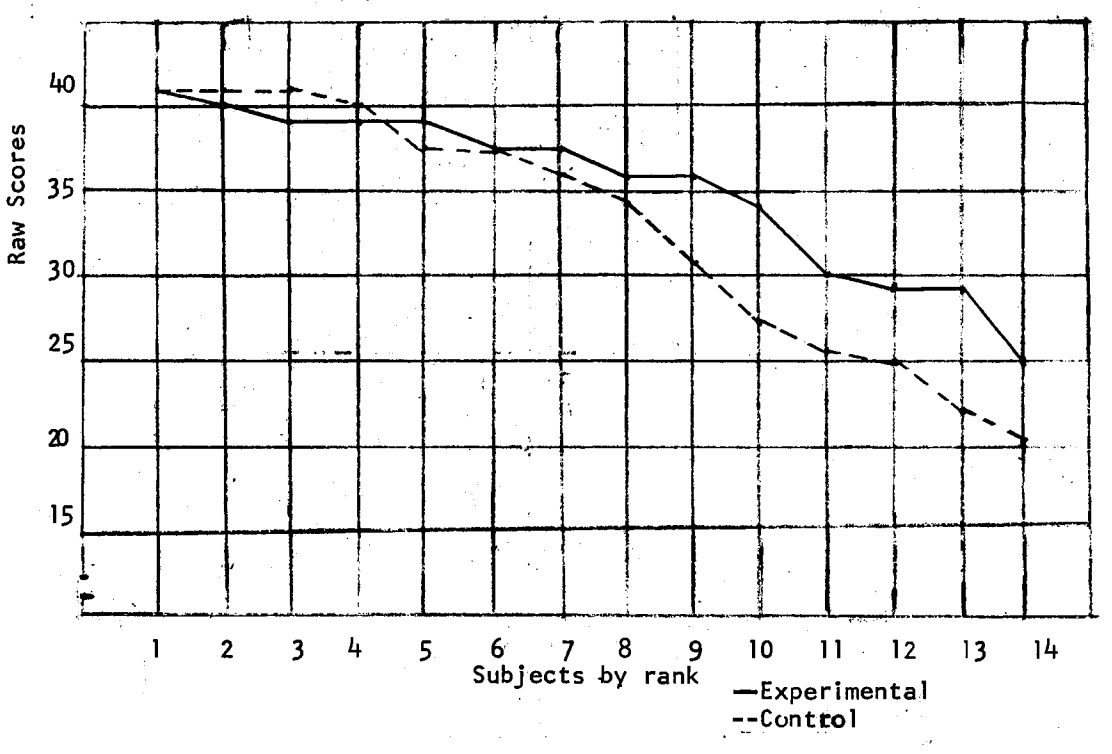

Figure 4. Dolch Basic Vocabulary Test: A Comparison of Raw Scores of Groups A and B on the First Grade Battery

Differences were present in the scores of the paired subjects in eighty-five percent of the cases. A difference of five points or greater was present for forty-three percent of the paired subjects. The

graphic presentation of the first grade level shows that some differences did exist in the results. A statistical analysis of these results produced a t value of 1.043 as presented in Table VII.

TABLE VII

DOLCH BASIC VOCABULARY TEST: A STATISTICAL COMPARISON OF GROUPS A AND B AT THE FIRST GRADE LEVEL

Group	No.	S.D.	Mean Score	t Value
A	14	4.87	35.21	1.043 NS
B	14	7.84	32.57	

No significant difference was found between the two groups on the first grade level of the Dolch Basic Vocabulary Test at the .05 level of significance. The null hypothesis, therefore, was accepted.

The Dolch Basic Vocabulary Test results at the second grade level are presented graphically in Figure 5.

The average number of points between the two groups was approximately seven. In the case of thirty percent of the paired subjects, a difference of at least twelve points existed. The graphic differences between the two groups indicate the possibility of a significant difference.

The statistical results of the second grade level was 1.724 as shown in Table VIII.

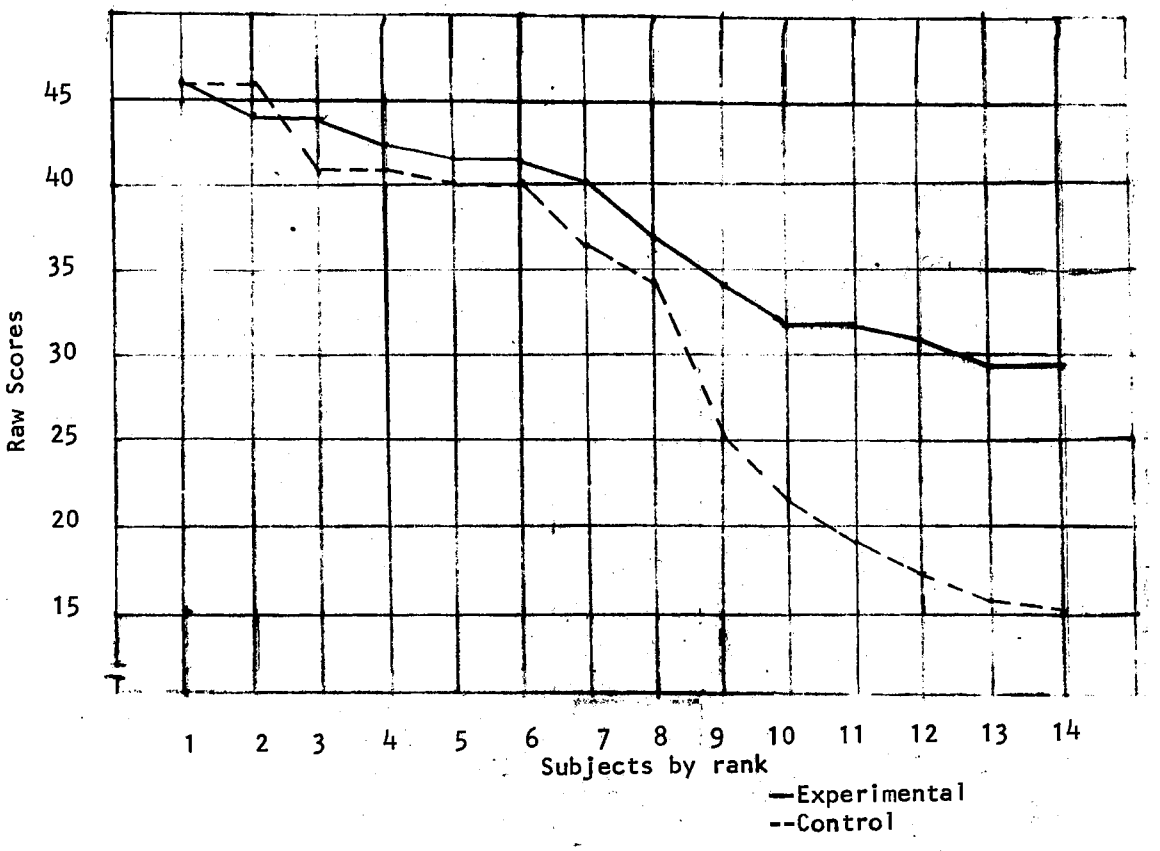

Figure 5. Dolch Basic Vocabulary Test: A Comparison of Raw Scores of Groups A and B on the Second Grade Battery

TABLE VIII

DOLCH BASIC VOCABULARY TEST: A STATISTICAL COMPARISON OF GROUPS A AND B AT THE SECOND GRADE LEVEL

Group	No.	S.D.	Mean Score	t Value
A	14	5.94	37.50	1.724 NS
B	14	11.23	31.43	

The results of the Dolch Basic Vocabulary Test at the second grade level were not significant. The null hypothesis was, therefore, accepted.

The final test in the Dolch series was level three. Figure 6 is a graphic presentation of the raw scores.

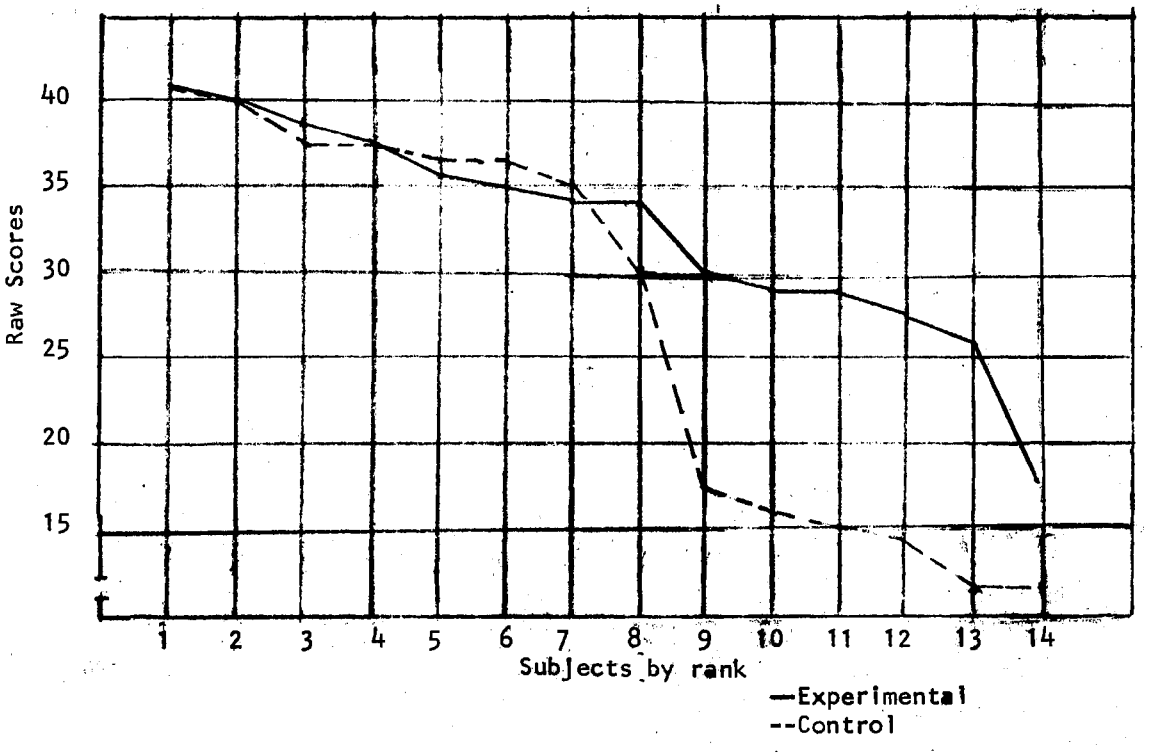

Figure 6. Dolch Basic Vocabulary Test: A Comparison of Raw Scores of Groups A and B on the Third Grade Battery

These raw scores showed a large degree of variation in forty-three percent of the cases. In the remaining fifty-seven percent, variation

was either slight or non-existent. The results of the t test are found in Table IX.

TABLE IX

DOLCH BASIC VOCABULARY TEST: A STATISTICAL COMPARISON OF GROUPS A AND B AT THE THIRD GRADE LEVEL

Group	No.	S.D.	Mean Score	t Value
A	14	12.59	32.64	1.12 NS
B	14	11.45	27.36	

The result of the t test at the third grade level—1.12—indicates that no significant difference existed between the scores of Groups A and B. The table value of 2.056 exceeds the computed t value of 1.12 by .936. The null hypothesis was, therefore, accepted.

Gates-MacGinitie Reading Test

The last in the series of instruments which were administered was the Gates-MacGinitie Reading Test, Primary A, Form 1. Raw scores for this test are in Table X.

Approximately twelve percent of the paired subjects in Group B ranked below the lowest score in Group A. In all other cases, the scores were more closely ranked. These scores are compared graphically in Figure 7.

TABLE X

GATES-MACGINITIE READING TEST: A COMPARISON OF RAW SCORES OF GROUPS A AND B

Subjects	Experimental Group	Control Group
A	3.5	2.0
B	3.5	2.6
C	3.9	2.4
D	3.1	1.7
E	2.7	2.6
F	2.9	1.6
G	2.3	1.6
H	2.3	3.0
I	1.6	1.6
J	1.6	3.0
K	1.6	3.5
L	1.9	1.4
M	1.8	1.6
N	3.5	1.3
O	2.2	3.4

Group A Mean = 2.41
Group B Mean = 2.22

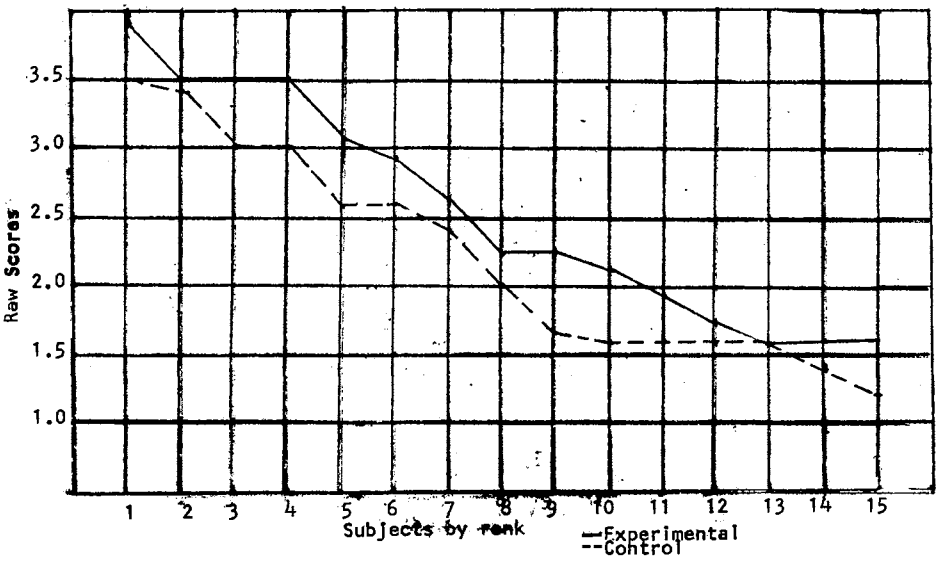

Figure 7. Gates-MacGinitie Reading Test: A Comparison of Raw Scores of Groups A and B

Figure 7 shows an average distance of three points between the scores of Group A and those of Group B. The greatest number span between the two groups was only five points.

The statistical results are in Table XI.

TABLE XI

GATES-MACGINITIE READING TEST: A STATISTICAL COMPARISON OF GROUPS A AND B

Group	No.	S.D.	Mean Score	t Value
A	15	1.16	2.41	.5068 NS
B	15	.728	2.22	

Based on the results of the t test, it was determined that there was no significant difference in the scores of the two groups on the Gates-MacGinitie Reading Test, thus accepting the null hypothesis.

Summary

Three instruments were administered to the experimental group (Group A) and the control group (Group B) in order to test the null hypothesis which states that there is no significant difference in the reading achievement of the control group as compared to the experimental group as a result of an intensive cultural enrichment program. These instruments were the Informal Vocabulary Test (developed by the

writer), Dolch Basic Vocabulary Test, and the Gates-MacGinitie Reading Test. The scores of the two groups were statistically compared using Fisher's t with the .05 level of significance used as the criterion.

The statistical results of the Informal Vocabulary Test supported the null hypothesis that no significant differences existed between the experimental and control groups.

The Dolch Basic Vocabulary Test was statistically analyzed by grade levels. The results of each level—pre-primer, primer, first, second, and third—showed no significant differences, thus accepting the null hypothesis.

The final test which was administered, the Gates-MacGinitie Reading Test, also accepted the null hypothesis that no significant differences existed.

CHAPTER V

SUMMARY AND CONCLUSIONS

General Summary

The development and improvement of the reading skills of the educable mentally retarded child are as important as those for the normal child. Even though he may not read for pleasure, care should be given to help him to read at a level whereby he can function independently and productively in society commensurate with his intellectual capacity.

The educable mentally retarded child in junior high school is in a precarious position. He is reading at a grade level which requires reading materials which may not be compatible with the interest level for his chronological age. The educable mentally retarded child on this level may also have come from an environment which did not prepare him for the challenges and demands of reading in the elementary schools of the dominant society; therefore, he did not make the normal advancements in developing competence in reading. By the time he had reached junior high school, he had developed a "failure syndrome" and a poor self-concept. Although these circumstances may have occurred, the reading level of the educable mentally retarded child can be improved with the proper instructional techniques, with high-interest, low-vocabulary reading materials, and with the proper motivational techniques.

This study was designed to determine the effects of a short term cultural enrichment program on the reading improvement of the educable mentally retarded students. The sample consisted of thirty educable mentally retarded subjects from the seventh and eighth grades at Harding Middle School, Oklahoma City, Oklahoma. The subjects were divided into two groups of fifteen each with the experimental group designated as Group A and the control group as Group B. Group A's instruction centered around specific activities. The language-experience approach was the method of instruction used. Group B received no enrichment activities, and the method of instruction was the traditional approach.

Group A received a pre-activity briefing session on the planned trip. The post-activity sessions centered on the subjects' expressing their likes and dislikes about the trip, receiving related vocabulary on flash cards on the activity, reading an activity-oriented story which had been developed by the writer from their discussion concerning the trip, and answering comprehension questions about the story.

The experimental and control groups were administered three instruments to test the results of the study. These were the Informal Vocabulary Test (developed by the writer), Dolch Basic Vocabulary Test, and the Gates-MacGinitie Reading Test. All instruments were hand-scored.

Conclusions

Results of the study indicate that the scores of the experimental and control groups were not significantly different. The results of the Informal Vocabulary Test, developed by the writer; the five batteries of the Dolch Basic Vocabulary Test; and the vocabulary and comprehension sections of the Gates-MacGinitie Reading Test showed that the short term

intensive cultural enrichment program had no effect on the reading level of the educable mentally retarded. The null hypothesis was, therefore, accepted on the basis of the results of the instruments.

Discussion

Groups A and B of this study were selected by random sampling. As previously stated, Group A—the experimental group—received the eight-week intensive cultural enrichment program, and Group B—the control group—received no treatment. Both groups were administered the same three instruments to determine if a significant difference existed in reading achievement.

Although no significant differences existed between Group A and Group B, the major question is why gains were not made as a result of the intensive enrichment program. In the opinion of the writer, several factors operated to generate this condition. First, had the intensive enrichment program been extended over a longer period of time, in all probability, significance would have been found, because the educable mentally retarded tend to progress mentally at a rate of from one-half to three-fourths that of the average youth. Second, if the intensive enrichment program had been instituted earlier in the school year rather than near the close when vacations were being anticipated, differences may have been found.

Another factor which may have confounded the results was the possible presence of the writer's experimental bias. As the writer taught reading to the experimental group, his enthusiasm in this endeavor could have skewed the results. More specifically, the writer, in an effort to be as unbiased as possible, could have

under-taught or over-taught the subjects in the intensive enrichment program.

Recommendations

As a result of this study, the following recommendations are made:

1) This study should be replicated with the following adjustments:
   A) The study should be made over a longer period to determine the extent of differences in reading gain for educable mentally retarded students of the middle school level.
   B) It should encompass a larger sample in order to make it more reliable.
   C) It should extend over a longer period of time to determine the impact of intensive enrichment experiences void of special instructional techniques as related to reading improvement.
   D) It should begin at the first part of the school year, rather than at the end of the school year.
   E) It should be made without experimental bias.
2) A study should be made comparing the achievement of lower grade and junior high level educable mentally retarded students to determine at what level the greater gain is made in reading.

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APPENDIX A

WESCHLER INTELLIGENCE SCALE FOR CHILDREN

WESCHLER INTELLIGENCE SCALE FOR CHILDREN

Subjects	Experimental Group	Control Group
A	69	62
B	52	61
C	73	71
D	73	60
E	75	63
F	57	77
G	78	69
H	69	66
I	75	70
J	69	58
K	75	62
L	70	68
M	57	71
N	75	77
O	72	62

APPENDIX B

CULTURAL ENRICHMENT ACTIVITIES

ENRICHMENT EXPERIENCES

Name	Date	Type of Activity	No. of Students	% Participated
Horace's Supper Club	4- 4-73	Restaurant	15	100%
Springlake Park	4-12-73	Amusement Park	12	80%
Cowboy Hall of Fame	4-19-73	Historical Museum	14	93%
Six Flags Over Texas	4-28-73	Amusement Park	13	86%
Oklahoma City Zoo	5- 4-73	Zoological Park	15	100%
Oklahoma City Planetarium	5- 8-73	State Exhibit	14	93%
Red Rock Canyon	5-19-73	State Camp Site	14	93%
Bowling	5-22-73	Recreation Center	14	93%

APPENDIX C

SAMPLE STORY FOR GROUP A

EXPERIENCE STORY

Our Trip to Springlake

We took a trip to Springlake Amusement Park on Saturday, April 21, 1973. Everyone had a good time. We rode almost every ride in the park. Some of the rides which were the most fun were the Big Dipper, the Bumper Cars, the Skyride, and the Wild Mouse.

Annette rode the Big Dipper seven times! Ronnie did better than that. He rode every single ride in the park. Wow! Robyn really likes fast rides because she rode the Wild Mouse and the Big Dipper. Do you remember who lost her shoe in the lake when she was riding the Skyride?

APPENDIX D

INFORMAL VOCABULARY TEST

VOCABULARY WORDS

1. Supper
2. Club
3. Dinner
4. Cafeteria
5. Waiter
6. Springlake
7. Wild Mouse
8. Skyride
9. Park
10. Roller Coaster
11. Planet
12. Mars
13. Scorpio
14. Quiet
15. Whisper
16. Cowboy
17. Bulldogging
18. Squaw
19. Indian
20. Six-gun
21. Rock
22. Mountain
23. Sand
24. Canyon
25. Waterfall
26. Texas
27. Flags
28. Slide
29. Train
30. Trip
31. Zoo
32. Snake
33. Elephant
34. Monkey
35. Gorilla
36. Strike
37. Bowling
38. Alley
39. Gutter
40. Spare
41. Pins
42. Seals
43. Trouble
44. Bonnet
45. Picnic
46. Kitchen
47. Round
48. Big Dipper
49. Kangaroo
50. Snack bar

VITA √

Lester Clark

Candidate for the Degree of

Doctor of Education

Thesis: THE EFFECT OF A SHORT TERM INTENSIVE ENRICHMENT PROGRAM ON THE READING IMPROVEMENT OF THE EDUCABLE MENTALLY RETARDED

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