A READING PROGRAM FOR PRIMARY EDUCABLE MENTALLY RETARDED CHILDREN OF BAILEY COBB ELEMENTARY SCHOOL

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CHAPTER I

INTRODUCTION

Leaders in the field of the education of mentally handicapped children agree that socialization of the child and preparing him to share in the world's work are the major aims of special education. Although reading, while of major importance in itself, is also an essential tool acquired by the child in the classroom. It aids the individual in protecting himself, in acquiring information, and in deriving pleasure from reading, thereby, developing into a more contented and useful member of society. For such reasons it is justifiable to stress the teaching of reading with the mentally retarded child, and to perform the task as effectively as possible.[1]

Since the beginning of special education for the educable mentally retarded at Bailey Cobb Elementary School in 1954, no attempt has been made to design a reading program on the primary level actually based on the children's needs and commenserate with their retarded intellectual development, due to such a heterogeneous grouping within the classroom. It was almost impossible for one room to provide the variety of equipment and materials needed by a very diversified group. Therefore, in 1959, an effort was made to group together children of similar learning abilities, interests, and

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1. Samuel A. Kirk, "A Reading Program for Mentally Retarded Children," Journal of Exceptional Children. 6, (November, 1939), p. 49.

physical maturity, with the possibility of adjustment from year to year as they attain certain stages of maturity and development.

Most of the children considered for the primary educable mentally retarded class at Bailey Cobb School, had attempted and failed in reading one or more times before their entrance into the special class. The consequence of such failures in learning to read caused them to feel insecure, inferior, and very discouraged in a reading situation.

It was the task of the writer to develop a reading program in harmony with their abilities and at their level of development in order that each child might witness success thereby, and replace any fear and distaste toward reading with more positive attitudes and confidence.

DEFINITION OF TERMS

For the purposes of this study the following definitions of terms were employed:

Educable mentally retarded children (hereafter referred to as educable mentally retarded, mentally handicapped, mentally deficient, and slow-learning). The educable mentally retarded was defined as children with intelligence quotients within the limits of 50 to 78 inclusive, as measured by the Revised Stanford-Binet Test of Intelligence, Form L.

DELIMITATIONS OF PROGRAM

The reader is cautioned to note that this Reading Program was delimited to the primary class for educable mentally retarded children enrolled in special education at Bailey Cobb Elementary School, Clarksville, Tennessee.

All of the children considered for this reading program were screened by a qualified psychologist and diagnosed as being mentally retarded, but educable in the academic sense, and had a need for special education services in order to grow and develop to their maximum.

HISTORY OF BAILEY COBB ELEMENTARY SCHOOL

Bailey Cobb Elementary School, formerly Burt High School, is located in the business section on Franklin Street, in the eastern part of the city of Clarksville, Tennessee, about ten blocks from the heart of the city, and three blocks north of the Nashville Highway, 41A. The buildings stand approximately thirty feet back from Franklin Street.

There are two buildings located close together on the same site. The older building was constructed in 1880 and housed the elementary grades, and a two-year high school for many years. In 1922, the high school was built. This left the entire old building for the elementary department.

During the early forties, Clarksville School System had an influx of population due to the erection of Fort Campbell, a military installation. This influx made it expedient that a new school, Burt High School, be built. The old building which formerly housed Burt High School was converted into an elementary school, which was designated as Bailey Cobb Elementary School in 1952.

The older building at Cobb School contains the Administrative Office, Library, Teachers' Lounge, Store Rooms, Water Fountains, Gymnasium, Lavatories, Seven Classrooms, and an Auditorium. The newly constructed building contains the Cafeteria, Clinic, Lavatories, Janitors' Room, Water Fountains, and Seventeen Classrooms, two of which house the primary and intermediate Special Education Classes.

The enrollment of Bailey Cobb School, which is about 750 pupils, fluctuates as a result of the frequent moving of families.

PHILOSOPHY OF THE SCHOOL

The philosophy of Bailey Cobb School is to gear its program of instruction to meet the needs of all the children of the community; that each child, as a separate individual, should be taught on the basis of his ability to achieve at his rate of speed; that each child should be loved, understood and intelligently guided in all phases of his learning activities, with the hope that he will be able to utilize the educational opportunities offered by the school, to the end that he will achieve success all along the way.

OBJECTIVES OF THE SCHOOL

The objectives of Bailey Cobb School are as follows:

1. To develop a wholesome attitude toward how to live and work with other people in the classroom, home, community, nation, and the world.
2. To develop a sense of values as to right and wrong, (How to make choices).
3. To aid the child in making progress and growing in his ability to take care of his needs, from where he was, nearer to where he can go.

COMPOSITION OF CLASS

The primary class for educable mentally retarded children at Bailey Cobb School was composed of thirteen boys and three girls. The chronological age range was 6 years and 2 months to 12 years and 3 months; mental age range from 3 years and 4 months to 7 years and 4 months and intelligence quotients from 54 to 78.

A descriptive personnel chart follows:

PUPIL	SEX	C.A.	I.Q.	M.A.	PHYSICAL DEFECTS
R.B.	M	9-7	66	6-4	Perceptual immaturity, poor perceptual-motor coordination, possible neurological damage.
W.B.	M	12-3	56	6-10	Severely crippled cerebral palsied child, nervous, poor balance, mystagmus in both eyes.
J.B.	M	10-2	60	6-1	Serious articulation, some nasality, very nervous, marked perceptual-motor problem.
A.C.	M	8-0	58	4-8	Lisping, very nervous, hyperactive, impaired visual discrimination, impaired perceptual-motor development.
R.D.	M	7-7	68	5-2	Poor perceptual-motor development, social and emotional immaturity.
C.E.	M	9-7	65	6-3	Limited perceptual-motor ability, immature reasoning, very small for age, hearing defect.
J.G.	M	9-3	63	6-0	Speech articulation defect, limited visual organization, poor perceptual-motor ability, emotional difficulties.
T.H.	M	7-5	55	3-8	Speech defect, lateral lisp speech impairment, limited perceptual-motor ability, emotional problems.
O.H.	M	9-1	78	7-4	Poor vision, stutterer, emotional problems, very nervous, poor perceptual-motor ability.

DESCRIPTIVE PERSONNEL CHART CONTINUED

PUPIL	SEX	C.A.	I.Q.	M.A.	PHYSICAL DEFECTS
L.Q.	M	9-9	60	5-10	Serious emotional problem, perceptual-motor problem, possible central nervous damage.
W.T.	M	8-7	70	6-0	Perceptual-motor immaturity, weak auditory perception, very nervous.
L.T.	M	11-0	66	7-3	Emotional problems, poor vision and hearing.
B.H.	M	6-8	66	4-7	Very poor motor-coordination, immature speech, stammers, extreme perceptual-motor immaturity.
R.H.	F	6-2	54	3-4	Very immature speech, poor perceptual-motor coordination.
P.W.	F	8-8	61	5-3	Very immature, speech defect, poor perceptual-motor coordination.
H.P.	F	8-10	75	6-8	Speech impairment, poor vision, emotional problems, poor physical health.

A VIEW OF THE EDUCABLE MENTALLY RETARDED

Educable mentally retarded children are the children who, on an individual intelligence test, obtain intelligence quotients (I.Q.'s) roughly within the range of 50 to 75. In other words their mental ages are approximately one-half to three-fourths of their chronological ages. Thus, six-year-old mentally retarded children will range in mental ages from three to four and one-half years. Similarly, twelve-year-old mentally retarded children will have mental ages between 6 and 9 years. The educational potential of these children is so low that regular classroom placement (especially in large elementary and secondary schools) will frequently result in repeated frustration and failure. Because of this, many of these pupils are in need of special class placement to insure the type of instruction in which they will experience success. With these special education services most of these children can become happy and contributing members of society.

> Children of the primary group are usually about 6 to 10 years chronologically and will have a mental age of 3 to 6½. To teach these children to live in a social environment is far more important than to attempt to teach them to read. During this process of social adjustment the children will be getting ready to read. As they grow intellectually they will approach the task with an enriched background of meaningful experiences, enlarged speaking vocabulary, a lengthened and more stable span of attention and improved muscular coordination.[2]

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2. Joint Project of Three Agencies: George Peabody College for Teachers, Nashville City Schools, Tennessee State Department of Education, "A Tentative Guide for Understanding and Teaching Educable Mentally Retarded Children," September 1, 1955. pp. 1-13.

Philosophy

In a democratic society every child has a right to an education regardless of his abilities or inabilities. The mentally retarded child must not be denied this right, he, too, has a place to fill in society, and only through proper training can he fill it. The special class for mentally retarded children in the elementary school tends to prepare the child to become mentally, socially, and occupationally competent to some degree.

Objectives for Education of Mentally Retarded Children

The basic education objectives applicable to the mentally deficient child, which should determine the type and degree of curriculum adjustments that must be made, involve the four principles of (1) educating each child in keeping with his capacities, limitations, and interests; (2) educating each child for achievement on his own level, without attempting to force him into activities beyond his ability; (3) educating each child for some participation in the world's work and also for participation in those social and cultural values which are within his reach; and (4) educating each child with full consideration of the best interest of all children.[3]

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3. Elise H. Martens, "Curriculum Adjustments for the Mentally Retarded," U. S. Office of Education, (Washington D. C., Federal Security Agency, Bulletin 1950), No. 2.

Specific Objectives

In general, all specialists agree that the more specific objectives for the mentally handicapped include the following:

1. They should be educated to get along with their fellowmen.
2. They should learn to participate in work for the purpose of earning their own living.
3. They should develop emotional security and independence in the school and in the home through a geed mental hygiene program.
4. They should develop habits of health and sanitation through a good program of health education.
5. They should learn the minimum essentials of the tool subjects, even though their academic limits are third to fifth grade.
6. They should learn to occupy themselves in wholesome leisure time activities through an educational program that teaches them to enjoy recreational and leisure time activities.
7. They should learn to become adequate members of a family and a home through an educational program that emphasizes home membership as a function of the curriculum.
8. They should learn to become adequate members of a community through a school program that emphasizes community participation. [4]

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4. Kirk, Samuel A. and G. Orville Johnson, Educating the Retarded Child. (Boston: Houghton Mifflin Company, 1950), p. 118.

HISTORY OF SPECIAL EDUCATION OF COBB SCHOOL

The first class for educable mentally retarded children of Cobb School was organized in 1954. The writer, then serving in the capacity of a regular classroom teacher in the same school, was employed as teacher of this class. The first class was a combination class. It served the primary, intermediate, and secondary levels. In 1956, a secondary class was organized at Burt High School, leaving the primary and intermediate levels for the writer to supervise and instruct.

Due to an increased need for teachers for each level of instruction, a teacher was employed for the intermediate level in 1957, and it became expedient that a special education teacher be employed in 1959, to teach a second intermediate class in order to provide for a more homogeneous grouping within the primary class.

CHAPTER II

READING CAPACITY OF MENTALLY RETARDED CHILDREN

Questions have been raised as to the reading capacity of mentally handicapped children. One such question is, "Can mentally handicapped children learn to read, and how much?" This question can be answered specifically for each child only after a thorough diagnosis has been made. There are, however, generalizations which can be made concerning the educability of the majority of such children in reading.

The mental age of a child on a verbal intelligence test, such as the Binet, gives some indication of the child's potentiality in reading. Studies by Merrill,[5] Bennett,[6] and others show that on the whole, mentally handicapped children learn to read up to their mental age reading grade expectancy, as do children of normal or superior intelligence. Although the mental age is not a perfect indicator of reading capacity, it is probably the most important single factor. In interpreting the mental age as a measure of reading grade expectancy, one can state that; all other factors being equal, the mental age is

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[5]Maud A. Merrill, "On the Relation of Intelligence to Achievement in Case of Mentally Retarded Children," Comparative Psychology Monographs, 2, No. 16 (Sept. 1924), pp. 1-100.

[6]A. Bennett, "A Comparative Study of Subnormal Children in the Elementary Grades," (New York: Bureau of Publications, Teachers College, Columbia University, 1932).

the best known measure of reading grade expectancy. Using the I.Q. alone does not indicate the child's reading capacity or expectancy. For instance, a sixteen-year-old boy with an I. Q. of 60 will be reading more efficiently than a six-year-old boy with an I. Q. of 110. Thus it is apparent that the I. Q. is not a measure of reading grade expectancy.

STANDARDS OF EXPECTANCY

Featherstone[7] maintains that there is rather high correlation between reading ability and general intellectual ability, as measured by intelligence tests. The correlation is not perfect, but it is high. Consequently, the pupil's mental age, as obtained from time to time on such tests, is a practical all-round guide of what to expect in the way of reading ability. A good general rule to follow is this: If the pupil's reading age, obtained by means of standardized reading tests, is within six months of his known mental age, obtained by two or more group intelligence tests, or by means of an individual Binet test, he is "up to grade." Of course he may not be "up to grade" in the usual sense of school grade. For example, a pupil may be in the fifth grade and be able to read only as well as the average third grader. Nevertheless, if he is ten years old (the typical age for fifth grade) and has an I. Q., say of 85, he has a mental age of almost 8-6.

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[7]W. B. Featherstone, Teaching the Slow Learner. (New York: Bureau of Publications, Teachers College, Columbia University), pp. 75-76.

This is comparable to the average chronological age of children in the third grade. Therefore, such a pupil should be regarded as meeting reasonable standards; he is not a problem.

In applying this general rule, two points should be kept in mind. First a difference of at least six months between reading age and mental age should be allowed before concluding that a pupil is "below grade." Second, all kinds of reading should not be lumped together. That is, a pupil may be "up to grade" in general survey reading, and below grade or above grade in comprehension of words, or in speed, or in skill in following directions. Each of the kinds of reading abilities measured by good up-to-date reading tests should be considered separately in assessing a pupil's status and progress.

Unfortunately, the majority of standardized reading tests furnish grade scores rather than age scores. The grade score is a meaningless and useless score when dealing with slow learners. Some tests give age scores also, and a few provide tables or other devices for translating grade scores into age scores. While there is not exact one-to-one correspondence between grade scores and age scores for any particular raw score on a test, nevertheless, one will not go far wrong in assuming that such is the case. Therefore, for most practical purposes, any obtained grade score on a reading test can be translated into an age score by the simple device of adding six years to the obtained grade score. Thus, an obtained grade score of 3-0 is approximately equivalent to an age score of 9-0; a grade score of 5-3 is roughly equivalent to an age score of 11-3.

Kirk and Johnson[8] offer general guides which might be used as a basis of reference when considering what reading ability to expect of mentally retarded children. They are as follows:

(1) Children with chronological ages seven to nine and with mental ages of four to six:

(a) Have not begun to read.

(b) Should be showing interest in reading, in books, and in pictures, in the interpretation of pictures, labels, their own names, and so forth.

(c) Should be engaging in an intensive reading readiness program.

(2) Children of chronological ages nine to eleven and with mental ages of five and one-half years to seven years:

(a) Should be having an intensive reading readiness program with incidental reading of charts, signs, labels, etc., if readiness is not adequate.

(b) Should begin reading stories of their own experiences from the board and from charts if readiness is established.

(c) Should be interested in drawing pictures, interpreting pictures, and reading and writing stories about these pictures.

(d) Should be able to make booklets of their own stories that they have told and which they have read from charts.

(e) Should begin to read pre-primers, primers, and simple books.

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[8]Kirk and Johnson, Op. cit., pp. 254-55.

(3) Children of chronological ages eleven to thirteen and with mental ages of seven to eight and one-half years:

(a) Should be reading first to third-grade material with adequate understanding.

(b) Should be grouping words and phrases into thought units, but are slow in reading.

(c) Should be developing a method of word recognition and should be capable of recognizing new words from context clues, phonic analysis, and so forth.

(d) Should be interested in reading simple books for information and pleasure, and engaging in out-of-school reading such as newspapers, directions for games, and projects.

(4) Children with chronological ages thirteen to sixteen and mental ages of eight and one-half to eleven years:

(a) Should be utilizing reading for many activities and using books from third through fifth-grade level.

(b) Should be using dictionary, telephone directory, library, and reading newspapers and maps.

(c) Should have increased vocabulary and fair comprehension with independent methods of word recognition.

(d) Should be spontaneously reading for information and pleasure.

RESULTS OF FALL TESTING

All of the children in the primary class for mentally retarded children at Cobb School, with the exception of two, had already attenpted and failed in beginning reading before being placed in special education. Due to very low academic achievement, they were referred to the school psychologist for testing. The school psychologist, after having diagnosed each child, found that they were mentally retarded and some of them were too immature mentally and otherwise, to profit from anything more than a readiness program.

The writer administered the Metropolitan Readiness Tests in the fall of 1959, and an analysis of the results showed that some of the children in the class could profit from a reading readiness program. The results of the Metropolitan Readiness Tests are shown on Table I.

The Gates Primary Reading Tests for Grade I and II (First Half), Type PWR Form 2, Word Recognition, and Type PPR Form 2, Paragraph Reading, were administered during the third week in October, 1959, and the results are recorded on Table II.

In recognition of these children's needs, abilities, and their experences of previous terms, a reading readiness program was designed for the pupils who could profit from it, and a beginning reading program was designed for those pupils who could function along that level.

TABLE I

FALL TESTING

The Metropolitan Readiness Test: Form R was administered during the second week in October, 1959. The results are shown on the following table:

NAME	SEX	C.A.	I.Q.	M.A.	TEST 1	TEST 2	TEST 3	TEST 4	SUM 1-4	LETTER RATING	READINESS STATUS
R.H.	F	6-2	54	3-4	3	2	2	3	10	E	Poor Risk
T.H.	M	7-5	55	3-8	4	2	7	3	16	E	Poor Risk
B.H.	M	6-8	69	4-7	5	2	6	8	21	E	Poor Risk
R.D.	M	7-7	68	5-2	7	6	3	11	27	E	Poor Risk
A.C.	M	8-0	58	4-8	9	6	7	8	30	E	Poor Risk
W.B.	M	12-3	56	6-10	13	9	8	10	40	D	L. Normal
J.B.	M	10-2	60	6-1	16	12	14	5	47	C	Average
P.W.	F	8-8	61	5-3	15	13	11	10	49	C	Average
R.B.	M	9-7	66	6-4	16	13	13	9	51	C	Average
W.T.	M	8-7	70	6-0	16	10	13	13	52	C	Average
L.Q.	M	9-9	60	5-10	15	13	13	14	55	C	Average
J.G.	M	9-3	63	6-0	18	10	12	15	55	C	Average
O.H.	M	9-1	78	7-4	17	12	12	15	56	B	H. Normal
C.E.	M	9-7	65	6-3	18	11	13	19	61	A	Superior
L.T.	M	11-0	66	7-3	18	13	13	18	62	A	Superior
H.P.	F	8-10	75	6-8	18	14	12	18	62	A	Superior

TABLE I CONTINUED

DESCRIPTION AND TOTAL POSSIBLE SCORES FOR EACH SUBJECT

SUBJECTS	TITLE	DISCRIPTION	POSSIBLE SCORE
Test 1	Word Meaning	Comprehension of Language	19
Test 2	Sentences	Comprehension of phrases and sentences	14
Test 3	Information	Related to vocabulary	14
Test 4	Matching	Visual perception	19

The scores of the Metropolitan Readiness Tests were ranked in the order of magnitude, and pupils who showed a low readiness status were placed in a reading readiness program. The pupils scoring average and above in reading readiness were administered in addition the Gates Primary Reading Tests, Type PWR, Form 2, Word Recognition, and Type PPR Form 2, Paragraph Reading, for Grade I and II (First Half).

The writer felt that the second test might help determine whether or not the pupils who scored average or above on the Metropolitan Readiness Tests could function at a higher level reading, since all of this group had been enrolled in regular grades from one to four years.

Gates Primary Reading Tests, Type PWR, Form 2, Word Recognition, and Type PPR, Form 2, Paragraph Reading for grades I and II (First Half), was administered during the third week in October, 1959. The results are recorded on Table II.

TABLE II

RESULTS OF GATES PRIMARY READING TESTS

The results of the Gates Primary Reading Test are as follows:

NAME	SEX	C.A.	I.Q.	READ. TYPE GR. PWR	READ. AGE	READ. TYPE GR. PPR.	READ. AGE	AVERAGE READING
J.B.	M	10-2	60	1.3	6-7	1.3	6-7	1.3
P.W.	F	8-8	61	1.3	6-7	1.4	6-8	1.4
R.B.	M	9-7	66	1.3	6-7	1.5	6-9	1.4
W.T.	M	8-7	70	1.3	6-7	1.4	6-8	1.4
L.Q.	M	9-9	60	1.3	6-7	1.5	6-9	1.4
O.H.	M	9-1	78	1.4	6-8	1.5	6-9	1.5
J.G.	M	9-3	63	1.5	6-9	1.4	6-8	1.5
C.E.	M	9-7	65	1.6	6-10	2.6	7-10	2.1
H.P.	F	8-10	75	2.5	7-8	2.7	7-10	2.6
L.T.	M	11- 8	66	2.6	7-10	2.7	7-11	2.6

CHAPTER III

CURRICULUM

THE READING PROGRAM

The writer through reviewing the types of reading programs that are recommended for mentally retarded children by authorities, found principles, techniques, materials, and methods of teaching reading, and chose to use much of their data. She realized however, that all materials found, pertaining to reading programs for mentally retarded children were more or less general, and would necessarily have to be adapted to meet the specific needs and abilities of the primary mentally retarded children of Cobb School.

The reading program that will be described below was designed for children having most or all of the following characteristics:

(1) The chronological ages ranged between 6 and 13.

(2) The mental ages ranged from 3-4 to 7-4.

(3) The IQ's ranged from 54 to 78.

(4) Some of the children were ready to read and some were not.

(5) All of the children came from subcultural homes.

(6) Two of the children were entering school for the first time, and the rest of the children in the class had experienced failure in regular grades before admission to a special class.

(7) Some of them have associated disabilities.

(8) Most of the children have witnessed isolation and rejection by children and teachers in the regular grades and have developed aggressive or withdrawn tendencies.

(9) Their physical abilities and activities are similar to those of kindergarten, first, and second grade children.

(10) Their mental and social activities are similar to those of kindergarten, first, and second grade children.

The process of curriculum building in this reading program became one of selecting activities that would be suitable for the children concerned. It evolved from the recognition of the children's needs, abilities, their experiences of previous terms, and the resources of their homes and community. It was simplified, and the approach was that of adapting instruction to the growth levels of the children.

According to Samuel A. Kirk [1] the teaching of reading to mentally retarded children presents a different problem from teaching reading to mentally normal children. The difference is due partly to the characteristics of the mentally retarded, and partly to the fact that materials have not been adapted to their level. In teaching them to read, we must (1) study the characteristics of the mentally retarded, (2) note the difference between the mentally normal and the mentally retarded in learning to read, and (3) adapt materials and instruction to the child's capacity.

Kirk further states that studies on the characteristics of mentally retarded children consistently give the following results. In physical and motor characteristics they are on the average slightly inferior to mentally normal children. Since learning to read is

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1. Samuel A. Kirk, "A Reading Program for Mentally Retarded Children," Journal of Exceptional Children, (November, 1939), p. 49.

more contingent upon learning ability and mental growth than physical and motor development, reading is correspondingly retarded.

Certain differences between normal and subnormals in learning to read are of special significance. In the first place, mentally retarded children usually enter school in the regular grades. They fail for many years before they are examined and found to be mentally retarded. Their failure in learning to read while others learn during this initial stage of school gives them a different outlook toward reading. The normal child learns, succeeds, and derives pleasure from reading. The mentally retarded child fails, becomes insecure, and develops feelings of inferiority and defense mechanisms toward reading. Secondly, repeating the same primer for a number of years makes reading a drill process. The thrill of the story disappears, and the child becomes bored. It is doubtful that a second or third presentation of primers and beginning reading material previously used would be interesting to him. Thirdly, the mentally retarded child has a slow rate of mental growth and is slower in learning than the normal child. Consequently, the materials (primers, books, and so forth) adapted to the rate of learning of mentally normal children cannot be used in the same way with mentally retarded children. [2]

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2. Ibid., p. 53

A consistent reading program is recommended for mentally retarded children, which necessarily follows several levels of instruction. These levels are not specific stages but a continuation of various levels of achievement. These programs are: (1) a reading readiness program to prepare them for success in reading; (2) a prolonged beginning reading period which will give them a good start in reading; (3) a program which develops methods of word recognition and efficiency in independent reading; (4) definite guidance in the comprehension of more complex reading materials. [3]

A consistent reading program based on the preceding levels of instruction was designed for the primary class of mentally retarded children of Cobb School. The writer was very cautious in adapting instruction, activities, and materials to the abilities of the children.

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3. Samuel A. Kirk and G. Orville Johnson, Educating the Retarded Child (Boston: Houghton Mifflin Company, 1951) pp. 258-259.

OBJECTIVES FOR THE READING PROGRAM

Reading is the most essential tool of learning. The child must learn to read in order that he may read to learn. The mentally retarded child, like other children, is aware that reading is a highly valued achievement. Both types of reading, for pleasure and information, will play an important part in the life experience of the mentally retarded as well as of the normal child. Mentally retarded children must be helped to whatever mastery of this tool as they are capable of attaining.

The general objectives for the reading program are as follows:

1. To teach the child to live in a democratic society.
2. To strengthen the child's interest in reading.
3. To develop the skills and abilities the child needs for successful reading on his own level.
4. To teach the child to read for protection.
5. To teach the child to read for fun and enjoyment.
6. To further the development of thinking skills.
7. To further the development of language.
8. To teach the child to read for information and instruction.

SPECIFIC OBJECTIVES

The specific objectives are as follows:

1. To emphasize social adjustment and social participation.
2. To develop language ability.
3. To develop better thinking ability.

4. To develop visual perception abilities as a preparation for reading activities.
5. To develop auditory abilities as a preparation for reading activities.
6. To facilitate the use of their muscles for better motor coordination.
7. To develop more adequate speech.

PRINCIPLES OF TEACHING READING TO MENTALLY RETARDED CHILDREN

1. Mentally retarded children learn in the same way other children do up to a point.
2. Mentally retarded children need orderly, systematic development of reading techniques.
3. They need special emphasis on:
   a. Reading readiness
   b. Development of vocabulary and techniques of word recognition.
   c. Selection of reading material
   d. Preparation of supplementary reading materials
4. You have to build up a concept of what words are.
5. A background of first hand experience is needed to make reading meaningful.
6. Putting words learned on word-cards is a tangible way to show the child his progress, since he has much need for success.
7. Oral reading is usually to be preferred to silent reading.
8. A mental age of six is usually considered basic before readiness materials are left, and real reading instruction begins.
9. Much of the problem of eye-sweep, fixations, and accuracy in

moving from line to line is solved with actual reading, and doesn't need too much extra drill.

10. Present learning activities gradually, going from simpler to more complex.

11. Samuel A. Kirk recommends a systematic experience method, rather than a natural or activity method.

12. Reading involves thinking, therefore, drill in thinking is part of readiness training.

13. Visual memory and discrimination, and auditory memory and discrimination are very important in developing readiness for reading.

14. Emphasis on beginning sound is probably the single most effective technique.

15. Brain-injured children may react better to alphabet method than whole-word method; therefore, with mentally retarded children, use varied techniques and try to decide what methods are best for each child.

16. Stress comprehension, and beware of "word-calling."

17. Seat-work materials and appropriate workbooks may be used, as well as games, etc.

18. Differences between mentally retarded and "normal" children that influence reading:

    a. Slower mental development, therefore rate of learning is slower.

    b. More tendency to stereotyped response to environmental stimuli.

    c. Inability to evaluate and criticize their own work.

d. Poorer ability to adapt to changes in instruction.

e. Poorer ability to generalize.

f. Reliance on concrete rather than abstract learning.

g. Lower psychological abilities of language and perception, therefore slower to learn and poorer in retention.

19. Children must have an interest in reading; must want to read.

20. Be sure child has no physical defects that would interfere with learning procedure.

21. Children need to learn to "read" pictures, as well as words.

22. Don't force mentally retarded children to get education from books.[4]

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4. George Peabody College for Teachers, "Methods of Teaching Mentally Retarded Children," (Nashville: Special Education Department, 1958), pp. 62-63.

THE READING READINESS PROGRAM

Reading readiness in mentally retarded children is usually developed through mental maturation. If we wait long enough mentally retarded children will be ready to read at the older ages. They need time to grow and participate in a variety of activities in order to facilitate this maturation and to decrease the period of waiting for maturation.

Ingram states that, certain readiness functions should be developed through experiences and activities in the classroom that develop abilities requisite for beginning reading. These abilities are (1) social-emotional aspects of sharing, taking turns, listening, and attending to and finishing a task, (2) adequate speech and auditory language, (3) correct enunciation and pronunciation, (4) interpretation of pictures, (5) memory for sentences and ideas, (6) visual memory and discrimination, (7) auditory memory and discrimination, (8) left-to-right eye movements, and eye-hand coordination.[5]

Some children of the same mental ages will become ready to read before others. These children will begin to ask about reading materials in the pre-primers and other books in the classroom, and will appear anxious to read. The teacher, then, should encourage them if they are ready and can go into the initial stages of the reading process. The mental age used in placing children in certain

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5. Christine P. Ingram, Education of the Slow-Learning Child (New York: The Ronald Press Company, 1953), p. 285.

categories is only an initial classification, and should not be adhered to when the child shows greater or lesser capabilities than indicated from his mental age. [6]

But, it is very important for the teacher to remember that the teaching of reading to mentally retarded children should be delayed until they have attained sufficient mental maturation to learn to read.

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6. Kirk and Johnson, op. cit., p. 260.

EXTENDED READING READINESS

Wheeler [7] discusses the features, techniques, and methods which should be used in developing an extended reading readiness program for slow-learning pupils. The discussion follows:

> Depending upon the extent of mental retardation, the readiness program may extend over one, two, three or more years. The pupil who is a slow-learner will be slow to profit from it, regardless of how well it may be done. All of the features of the reading-readiness program for grade one, will be found in the extended reading-readiness program for the slow-learning pupil, but the techniques and methods used in developing it should be adjusted to meet the needs and interests of the pupil. Although there should be much repetition, repetition need not necessarily always be more of the same thing. It should consist of re-presentation of old words or ideas in new situations. For example, a word that a pupil of normal-learning ability will be able to learn in ten repetitions the slow-learning pupil may not be able to learn in forty repetitions, since he is slow to learn and quick to forget. The word should be repeated again and again in different settings. Word drills should be varied and different from time to time although the words drilled upon may be the same.
>
> The teacher should do a lot of reading to slow-learning pupils. Reading which the teacher does for the purpose of creating interest in reading will stand repetition. She may read the same story over and over again without it becoming monotonous or boring to the pupils. In fact, many slow-learning pupils prefer to hear the same story, once they have learned to understand and like it, read over and over again, to hearing a story read for the first time. One ten-year-old, slow-learning pupil seemed never to tire of listening to his teacher read a "watered-down" version of Sir Gawain and the Green Knight. Day after day, he called for the reading of that story and was disappointed, and sometimes he even sulked, when the teacher did not yield to his request.

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7. Arville Wheeler, Teaching Reading to the Slow-Learner, Section V (Conneticut: Arthur C. Croft Publications, 1959), pp. 15-16.

Dr. Arville Wheeler [8] further states that:

The kinds of stories that are normally read during the reading-readiness period do not always appeal to the slow-learning pupil. The slow-learning pupil does not have the range of interests the pupil of normal-learning ability has. The greater the difference between his chronological age and his mental age, the more narrow the range of his interest. Therefore, the teacher should endeavor to find out what kinds of interests the pupil has and read stories to him that are in keeping with them. He may be interested in stories about trains or about animals, but he is not likely to be interested in both kinds of stories at the same time. To read stories to slow-learning pupils that make no appeal to them is to create a dislike for reading rather than a favorable attitude toward it.

The slow-learning pupil should be provided with all kinds of play experiences. He should be given opportunity to develop muscular coordination and self-control. He should learn how to get along with other pupils, how to do teamwork. The old saying, "if a boy does not have a chance to pull his wagon while he is little, he will pull it when he is big," is certainly true of a slow-learning pupil. One twelve-year-old pupil who was four years mentally retarded and who towered above his classmates by a height of ten to twelve inches could be seen shooting marbles with third-grade pupils during the recess period rather than engaging in the activities that other twelve-year-old pupils engaged in. Play is vitally important. There must be an abundance of it.

The slow-learning pupil should be given opportunity to do a lot of talking - telling stories, taking part in discussions, etc. He should be helped to acquire a wide speaking vocabulary. He should be given opportunity to hammer and saw, to build things - to draw, to paint, to sing, to dance. Variety adds to enthusiasm for doing. Not one moment in this period, long though it may be, should ever be dull or monotonous. The pupil should go from one activity to another; he should always be engaged in something that will be helpful in his development - something which will contribute to readiness for reading.

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8. Ibid.

There were sixteen children enrolled in the class. Most of them had already spent from one to five years in the regular grades, and were expected to have learned a few common words and to have acquired some readiness for reading.

All of the children in the class except six, showed readiness for reading as measured by the Metropolitan Readiness Test, The Gates Primary Reading Tests, and teacher observation, but these children were not permitted to begin reading until a certain length of time had been spent in building up a useful sight vocabulary and acquiring enough background of experience (first-hand) to make reading meaningful.

Then too, since most of these children had spent from one to five years in regular grades, time had to be spent in re-establishing their confidence which had been shattered through failure in school for several years. Therefore, systematic instruction in reading involving extensive use of books was delayed until such time the teacher deemed it necessary to use it. Consequently, systematic instruction was delayed until around the middle of November, 1959.

The other six children in the class will remain in an extended reading readiness program until they are ready for beginning reading.

SUGGESTED ACTIVITIES

READING READINESS

A great variety of activities had to be used. The following list of activities are suggested for use in developing a reading readiness program:

1. Interpretation, or reading pictures.
2. Excursions and field trips.
3. Setting-up centers of interest with books and pictures.
4. Making and labeling collections.
5. Story-telling by teachers and children.
6. Story reading to the children.
7. Associating words with pictures.
8. Informal discussions.
9. Preparing and presenting dramatizations by the children.
10. Preparing booklets and scrapbooks.
11. Learning about the kinds and care of books.
12. Giving reports to group on activities.
13. Construction activities such as "stop" and "go" signs for play cars, clay models, charts, etc.
14. Playing language, number, and color games.
15. Planning, assigning, and following-up classroom housekeeping jobs.
16. Planning for school projects.
17. Collecting and organizing information for a bulletin board.

18. Conducting telephone conversations.

19. Working puzzle games.

20. Rhythm activities such as games, hopping, skipping, and dancing.

21. Illustrating stories.

22. Movies.

23. Garden projects.

24. Sense games

    a. Games involving sight

    b. Games involving hearing

    c. Games involving touch

    d. Games involving smell

    e. Games involving taste

25. Rhyming activities

    a. Identifying rhyming pairs

    b. Rhyming pairs

    c. Matching rhyming pictures

    d. Finding rhyming details

26. Visual motor skills - activities

    a. Tracing designs

    b. Completing designs

    c. Repeating designs

    d. Copying patterns

27. Visual discrimination

    a. External differences

    b. Differences in size

c. Differences in kind

d. Differences in direction

e. Internal differences - Reversals

f. External differences - Reversals

g. Internal and External differences - Matching

28. Independent Activities

a. Complete a design

b. Identify missing parts

c. Supply missing details

d. Arrange ideas in order

e. Which belong together?

f. Which happened first?

g. Which move alike?

h. Continuing patterns - Use variety

i. Which was used?

29. Thinking Skills

a. Classifying birds and insects

b. Classifying fruits and vegetables

c. Which belong together?

d. Arranging ideas in order

e. Where does it belong?

f. What will happen next?

g. Classification

The following suggestions are presented to describe activities for the fulfillment of the aims of the reading readiness program.

LANGUAGE DEVELOPMENT

Develop language ability in the child. Most mentally retarded children usually come from homes which provide a poor language background, and are consequently deficient in the use of language. Since reading involves the use and an understanding of the English langauge, this function should be developed during the reading readiness period before reading is introduced. To develop language ability, certain activities should be carried out.

1. News period - Provide for and encourage opportunities for the children to speak naturally about things in which they are highly interested, such as:
   a. Their home, pets, animals, people, school, hikes, visits, weather, things that have happened to them, or whatever their interests might be.
   b. During discussions the teacher aided the children in speaking in complete sentences, rather than one or two-word responses.
   c. The teacher helped to keep interest by asking lead questions.
   d. After securing enough information, the teacher made sentences and asked the children to talk about them.
   e. The children were allowed to solve their own problems through discussions.

2. Following directions: Have children carry out instructions in any activity and then encourage them to tell about it. This activity aids the children in following directions.
3. Pictures are very useful in developing langauge and language concepts.
   a. The teacher guided the children in interpreting pictures.
   b. She used pictures to aid the children in increasing sentences - length, vocabulary, and meaning concepts through discussion of the pictures. She showed an interesting picture, and encouraged the children to talk about it. The children enjoyed selecting pictures of their own interests from magazines and books. After pictures had been described and discussed, they were placed in the picture file for future use. Pictures may be secured from various sources, and organized for specific purposes.
4. Story-telling - Stories are a good source for language development.
   a. The teacher read or told interesting stories and children retold the stories in their own words. Teacher questioned children about the stories. A story hour was provided daily for this activity.
   b. The children told stories and listened to the teacher relate them, and watched the teacher write them on the chalkboard and charts.

c. The first stories were kept very short and most of them were about the children themselves. Later the stories were increased in length and took in a wider field of experience.

5. Dramatization: The children dramatized stories in which simple parts were memorized.

6. The children carried on imaginary telephone conversations on their play telephone.

7. Classifying objects: A chart of pictures was made, illustrating a general idea, fruits, vegetables, furniture, animals, tools, things mother does, father does, toys, numbers, opposites, colors, etc. This activity helped to develop classification and fluency in remembering words.

8. Many rhymes, jingles, and riddles were used as they serve as good langauge aids.

9. Games for prepositions were made and the children were instructed to put an object on, in, under, beside, below, behind, above, the box or shelf.

10. Games for adverbs were made and the children were instructed to walk quickly, slowly, quietly, sadly, noisily, happily, etc.

11. Games for adjectives were made. The children were asked to bring the big, little, red, blue, smooth, hard, or

soft, ball, etc.

12. Games for verbs were made. The children ran, walked, hopped, worked, played, and skipped, etc.

The various activities and exercises listed above were used by the writer, and are suggestive of methods that may be used in the classroom to develop language ability in mentally retarded children. The teacher should keep in mind, however, that free expression is not sufficient to increase the vocabulary of the child. She must add new words.

VISUAL MEMORY AND VISUAL DISCRIMINATION ACTIVITIES

Learning to read involves visual memory, or remembering things previously seen, and visual discrimination, or seeing similarities and differences in words. It is the duty of the teacher of mentally retarded children to make an attempt during the reading readiness period to develop this function so that the child will not be too confused when he begins reading. Some activities which were used to aid visual discrimination and visual memory are suggested below.

1. The teacher used real balloons of different colors and sizes and shapes for color and size discrimination. The children were directed to pick out a large red balloon, a small blue balloon, match colors, etc. This activity may not be limited to balloons. Other objects will do just as well, but the teacher should decide what objects are to be used previous to presenting the activity.
2. For training of visual memory, the teacher placed objects on a table and discussed them with the children. Then

one child turned around and named as many objects from memory as possible. Another activity involved the placing of several small familiar objects on a table, covered by a paper. The paper was removed, exposing the objects for a few seconds. The cover was then replaced and the children were asked to name as many objects as they could recall. The number of objects exposed was gradually increased.

3. Several objects were placed under the cover on the table. They were exposed for a few seconds, after which the children were instructed to close their eyes while one object was removed. The remaining objects were re-arranged, and exposed again while the children tried to recall which object was gone.
4. The children matched words with the same words on chart.
5. They named rows of objects from left to right.
6. Games involving the pointing out of likenesses and differences were played.
7. Objects were described and children guessed what they were. The clothes and appearance of some child in the room was described and the children guessed who was being described.
8. An activity to involve speed of perception - The teacher showed the children a picture of a great number of objects and asked them to find certain objects such as baby, doll,

a certain number of geometric designs, etc. Other similar activities may be used.

9. Simple patterns were made by using colored sticks, such as pegboard sticks or plastic tooth picks. The children were asked to make one just like it. First, show the pattern to the children while they make it. Later, show the pattern and cover it, requiring the children to reproduce from memory, what they have seen. This activity includes color discrimination, ability to follow directions, and visual memory.
10. Match pictures with pictures. These pictures were obtained from magazines, textbooks, etc. Group pictures and objects according to similarities and differences.
11. Have children recognize and copy their own names, if possible.
12. The children put together, many jig-saw puzzles. This activity proved to be very valuable.
13. The children were instructed to trace, complete, and repeat designs.
14. They were instructed to classify birds, insects, fruits, vegetables, etc.

AUDITORY MEMORY AND DISCRIMINATION ACTIVITIES

Learning to read requires auditory memory and discrimination. These children were deficient in auditory memory and auditory discrimination. Therefore, this function had to be provided for during

the reading readiness period. Some activities for developing auditory memory and discrimination are given in the following:

1. Listening to words beginning with the same sound proved to be very useful. The teacher gave a number of words beginning with the same sound, as go, gun, game, can, etc. The children were instructed to raise a hand as soon as the "different" word was pronounced. The same may be done with rhyming words.
2. Blindfold child and have him identify classmates by the sound of their voices. The children seemed to enjoy this activity very much.
3. Nursery rhymes and jingles of all sorts were taught, especially those which emphasize a particular sound. The teacher gave the rhyme, stopping just before the rhyming word was given. The children finished it. In this type of activity the teacher at first aids them in finishing the rhyme, and just as soon as they can, they are allowed to fill in the missing word or phrase. Baby's Mother Goose Rhymes [8] are excellent for this activity. They may be purchased at any Book Store, or ordered from the publisher.
4. Simple exercises such as, "Who can think of a word that rhymes

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8. Simon and Schuster, Baby's Mother Goose Rhymes (New York: Simon and Schuster, Inc., 1958).

with 'cat,''tree,' ? and so forth, were used as aids in the development of auditory discrimination.

5. Choral speaking of poems and rhymes is helpful.
6. Stories of two or three sentences were told, and the children were asked to retell the story as accurately as possible.
7. Learning of songs and musical games was very helpful in aiding auditory memory.
8. The teacher gave oral directions involving two commissions, then three, then four or five, for example, a child was instructed to "Put a pencil on the table, hop around the room, and then stand by the desk." Children watched to see if the child succeeded in doing all the commissions; if he got one, another child tried until one child succeeded.
9. Tap on the desk several times. Let children, count mentally, and then tell the number of taps. The taps might be varied by tapping slowly, quickly, and in regular rhythm, which requires careful attention to auditory stimuli on the part of the child.

CORRECT ENUNCIATION AND PRONUNCIATION

Because of the poor language background of mentally retarded children, inadequate enunciation and pronunciation is very common among them. It is more poorly developed in mentally retarded children than normal children of the same mental age. The teacher should stress correct enunciation and pronunciation at all times by setting a good example, by correcting articulation defects when they occur in the classroom, and by giving speech training.

There were numerous speech defects in the class. The teacher was aware of this and corrected deficient enunciation and pronunciation whenever possible. Suggested exercises and activities are given in the following:

1. The teacher corrected conversation and discussions in the classroom, taking care that the child did not become self-conscious, thus further retarded language.
2. Each child was helped with the particular sounds he could not say. He was shown the position of the lips and tongue for the sound.
3. Choral speaking was very helpful, especially for those who stammered.
4. Games were played requiring different types of voice: baby, mother, father, etc.

MOTOR AND MUSCULAR CO-ORDINATION

Motor co-ordination may be developed through many activities. Some games and exercises for developing motor abilities are:

1. Rhythms - rhythmical work with music is very helpful. This activity includes hopping, skipping, dancing, and marching.
2. Handwork of various kinds - drawing, constructive work, cutting, pasting, coloring, tracing, making murals, etc.
3. Fitting objects together, pegboards, jigsaw puzzles, etc.
4. The mentally retarded children of Cobb School are integrated with regular physical education classes, and take physical education daily for thirty minutes. This activity is very valuable to them.

CHAPTER IV

THE INITIAL READING PERIOD

The curriculum designed for the children in this beginning reading program is an extension of the curriculum outlined for the children in the reading readiness program.

Ingram[1] states that:

> The transition comes during the period of acquiring reading readiness when, among other things, the pupil is ready (1) to associate words and ideas with symbols, (2) to see likenesses and differences in those symbols as clues to auditory and visual recognition and memory, and (3) to attend to beginning reading tasks.
>
> Among other experiences, numerous opportunities for incidental reading of words and phrases from the bulletin board, labels, picture titles, picture stories, rhymes, and so on, during the readiness period have prepared the child for beginning reading.

When the child begins to function at the preceding level of readiness, he probably will have reached a mental age of approximately six years to six years and six months, the recommended mental age for beginning reading as pointed up by Dr. Arville Wheeler[2] who maintains the following:

> The desirable mental age for beginning reading is approximately six years to six years and six months. However, it will vary with pupils. The slow-learning pupil is no exception to this rule. He should have a mental age of six years to six years and six months before he is introduced to the formal reading program, although such mental age may not be reached before he has reached the chronological age of seven, eight, nine or even more years.

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1. Christine P. Ingram, Education of the Slow-Learning Child (New York: The Ronald Press Company, 1953), p. 286.

2. Arville Wheeler, Teaching Reading to the Slow-Learner, Section V (Conneticut: Arthur C. Croft Publications, 1959), p. 15.

"The mentally retarded child differs from the normal child in that he learns much more slowly, needs more repetition of material in different settings, needs a greater variety of presentations, and needs more guidance than the normal child because he is deficient in generalizing ability."[3] Nevertheless, there is not a great difference between the beginning reading program for mentally retarded children and the beginning reading program for mentally normal children. Dr. Arville Wheeler[4] supports this fact. He said that:

> The beginning reading program for the slow-learning pupil should be quite similar to the beginning reading program for normal pupils. The two programs should differ only in regards to the kinds of materials used and the approach that is made in the use of them.
>
> Slow-learning pupils should be interested in doing most of the things other children do. They will be interested in going on field trips, visiting the fire department, the zoo and the police station and composing stories based on their observations. Such field trips and visits should be prompted by the pupils' interests, however, rather than by the teacher's guess that "this may interest them." Many such pupils have highly specialized interests which should be capitalized upon.

The major goals of reading may be accomplished by utilizing activities that grow out of and contribute to everyday living both at home, at school, and in the community.

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3. Samuel A. Kirk, "A Reading Program for Mentally Retarded Children," Journal of Exceptional Children (November, 1939), p. 52.

4. Wheeler, op. cit., p. 16.

The goals of initial reading are summarized as follows:

(1) Developing an interest in reading to satisfy personal needs.
(2) Developing facility in the use of books and desirable attitudes toward books.
(3) Continuing the development of oral language facility.
(4) Expanding the concept that words stand for experience.
(5) Developing basic reading skills and abilities, including a sight vocabulary.

Regardless of the approach used to teach reading in its initial stage, certain basic principles and assumptions should be kept in mind, such as:

(1) Selection of books that have much repetition of vocabulary.
(2) Supplementing books with other materials containing the same vocabulary.
(3) Planning seatwork to meet individual needs and promote effective work habits and success.
(4) Developing some versatility and independence in word recognition.
(5) Emphasizing accuracy rather than speed.[5]

SUGGESTED ACTIVITIES

The following list of activities are suggested for use during the initial stages of reading:

1. Development of sight vocabulary.
2. Use of alphabet picture books for sound.
3. Reading words and phrases from the bulletin board.
4. Drill on likenesses and differences in word recognition.
5. Oral expression and speech vocabulary.
6. Matching words, phrases, and sentences.
7. Reading assignments.
8. Reading labels.
9. Reading common signs.
10. Greetings and statements written on the board.
11. Writing down rules.
12. Roller-Movies.

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5. Samuel A. Kirk and G. Orville Johnson, Educating the Retarded Child (Boston: Houghton Mifflin Company, 1951), p. 265.

13. Reading booklets of stories which were made by children.
14. Reading film-strips, slides.
15. Using word cards.
16. Matching words and pictures.
17. Putting words and sentences together to make story.
18. Matching phrases, sentences, and pictures.
19. Using picture cards with words on other side.
20. Using workbooks on appropriate levels.
21. Following written directions.
22. Pasting words, sentences, and phrases under picture.
23. Pasting or writing in a word to complete a sentence.
24. Establishing activity areas in the classroom.
25. Drawing own picture and telling about it.
26. Making word dictionaries.
27. Reading charts.
28. Making scrapbook activities.
29. Utilizing collection activities.
30. Games and puzzle activities.
31. Making picture books of animals.
32. Making model store and listing items for sale.
33. Listening to recordings.
34. Listening to sound projector.
35. Listening to tape recording of own voices.
36. Classifying objects.
37. Making garden projects.
38. Playing language arts games.[6]

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6. See Appendix A for Language Arts Games.

PROCESS OF READING

Mentally retarded and mentally normal children learn to read by the same process. They first learn wholes, then details, and then learn to read without awareness of details. The stages of reading are explained as follows:

First Stage

The first stage of reading consists of reading whole sentences and groups of words. When the child is first presented with a short sentence, or phrase which is based on his experience he probably learns the whole sentence, partly by recognizing its length, partly by its configuration, gross structure, and memory. His first impression is whole sentences with blocks and gaps between words.

Second Stage

The second stage of reading is learning details of the sentences, of words; then details of the words, that is, letters in the words. Many mentally retarded children find difficulty in learning details without having the details pointed out to them.

Third Stage

The third stage of reading is reading without being aware of details. This is the stage of getting thought from the printed page without being aware of the printed page.[7]

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7. Samuel A. Kirk, Teaching Reading to Slow-Learning Children (New York: Houghton Mifflin Company, 1940), pp. 76.

Kirk[8] summarized the three stages of reading in the following paragraph:

> The alphabet and phonic methods at the beginning of reading are psychologically unsound since the child at first is perceiving gross configurations. After the child has had experience in reading short sentences and paragraphs, he should be aided in observing details through the use of word study. After he has had further experience with details, larger thought units can be introduced so that the child, through the process of "cue reduction," can read without noting the details of words and sentences, yet can fall back on them if necessary. The teacher who is able to recognize these three stages of reading can formulate her method to fit into the process of reading at each particular stage.

During the first stage of reading, the teacher used every opportunity to encourage the children to talk about those things in which they were highly interested. As they began to tell their experiences spontaneously, the teacher encouraged them to take turns in telling their experiences. As a child told his experience, the teacher wrote his story in manuscript on the blackboard. The activities for this stage are explained as follows:

1. The child was given opportunity to tell an immediate experience.
2. As the child told the story, the teacher wrote it on the board.
3. The child read the story from the board.
4. The following day the story was written again on a chart and the child read from the chart.
5. Additional stories were made and charts were used in the same manner to fixate the same material in a different setting.

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8. Kirk, Ibid. p. 77.

6. The same stories were mimeographed for further repetitions to develop a sight vocabulary through configuration of words and phrases.

During the second stage of reading, much instruction was done on developing recognition of individual words.

1. Word Study. Every word that was used in writing the stories was written on a sentence strip which had been cut in porportion to the length of the word. The children studied the words through games, etc. As they finished with words, the words were placed in a word box. All words which seemed to be difficult, were placed in a word chart pocket which the children had constructed, with the aid of the teacher.

2. The children were asked to point out individual words in stories they were reading. If they could not remember a particular word, they would go back to the word chart pocket, or the word box to find the word. This activity seemed to help them remember words better.

3. The teacher cut charts into sentences and had a child or the children as a group to reconstruct the story by placing them in the correct order.

4. This stage of reading was carried on until the children were ready for pre-primer materials. After pre-primers were introduced, experience charts were worded so as to include words they would need in the pre-primers.

When the children reached the third stage in reading, they were ready for books, pre-primers, etc.

a. Books were selected that had much repetition of vocabulary.

b. The books were supplemented with other material containing

the same vocabulary.

c. Seatwork was planned to meet individual needs in order to promote effective work habits and success.

d. The teacher tried to develop some independence and versatility in word recognition. Some books were prepared at their interest level. The stories were kept very short, and were mimeographed so all of the children in the reading group could have a story.

Much of the reading materials utilized were:

(1) Charts of all kinds.

(2) Weekly Readers on different levels.

(3) Library books.

(4) Skill text Readers - Readers Digest.

(5) Textbooks.

(6) Filmstrips, etc.

"Practical" reading was of paramount importance with these children. However, reading for pleasure was not overlooked. They had the same access to the school library, two thirty-minute periods each week, as other children, and were given permission to draw books of their own choice from the library.

A "Reading Center" was set up in the classroom to encourage leisure reading. Books of adventure, nature, biography, travel and mechanics were placed in the center. Most of the books were selected from the library by the children themselves. Copies of their Weekly Readers were placed in the reading center.

Even though many of the children could not read very well, the books which they had chosen from the library, it was amazing to see the interest aroused over books which they selected.

METHODS OF INSTRUCTION

In teaching reading to normal children, several methods have been proposed which fall into the following catagories, (1) the natural or activity method whereby children are supplied with an interesting reading environment and allowed to learn by themselves without any guidance, (2) the incidental method which presents reading in connection with immediate experiences, and (3) the systematic experience method, which utilizes the experience and vocabulary of the children in teaching them to read.

The natural method is practiced by many gifted children. Average children also learn to read by this method, but for mentally retarded children, they must have reading presented to them in a systematic manner, since the natural or activity method alone is not successful with mentally retarded children.

With mentally retarded children, the incidental method, which is related to the natural method, may be a supplement to the systematic experience method.

During the time children are engaged in pre-reading activities, the teacher should introduce written words and phrases in the form of short stories in connection with the children's activities at the moment. When some of the children begin to learn these words and can read them, they are about ready to learn to read, regardless of their mental age.[9]

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9. Kirk, Ibid., pp 78-84.

The teacher spent much time in teaching incidental reading of signs, labels, and so on, in the classroom. Descriptions of the use of the incidental method of teaching reading follow:

(1) Use of the Bulletin Boards. The bulletin board was very useful for incidental reading. The children's names and simple directions for their participation in classroom activities were written on the bulletin board. For example, the teacher wrote on the board, the names and duties of those children who were selected to perform a particular task. In this way, they learned to recognize their own names and the names of their classmates, as well as many words and phrases. The bulletin board was also used for news items and various directions and instructions.

(2) Labels. Labels may be used during both the reading readiness and the beginning reading period. Articles in the room such as chairs, tables, desks, clock, and so on, were labeled in order to give the children concrete examples of symbols. The labels were removed, and different children were asked to replace the labels on the proper objects. This activity proved to be very important, in that it created quite a bit of interest through fun, yet it was a learning process.

(3) Pictures. All of the children in the class were asked to bring a photo of themselves to school. Each photo with the child's name, was mounted and hung on the wall. Whenever a child had a story or an experience to share with the class, the child's photo was hung on a chart or the blackboard where the teacher had written

the story. This child became the reporter, so to speak, for the class that day. This activity generated much enthusiasm. Pictures of animals, in fact, all kinds of pictures may be used in the same way, as they serve a valuable purpose in incidental reading, and may be used with words, phrases, or sentences.

(4) Greetings: The teacher wrote greetings and other statements on the board in place of the oral expressions. When the children came into the classroom in the morning, she asked children whether any of them knew what had been written on the board, etc. Such greetings as "Good morning, boys," and "Good Morning, girls," were written. Greetings were alternated from time to time.

(5) Assignments. During beginning reading, assignments were given to the children outside of the reading period. When the children were about to engage in hand-work or some other activity, the teacher discussed what each child was going to do, and wrote on the board the directions, such as, "John will color the fruit.", etc.

(6) Rules. Classroom activities, health, co-operation, standards or citizenship rules were discussed and written on posters to be placed around the classroom. Such statements as, "We play fair," "Our hands are clean," and similar statements were used for incidental reading. These posters were changed as the children learned them, and replaced with others.

At this stage of development they were also taught to distinguish many common signs. These signs might seem rather difficult for the children to read, but they were not, since most of the children came

in contact with such signs daily, and had a great need to learn to read them. The common signs taught were:

(1) Thin Ice

(2) Keep Off

(3) High Voltage

(4) Fresh Paint

(5) Coat Room

(6) Exit

(7) Entrance

(8) Hands Off

(9) Door

(10) Boys

(11) Girls

(12) Office

(13) Push

(14) Pull

(15) Walk

(16) Don't Run

(17) Please Leave by Rear Door

(18) Waiting Room

(19) X-Ray Department

(20) Please Move to Rear

(21) All Deliveries in Rear

(22) Bookkeeping

(23) No Salesmen Allowed

(24) Escalator

(25) Credit Office

(26) Express Elevator

(27) Local Elevator

(28) Stairway

(29) Checking

(30) Apartment for Rent

(31) Use Revolving Door

(32) Please Use Handrail

(33) Smoking Prohibited

(34) Employees Only

(35) Stop

(36) Go

(37) Cross Walk

(38) No Parking from 8:30 A.M. to 5:30 P.M.

(39) Parking Allowed This Side of Sign

(40) Divided Highway Ends

(41) Road Closed

(42) No Hitch Hiking

(43) Men Working

(44) Soft Shoulders

(45) School Zone

(46) Rough Road

(47) Slow - Playground

(48) State Line

(49) Roadside Table, etc.[10]

The preceding signs and many other common signs should be taught in the classroom. Most of the signs mentioned are usually

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10. L. R. Learning Aids Company, (Detroit: 854 Howard Street).

common to most localities, however, if other signs are used in a particular locality, those should be included in the list. The writer has not intended for the above list of common signs to be inclusive. She had many other signs at her disposal, but the list presented was used in the classroom for the school year of 1959-60.

THE SYSTEMATIC EXPERIENCE METHOD

The systematic experience method of teaching reading is very effective with mentally retarded children, if it is modified to fit their learning ability. The same process may be employed as with normal children, but fewer new words must be introduced, more repetitions must be given, the period of beginning reading must be prolonged, and many more and varied presentations must be given. The teacher is cautioned, however, to remember that all children do not react alike, and she should use the mothod in teaching beginning reading that will work best with her children.

The following recommended steps in teaching reading to mentally retarded children were used by the writer:

Step 1. First of all, the teacher of mentally retarded children should be sure that the children are ready to read. They must be sufficiently mature mentally; they should have acquired a vocabulary and other abilities needed for beginning reading. The most important requirement is that they must have a desire to read.

Step 2. On the basis of their immediate experiences, the children should be stimulated to tell a story. This story should be an experience which they describe and the teacher writes the sentences on

the board. Manuscript writing is preferred to cursive, since it is more like the printed materials.

In formulating paragraphs on the board, the teacher should keep in mind a number of principles.

(1) The stories should contain short sentences.

(2) The sentences should be derived from the children's immediate experiences.

(3) The paragraphs, at the beginning should contain only three or four sentences.

(4) The length of each sentence and paragraph should be increaded.

(5) Words that will appear later in book reading should be introduced.

Step 3. The paragraph that was written on the board should on the following day be written in manuscript form or with a printing set on a chart, from which the children should read. In this way the children read the same material in a different setting. The charts may be read aloud by several or all of the children.

At this stage of the reading process the children are reading the charts partly from memory, and partly on the basis of the configuration of each sentence and the paragraph. They see vague wholes, rather than words or letters in the words. They are perceiving wholes and are in the first stage of the reading process.

Step 4. On succeeding days, new paragraphs should be written on the board, which utilize the immediate experiences of the children, and should contain relatively few new words. The stories should also be written on charts in the same manner as before. The chart material

may be made in the form of a large book, so that the children can read progressively as they turn the pages of stories which they have experienced, and which they have aided in constructing.

Step 5. For normal children the first four steps in beginning reading are usually sufficient to teach them a sight vocabulary. It is stated that many teachers of normal children utilize the method given above for the first six or ten weeks of the first grade and then introduce the pre-primers and primers. This length of time doesn't usually work with mentally retarded children, however. Many other presentations should be given them. The teacher of mentally retarded children must continue the introductory reading experiences far beyond the point where she could stop for normal children.

The same material must be presented to mentally retarded children again and again in different settings. The following devices and methods of presenting the same materials are recommended so that repetitions of words and sentences may be given in a variety of settings.

(1) The "moving-picture" method can either take the place of the chart method or supplement it, since some children object to chart reading because it seems like "baby stuff" to them, and because they have had it in past years.

(2) Mimeographing the same stories for the purpose of further repetitions also aids the fixation of words and phrases, and presents the material in a new setting. Children also make their own reading books from the mimeographed stories.

(3) The lantern slide or stereopticon technique is another variation that may be used to advantage with the use of the projection

lantern, the teacher may print on slides the stories which have been read from the charts or the "moving-picture" box. These slides may be placed in a projection machine and flashed on a white wall. Because of the novelty, this motivates the children to re-read the materials. This technique aids many of the distractible children to pay attention to the reading materials.

(6) After the children have acquired a sight vocabulary through reading stories of their own experiences, the teacher should aid the children to become aware of details by instructing them how to learn to recognize individual words. This is the second stage in the reading process and may be facilitated by the use of a variety of methods. Some of the devices and methods follow:

(1) Pointing out individual words in a story.

(2) Cutting charts into sentences and children reconstructing the story in the right order.

(3) Cutting the sentences into words, and reconstructing them.[11]

The above method of teaching reading is recommended for teaching mentally retarded children to read, but the writer made variations for the children at Cobb School when needed.

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11. Kirk, Op. cit., pp. 85-91.

CHAPTER V

INCREASING THE EFFICIENCY OF READING

After the children have participated in a beginning reading program as outlined in Chapter IV, they will be able to read many stories prepared by the teacher as well as simple books corresponding to the primer and first-grade levels. The teacher, however, should be cautioned to note that these children are expected to do more than just read books. They must be aided in increasing their efficiency in reading. The following chapter is devoted to methods of increasing reading efficiency.

"To develop efficiency in reading, says Kirk and Johnson, teachers should become familiar with (1) development of word recognition, (2) significance of oral reading, (3) the factor of interest, and (4) the importance of comprehension skills." [1]

WORD RECOGNITION

To differentiate words requires the ability to make associations and inferences. Because of the poor generalizing ability of many mentally retarded children, they must be aided in this process. Consequently, guided experiences and activities must be planned to develop this ability. A variety of activities and methods will be needed, however, since all children do not learn alike. Mentally retarded children do not "pick up" words incidentally unless they are exposed to them over and over in a variety of situations. [2]

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1. Samuel A Kirk and G. Orville Johnson, Educating the Retarded Child (Boston: Houghton Mifflin Company, 1951), p. 266.

2. Ibid.

Dr. Arville Wheeler[3] asserts that:

> Teaching word-recognition to slow-learning pupils presents a problem, for what may help a pupil of normal-learning ability to get the pronunciation and meaning of a word may serve only to confuse the slow-learning pupil, and what may be a help to one slow-learning pupil may be a hinderance to another. The teacher should observe carefully to see how the slow-learning pupil attacks a strange word when he does it on his own. She should build on the method of attack used by him.

Dr. Wheeler[4] further states methods that might be used to teach slow-learning pupils word-recognition techniques. He maintains the following:

> Many slow-learning pupils use configuration clues to help them remember words. The length of the word grandfather; the ph in the middle of the word elephant; the y, sometimes referred to as the tail on the monkey, in the word monkey, may be the clues which stick in their minds when they see these words for the first time. They are the clues that transfer to the words the time they see them.
>
> Picture clues are used frequently by slow-learning pupils in recognizing strange words.
>
> Slow-learning pupils profit from phonetic instruction but not all of them. The teacher should be careful not to use the phonetic approach until she is certain are helpful to him should be taught. A mental age of seven years or more and a basic sight vocabulary of 75 to 100 words are indicative of readiness for phonetics when teaching pupils of normal- learning ability. The achievement of the slow-learning pupil should be equally as great at the time he is introduced to phonetics. For pupils who are extremely slow-learners this time may never come.
>
> Some slow-learning pupils seem to profit by the study of prefixes and suffixes of words which recur again and again in their reading.

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3. Arville Wheeler, Teaching Reading to the Slow-Learner, Section V (Conneticut: Arthur C. Croft Publications, 1959), p. 17.

4. Ibid.

> Context clues sometimes can be used by slow-learning pupils in determining the meaning of words they do not know but they should be used with extreme caution, because the slow-learning pupil is just as likely to "guess wrong" as he is to"guess right" when he guesses at the meaning of a word from the way it is used in the context.
>
> Few slow-learning pupils will ever be able to analyze a word - structurally take it to pieces - in order to get at either its meaning or its pronunciation, and many slow-learning pupils will never learn to read well enough to use the dictionary.
>
> So, it would seem that the teacher should use the most of her time for the teaching of words in the repetition of the same words over and over again in the form of new stories and in varied word drills and teach word-recognition techniques only incidentally at the time when a particular technique may be used to advantage.

Since the teacher was conscious of the fact that all of the children in the reading group at Cobb School would not use the same method of attacking strange words, a variety of methods were used. The teacher's task, however, was to note the methods of attack used by individual pupils, as recommended previously by Dr. Wheeler, and to build on the attack used by them. The methods used were: (1) configuration clues, (2) picture clues, (3) phonetic approach, (4) prefixes and suffixes of words, (5) context clues, and (6) repetition of words.

ORAL READING

> Oral reading is a necessary phase of beginning reading for every child. The slow-learning child enjoys oral reading over a longer period in his development than the brighter child. He gains a feeling of confidence and satisfaction from the auditory stimuli and motor component of speech afforded by reading aloud. He likes to hear himself read.5

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5. Christine P. Ingram, Education of the Slow-Learning Child (New York: The Ronald Press Company, 1953), p. 289.

Dr. Wheeler[6] presents research evidence to justify oral reading with the slow-learning pupil. He maintains the following:

> The agrument that oral reading begets "word callers" rather than comprehenders of what is read does not apply to the slow-learning pupil, for the simple reason that no pupil will ever be able to read faster than he can think. The slow-learning pupil is slow to think. That is why he is termed a slow-learner. Since he is slow to think, he will be slow to read. Since he is slow to read, time spent in calling words seems to help rather than hinder him in his attempt to understand the printed page.
>
> Now should it be argued that oral reading should not be taught to the slow-learning pupil on the ground that it will prevent him from becoming a fast reader because, under the best of conditions, many slow-learning pupils will never be able to read silently faster than they will be able to read orally. It is said that the silent reading rate of the pupil of normal learning ability does not exceed his oral reading rate before the third grade. For many slow-learning pupils the third grade will be the highest grade level on which they may ever be expected to read. Therefore, oral reading is not going to handicap them insofar as speed in reading is concerned.
>
> The slow-learning pupil seems to thrive on oral reading. It seems that calling words as he looks at them helps him to remember them. He is proud of his accomplishments. He likes to hear himself read, and he likes to read to others when he knows that he can read. Oral reading, then, becomes an incentive for reading. Anything that can be used to stimulate a slow-learning pupil to read should be capitalized upon. Oral reading in abundance, therefore, should be the practice in teaching slow-learning pupils in the primary grades.

Oral reading, then, is a necessary phase of beginning reading, especially for the slow-learning child.

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6. Wheeler, op. cit., p. 18.

Oral reading was stressed with the mentally retarded children at Cobb School. Oral reading was done on a voluntary basis, that is, the teacher asked the group who would like to read a story for the class the next day. In response to this question, two or three pupils always volunteered to read to the class the next day. The teacher did not worry as to whether or not every child who could read, volunteered. They took turns in reading, more or less, and seemed to enjoy it.

As was pointed up by Dr. Arville Wheeler, these pupils seemed to thrive on oral reading. Calling words as they looked at them helped them to remember the words. They were proud of their accomplishments, as was detected in their eagerness to read.

The use of the tape recorder proved to be very valuable in stimulating and creating an interest in oral reading. The pupils selected stories of their own choice to read orally onto the tape.

The filmstrip projector was very popular also in encouraging oral reading. The children in the reading groups knew how to operate the projector. They alternated in operating the projector, as well as reading the films.

SILENT READING

While slow-learning pupils may never become efficient silent readers for the reasons already indicated, silent reading should not be entirely overlooked in the primary grades. Slow-learning pupils in these grades have many occasions to use silent reading. They should be able to read such directions as, "time to play," "put your books away," "girls may stand", "boys may stand," "girls may pass," "boys may pass," "boys may play marbles," "girls may swing," etc., silently and instantaneously the moment the teacher places them on the blackboard. They should be able to read notices on the bulletin board. Such notices as

This is Monday.
It is raining.
We will play in the gym today.

and

Thursday is Thanksgiving.
We have a play today.
The play is about Thanksgiving.

should appear regularly on the bulletin board, and pupils should be taught to read them silently. All such notices should be in words that are already known by the pupils.[7]

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7. Ibid

SIGNIFICANCE OF INTEREST

Research points out that learning takes place more rapidly and more efficiently if the materials are meaningful and interesting. Consequently, the teacher must supply the children with interesting reading materials.

Gates[8] studied the interests of mentally normal children including the interests of mentally retarded children. He concluded that materials which are interesting to normal children are also interesting to mentally retarded children, vice versa; materials that were uninteresting to mentally retarded children were uninteresting to normal children. He concluded that the elements in children's reading material which contribute most to interest are:

Surprise. The unexpected and unforseen events, happenings, conclusions, and outcomes.

Liveliness. Action, movement, and something doing.

Animalness. Stories which present things animals do, their acts, characteristics, and experiences.

Conversation. A story which includes dialogue.

Humor. A story that includes humor from the child's point of view. Many incidents which are humorous to the adult are not funny to children.

Plot.

Suitability. A story that comes within the range of experience of the children.

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8. Arthur I. Gates, Interest and Ability in Reading (New York: The Macmillan Company, 1930), pp. 74-90.

Difficulty. Stories which are not too difficult in vocabulary and meaning.

For mentally retarded children who have experienced failure, one of the most important factors in creating interest in reading is for them to witness success in reading.

Keeping in mind the preceding elements in children's reading material which contribute most to interest, reading materials were selected on the basis of appeal to the children. This was done more or less, by leaving a variety of books on the reading table for a few days. Attention was called to these books, and the children were invited to read certain stories, or any stories in the books. After the stories were read, they were asked to tell what they thought of the stories. If the stories in the books tended to attract and hold attention, these books were considered for reading.

The selection of books was kept within the children's ability, yet was sufficiently difficult to require effort and promote learning.

COMPREHENSION SKILLS

Comprehension is another essential reading skill. Mentally retarded children must be aided constantly in applying the meaning of visual symbols.

Kirk[9] says:

> The aim of reading is to understand and evaluate what has been read. Too much stress on phonics, context clues, or oral reading, without due emphasis at all times on comprehension violates the main aim of teaching reading to mentally retarded children. The teacher should keep in mind that many of the devices suggested for increasing the efficiency of reading are only means to an end. Reading should foster an attitude of interest in and understanding of the material, not merely word-recognition and pronunciation.

The following are exercises and activities which were used to provide for comprehension skills:

1. Independent reading: Many simple stories on a variety of topics and of a variety of difficulty levels were used.

Dr. Wheeler[10] states that:

> The slow-learning pupil in the primary grades, because he is a slow-learner, will never do the vast amount of independent reading that the average reader should do; but he has the same need for independent reading that any other pupil has. He should do independent reading for information, recreation and entertainment. He should be surrounded by books and other reading materials easy enough for him to read. Such books should be highly illustrated and contain a vast amount of information encouched in a few words. Comic books, because of their masterful illustrations, have unusual appeal for slow-learning pupils.

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9. Samuel A. Kirk, Teaching Reading to Slow-Learning Children (New York: Houghton Mifflin Company, 1940), p. 130.

10. Wheeler, op. cit., p. 18.

2. Free reading: Many simple stories with a variety of topics and varying degrees of difficulty were provided.

The teacher was cautioned to note that, "free reading in itself does not produce comprehension skills; it does create interest, develop concentration, provide pleasurable experiences, and stimulates some thinking." [11]

3. Vocabulary training: Reading materials and activities which enlarged their reading vocabulary by learning new words and enriching the meanings of known words were provided. These reading materials were accomplished through projects, etc.

4. Basic sight vocabulary: Word lists that have been prepared by Dolch,[12] Gates,[13] and Stone[14] plus word lists in the back of their textbooks were used.

5. Reading directions and answering questions: Many projects and activities were used. After a discussion of a project and the manner in which it was to be executed, the teacher wrote or mimeographed directions for the children in order for them to read the directions to find out their individual parts in the activity.

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11. Samuel A. Kirk and G. Orville Johnson, Educating the Retarded Child (Boston: Houghton Mifflin Company, 1951), p. 268.

12. Edward W. Dolch, "A Basic Sight Vocabulary," The Elementary School Journal (February, 1936), pp. 458-59.

13. Arthur I. Gates, A Reading Vocabulary for the Primary Grades (New York: Teachers College Bureau of Publications, Columbia University).

14. Clarence R. Stone, Better Primary Reading (New York: Teachers College, Columbia University, 1935), pp. 50-53.

The stories of projects were also written in the form of questions and answers in order to determine what reading progress the children had made. This method was excellent for seatwork.

A list of projects which were used for integration of reading with activities follows. It may be noted that there is a progression in the series of units set forth, beginning with those centering around home and family life and reaching out to broader social and life situations.

It was felt that the learning experiences derived from these units would provide these children with a rich opportunity to experience actual doing, thinking, and feeling, in relation to the familiar situations in their environments of home, playground, neighborhood, street, school, and so on, thus making reading more interesting and meaningful to them.

Community or Neighborhood Units	Food Units
Getting Acquainted	The Cafeteria
Our Family	Foods
Our Homes	The Farm
Our School	Buying at the Grocery
The Carpenter at Work	The Dairy Farm
The Fire Department	The Bakery
The Postman	Truck Gardens
The Mail Truck	Vegetables and Fruits
The Toy Shop	The Huckster
The Gas Station	The Garden
The Theater	Milk

Travel Units	Clothing Units
Travel in our Neighborhood	The Dry Goods Store
The Taxi Cab	The Clothing Shop
The City Bus	The Laundry
The Railroad Station	The Laundromat
The Local Train	The Dry Cleaners
The Passenger Airplane	The Care and Repair of Clothing
Shelter Units	**Science and Nature Units**
The Houses on Our Street	Birds
Building a House	Fishing
The Apartment House	Our Class Pet
Furnishing the Home	The Weather
The Hotel	The Four Seasons

Examples of integration of reading with activities are presented in a compilation of projects by the following person:

Dr. Elise Martens [15] compiled and published a series of group activities contributed by teachers in special classes for mentally retarded children. The activities consisted of projects on "Community Life," "The Food Market," "Beautifying the Schoolroom," etc., and each of these group activities involved reading. The projects illustrated the manner in which "Units of Experience," may be executed to provide for meaningful and interesting reading materials.

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15. Elise H. Martens, "Group Activities for Mentally Retarded Children" (Department of the Interior, Bulletin No. 7), pp. 1-146.

SEATWORK

Seatwork can help the child develop independence in reading and at the same time engage in worth-while purposeful activities while the teacher is engeged in working with the other groups of children. The teacher provided seatwork that directed the children to read for understanding. This work included a variety of activities, that were suggested by Kirk.[16]

1. Pasting words, phrases, and sentences written by the teacher on pictures which were drawn by the child or cut from magazines.

2. Executing written directions such as, "Color the apple red."

3. Making and tracing stories on charts for moving pictures.

4. Using short phrases and sentences under a picture and instructing the child to circle the phrase or sentence that describes the picture.

5. Using reading books for the purpose of guiding the child's reading, such as, "Tell how the story may be illustrated."

6. Using mimeographed pictures and words with instructions to draw a line from the picture to the correct word to develop word recognition.

7. Using picture cards, with sentences containing words the child will meet in his reading experiences.

8. Free reading that will enable the child to read for comprehension.

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16. Samuel A. Kirk, Teaching Reading to Slow-Learning Children (New York: Houghton Mifflin Company, 1940), pp. 97-162.

9. Using the workbooks accompanying the basal readers with the activities based on the vocabulary.

10. Utilizing the sentence completion by mimeographing known stories, and omitting certain words.

MOTIVATION

> One of the basic considerations in the teaching of reading is that of developing desirable attitudes toward reading and reading activities. Because the mentally handicapped child has met failure in the reading situation he already has the attitude of withdrawing. This must be replaced with the attitude of approach toward the reading situation. [17]

Since most of the children in the class at Cobb School had met failure in reading situations, as shown on Chart II, they already had the attitude of withdrawing. Therefore, it was the teacher's duty to build up more wholesome attitudes of approaching the reading situation.

The teacher made use of Kirk and Johnson's [18] procedures for building up more favorable attitudes of approaching the reading situation. They are:

(1) Guiding the pupil into using materials that are understandable to him and in which he can succeed.

(2) Making the child aware of any small success or growth he achieves.

(3) Encouraging the child to compete with himself against his previous accomplishment.

(4) Providing easy but interesting reading material.

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17. Kirk and Johnson, op. cit., p. 270.

18. Loc. cit.

CHART II

PUPILS WHO FAILED ONE OR MORE TIMES

NAME	TIMES FAILED
R.B.	1
W.B.	5
J.B.	3
A.C.	2
R.D.	1
C.E.	1
J.G.	1
T.H.	1
O.H.	1
L.Q.	2
W.H.	1
L.T.	1
P.W.	1
H.P.	1

The pupils shown on the above chart, failed one or more times before being placed in special education. On the basis of their failure in school, it became the teacher's task to re-establish these children's confidence in themselves by presenting them with easy reading materials with an interest content more in harmony with their ability and experience.

In order to develop interest and provide reading materials that would further and expand the children's range of interests, the following suggestions were used:

(1) The children were allowed to select their own reading materials.

(2) A large variety of books were provided to encourage reading for information.

(3) The reading was vitalized through visual aids.

(4) Reading materials from recreational and informational type books were prepared for bulletin board exhibits.

(5) The children were stimulated to read their Weekly Readers, and portions of the daily newspaper.

(6) The children were encouraged to share interesting stories, poems, anecdotes, dramatizations and riddles that they found worthwhile in the books they used.

(7) The children were prepared for introduction to new units of work.

(8) The children were told the purposes for which reading is done.

(9) The children were encouraged to use the library.

(10) Free reading was encouraged at all times.

RESULTS OF SPRING TESTING

After the reading program was developed and employed, an evaluation was necessary in order to find out about its effectiveness. This was done by retesting the pupils at the conclusion of the school term. The Gates Primary Reading Test, Type PWR, Form 2, Word Recognition [18] and Type PPR, Form 2, Paragraph Reading for Grades I and II, [19] was repeated in April, 1960. The results are shown on the following table:

TABLE III

Name	Sex	C.A.	I.Q.	M.A.	Read. Gr. Type PWR	Read Gr. Type PPR	Average Reading
J.B.	M	10-2	60	6-1	1.6	1.4	1.5
P.W.	F	9-4	61	5-3	1.5	1.7	1.6
R.B.	M	10-2	66	6-4	1.5	1.7	1.6
W.T.	M	9-2	70	6-0	1.5	1.9	1.7
L.Q.	M	10-5	60	5-10	1.8	1.6	1.7
O.H.	M	9-8	78	7-4	1.7	1.9	1.8
J.G.	M	10-2	63	6-0	1.9	1.7	1.8
C.E.	M	10-3	65	6-3	2.3	2.7	2.5
H.P.	F	9-5	75	6-8	2.7	2.9	2.8
L.T.	M	12-1	66	7-3	2.8	3.2	3.0

18. Arthur I. Gates, Gates Primary Reading Test, Type PWR, Form 2, (New York: Bureau of Publications, Teachers College, Columbia University).

19. Arthur I. Gates, Gates Primary Reading Test, Type PPR, Form 2, (New York: Bureau of Publications, Teachers College, Columbia University.

SUMMARY OF FALL AND SPRING TESTS RESULTS

On the following table is a summary of the results of the Gates Primary Reading Tests. All of the pupils in the reading groups gained in their reading achievement by the end of the school term as shown on Table IV.

TABLE IV

Name	Sex	C.A.	I.Q.	M.A.	Test 1 Av. Reading	Test 2 Av. Reading	Gain
J.B.	M	10-2	60	6-1	1.3	1.5	0.2
P.W.	F	9-4	61	5-3	1.4	1.6	0.2
R.B.	M	10-2	66	6-4	1.4	1.6	0.2
W.T.	M	9-2	70	6-0	1.4	1.7	0.3
L.Q.	M	10-5	60	5-10	1.4	1.7	0.3
O.H.	M	9-8	78	7-4	1.5	1.8	0.3
J.G.	M	10-2	63	6-0	1.5	1.8	0.3
C.E.	M	10-3	65	6-3	2.1	2.5	0.4
H.P.	F	9-5	75	6-8	2.6	2.8	0.2
L.T.	M	12-1	66	7-3	2.6	3.0	0.4

The pupils in the reading readiness program were also retested at the end of the school term. The Metropolitan Readiness Test: Form R,[20] was repeated in April, 1960. The results are recorded on Table V.

TABLE V

Name	Sex	C.A.	I.Q.	M.A.	Test 1	Test 2	Test 3	Test 4	Test 1-4	Letter Rating	Readiness Status
R.H.	F	6-9	54	3-4	5	3	4	4	16	E	Poor Risk
T.H.	M	8-0	55	3-8	7	4	9	5	25	E	Poor Risk
B.H.	M	7-1	69	4-7	8	5	7	9	29	E	Poor Risk
R.D.	M	8-2	68	5-2	8	7	4	12	31	E	Poor Risk
A.C.	M	8-7	58	4-8	11	8	8	9	36	D	Low Normal
W.B.	M	12-10	56	6-10	15	11	9	13	48	C	Average

In Table VI is reported a summary of the results of the Metropolitan Readiness Tests which were administered in the fall and repeated in the spring.

TABLE VI

Name	Sex	C.A.	I.Q.	M.A.	Fall Tests	Spring Tests	Gain
R.H.	F	6-9	54	3-4	10	16	6
T.H.	M	8-0	55	3-8	16	25	9
B.H.	M	7-1	69	4-7	21	29	8
R.D.	M	8-2	68	5-2	27	31	4
A.C.	M	8-7	58	4-8	30	36	6
W.B.	M	12-10	56	6-10	40	48	8

20. Gertrude H. Hildreth and Nellie L. Griffiths, Metropolitan Readiness Tests (New York: World Book Company, 1949).

Even though all of the pupils in the reading readiness program participated in planned activities which were designed to develop all of the functions necessary for beginning reading, only one pupil was ready for beginning reading at the end of the school term. Nevertheless, all of the pupils did show much improvement.

It is recommended that the children in the reading readiness group remain in an extended reading readiness program until such time they have developed sufficiently for beginning reading.

The one pupil who showed readiness for beginning reading will be placed in a beginning reading program.

CHAPTER VI

SUMMARY AND CONCLUSIONS

Summary

The following is a summary of the reading program for primary mentally retarded children of Bailey Cobb Elementary School, Clarksville, Tennessee.

1. The primary class for mentally retarded children of Cobb School had a register of thirteen boys and three girls whose chronological ages ranged from 6 years and 2 months to 12 years and 3 months; mental ages ranged from 3 years and 4 months to 7 years and 4 months and intelligence quotients ranged from 54 to 78.

2. Many problems were factors in planning a reading program for this class in addition to their retarded intellectual development.

    (a) There was a large range in abilities.

    (b) There was marked emotional instability because of immaturity and failure.

    (c) There were numerous physical defects.

    (d) Speech disorders were numerous.

3. All of the children in the class, with the exception of two, had already attempted and failed in beginning reading before being placed in special education.

4. All of the mentally retarded children in the reading class gained in reading achievement as measured by standardized reading tests, and teacher observation. There was also a marked improvement in their behavior and interest in school activities, as a result of having participated in a reading program that was more in harmony with their needs and capabilities.

5. Surveys have shown that mentally retarded children can learn to read up to their mental age. In interpreting the mental age as a measure of reading grade expectancy, one can state that, all other things being equal, the mental age is the best known measure of reading grade expectancy.

6. Research has shown that mentally retarded children differ from normal children in learning to read in that they (a) cannot be expected to begin learning to read at the life age of six, (b) learn to read at a slower rate, (c) become discouraged because of continual failure, and (d) usually have poorer environmental and experiential backgrounds, as reflected in their language usage.

7. Delay reading until a mental age of at least six is attained or until the children show signs of an aptitude for reading.

8. Develop adequate use of the English language so that when the children begin to read, they will understand the reading matter.

9. Develop ability in the children to remember sentences and ideas in logical sequence, as reading involves thinking, and remembering sentences and ideas previously read.

10. Develop visual memory and visual discrimination. Learning to read involves remembering things seen, and the ability to discriminate between similar visual symbols.

11. Develop auditory memory and auditory discrimination. Learning to read involves remembering words and ideas heard as well as the ability to discriminate between similar auditory symbols.

12. Develop correct enunciation and pronunciation. Learning to read is related to the ability to speak accurately.

13. Develop motor ability during the regular course of classroom activities such as handwork, drawing, writing, and tracing, although, the motor ability of mentally retarded children is usually slightly inferior to that of the average child, this need should not be overlooked.

14. Present beginning reading to mentally retarded children in conformity with the psychological process of reading, that is, they first perceive whole sentences as vague blocks and gaps. To progress in reading, they must learn the details of the sentences and the details of the words. Lastly, by the process of "cue reduction" the awareness of the details are reduced and the child is capable of reading without being conscious of words or letters.

15. The systematic experience method, supplemented by incidental reading is recommended for mentally retarded children, because of their relatively inadequate methods of generalizations.

16. Mentally retarded children must have beginning reading materials presented repeatedly over a prolonged period of time and in different settings.

17. The teacher must write stories comprehensible to mentally retarded children since readers constructed for normal children are too difficult for mentally retarded children. Readers that are used should be supplemented by mimeographed stories or by adequate commercial supplementary books, etc.

18. Much seatwork materials must be designed to aid these children in learning details, in word-recognition, and other reading skills.

19. Mentally retarded children are deficient in generalizing ability and have difficulty in developing a method of word-recognition, therefore, various methods of recognizing words in reading should be used.

20. Oral reading should be prolonged since it aids learning and gives the teacher a guide to the methods of reading the child is using, however, silent reading should not be excluded from the reading program.

21. The mentally retarded child should be given interesting reading materials with elements of surprise, liveliness and aninalness, yet, simple enough to insure mastery on the part of the child.

22. The reading program for mentally retarded children should include free reading, reading directions and answering questions, correlating project work, and increasing the reading vocabulary. Comprehension of reading materials should always be stressed.

Conclusions

The facts presented in this study suggest certain definite conclusions regarding the reading program for the primary class for mentally retarded children of Bailey Cobb School, Clarksville, Tennessee.

1. In keeping with what is known about mentally retarded children, and the mentally retarded children of Cobb School were no exception, teaching reading to them should include (a) re-establishing their confidence which has been shattered through failure in school for several years, (b) delaying reading beyond the age of six or until sufficient mental age for reading has been attained, (c) adapting the reading periods by prolonging the period of each stage to conform to the slow-learning ability of the children, (d) presenting the children with easy reading materials with an interest content more in harmony with the children's age and experience.

2. Special emphasis must be placed on (a) reading readiness, (b) development of vocabulary and techniques of word-recognition, (c) selection of reading materials, and (d) preparation of supplementary reading materials.

3. A reading program for mentally retarded children must be flexible so that the individual child may be one of a group but work at his own level of accomplishment.

4. All learning activities should be presented gradually. In other words, the teacher should begin with simple materials with which the children can succeed and proceed slowly to more complex materials only as fast as the children can learn.

5. In planning reading for groups and individuals, the teacher should always provide for individual differences. Certain children, because of their handicap, may need differentiated and individualized methods in order to learn to read.

6. Because of the diversity of background in the home and school experiences of mentally retarded children, the teacher should know as much as possible about their home and of the school history of each individual pupil, with reference to length of their school attendance, grade repetitions, and the personality adjustments they have made under those conditions.

7. Standardized tests should be used to measure reading improvement. These tests should be chosen on the basis of how they are suited to the ability of the group and of the individual to be tested.

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APPENDIX

APPENDIX A

LANGUAGE ARTS GAMES

Word Meaning Games for Beginners

For Basic Concepts	Suggestive Procedures
Heavy and light large and small tall and short long and wide left and right whole and half big and little find something in the room that is	These concepts are most easily introduced through familiar concrete objects and experimentation. Using children themselves in a discussion of tall and short and using material close at hand to make comparisons of light and heavy, etc.

Matching	Suggestive Procedures
Colors pictures quantities words pictures with first letter sounds figures forms	Through discussion and concrete materials children can be helped to see likenesses and differences. Classification is another meaning and association check. Such classifications are: fruit, vegetables, clothing, dishes, color, toys, pets, animals, numbers, furniture and action words may be used in making picture books, words in games, etc., as well as playing riddle games in which a child gives a clue for others to guess.

Classifying	Suggestive Procedures
Thinking and Guessing	
I'm thinking of something: that has four feet that lives in water that climbs that has wheels that says "mew, mew"	After the children have used such simple one-line clues they can begin to make up similar clues of their own and the clues may become more complex.

"I'm Thinking of a Word that Means"

A place where books are kept (library)
A place where dishes are kept(cupboard)
A place where food is kept cold (refrigerator)
A place where people take trains (depot)
A person who builds(carpenter)

Suggestive Procedures

There may be many variations of this game in keeping with the understanding and needs of the children. This game may be used with spelling words to be sure that children associate real meaning with the words they are learning to spell.

Color Recognition Game

Each child has a circle of a different color except the child who is "It". Chairs are placed in a row and each child puts his 'color' beneath his chair. 'It' stands at the end of the row and calls a color. The person having that color beneath his chair must pick it up from the front of the chair while 'It' tries to get it from behind the chair. Change colors frequently.

Suggestive Procedures

After color words have been introduced, they may be substituted for the colored paper. Other words may be used in this game.

Musical Chairs

Place a color card or a word under each chair. Children march around the row of chairs to music. When the music stops 'It' calls out one of the words and no other child can sit on that chair. 'It' occupies that chair and each child tells what is under the chair. The child who is without a chair can gain one by being able to tell a word that some child cannot recognize. The last child standing is 'It' for the new game.

Suggestive Procedures

This can be varied by having children give sentences using the word or by explaining the meaning. Needs of the children can be determinants of the flexibility of the game.

Hiding the Ball

Children are seated on chairs in a circle. One child leaves the room while a ball is placed in the hands of some other child. 'It' returns and asks, "Who has the ball?" "Is it Mary?" etc. The children respond with "No, it is not Mary" or "No, it isn't Mary" until the right guess is made.

Suggestive Procedures

This helps children know each others names and to overcome usage of 'has got' and 'ain't'. Any object may be substituted for the ball.