Teaching Reading to the Educable Mentally Retarded at the Junior High Level Through Music and Rhythms

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TEACHING READING TO THE EDUCABLE MENTALLY RETARDED
AT THE JUNIOR HIGH LEVEL THROUGH
MUSIC AND RHYTHMS

A Thesis
Presented to
the Graduate Faculty
Central Washington State College

In Partial Fulfillment
of the Requirements for the Degree
Master of Education

by
John Ernest Wollenweber, Jr.
August, 1968
APPROVED FOR THE GRADUATE FACULTY

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John A. Schwenker
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CHAPTER I

THE PROBLEM AND DEFINITIONS OF TERMS USED

The necessity for providing adequate and appropriate kinds of educational experiences for all children has become more and more acute. Today's educators are most anxious to arrive at satisfactory solutions. The role of educating the mentally retarded member of society has accordingly become an important area of study by educators and parents alike. The need for a solution to the problems of providing optimum opportunity to achieve for these students has been emphasized by legislation, general public clamor, and concerned teachers.

Featherstone states very concisely why we as educators and members of a free American society should be anxious to reach a solution to educational inadequacies:

If anyone doubts the need of sincere efforts to educate the slow learners, not to mention the mentally retarded, let him meditate on the fact that twenty out of every hundred pupils chosen at random means at least four million for the country as a whole. Then let him ponder the consequences for the general welfare of permitting the number of future adult citizens to grow up illiterate, uncultured, and uninitiated in the American way of life (3:vii-viii).

Educators should be concerned about the inability of a segment of the school population to achieve the level of its potential. The acquisition of skills in the academic areas is important with the mental retardate. The very
definition of the terminology "mental retardate" requires
an added need to give these youngsters optimum training
and opportunity for academic success.

Working with these children place extra demands upon
the teacher. Their mental and often physical handicaps
require love and understanding by their parents; assistance
and moral support from the community; and skill, patience
and diligence from the teacher.

I. THE PROBLEM

Statement of the Problem

It should be the concern of society to provide ade­­­quate means of training for the mental retardate. The
burden of a handicapped individual upon society necessi­­tates the utilization of social and educational forces to
train and provide for the needs of that individual. Reading
achievement of the mentally retarded student should be a
concern to those who work with these youngsters.

This study was concerned with the problem of how to
vary the teaching of reading from the conventional approach
to an adjunctive method of teaching which utilized music
and rhythms.
Purpose of the Study

The purpose of this study was to determine the effectiveness of teaching reading to educable mentally retarded children at the junior high school level through the use of music and rhythms.

Some mentally retarded children have artistic and musical abilities that might be encouraged. With repetition of songs, children gradually become appreciative of music and seem to enjoy it. Some can hum tunes who cannot read the words; some possess good voices and sing correctly in tune; some whistle and some play an instrument. Worthwhile mental attitudes, such as concentration and interest, might be developed by music.

Teachers should be concerned when some of their pupils fail in reading. The teacher of the mental retardate realizes the additional handicaps prevalent in teaching these students. He is constantly searching for a method, a way, a "gimmick" which will enable him to teach all his pupils to read. It is especially important for a teacher of the mental retardate to acknowledge that no one particular method will work with all his students. These students have unique needs and handicaps and a teacher has to know a variety of methods when he is confronted with these unique problems.
II. DEFINITIONS OF TERMS USED

**Mental Retardation**

The American Association on Mental Deficiency proposes the following definition of mental retardation:

Mental retardation refers to subaverage general intellectual functioning which originates during the developmental period and is associated with impairment in adaptive behavior (7:70).

Mental retardation may be the result of brain damage, and so-called endogenous, familial, or hereditary conditions (7:469).

**Educable Mentally Retarded**

The educable mental retardate obtains intelligent quotient scores of between about 50 and 80. This child is believed capable of being educated and trained to a self-sufficient extent with limited learning capacity (6:18-26).

**Mental Retardate**

Throughout this paper, the term "mental retardate" has been used interchangeably with "educable mentally retarded."

**Normal Child**

For purposes of this paper, the reference to a normal child pertains to those children in the regular classroom situation.
Basal Reading Approach

When the writer refers to the basal reading approach to teaching reading, he is referring to those approaches recommended by current reading series textbooks, i.e., Ginn, Houghton-Mifflin, Scott Foresman, etc. This approach entails the use of some phonetic analysis and other word analysis skills such as context clues and word attack skills.

Conventional Approach

For the purposes of this paper, when the term "conventional approach" to teaching reading is used, the writer is referring to the basal reading approach.

Academic Areas

For all practical purposes of this paper, the term "academic areas" will refer to those skills involved in learning subjects, such as reading and arithmetic.

III. OVERVIEW

Chapter II presents authoritative opinion regarding the need for using various approaches when educating the mentally retarded. Chapter III discusses an approach to teaching reading via the use of music and rhythms. Chapter IV will summarize the paper and offer recommendations for further study.
CHAPTER II

REVIEW OF THE LITERATURE

The purpose of this chapter is to present the opinions of educational and social authorities regarding the necessity of varying approaches to teaching the mentally retarded. Although children are alike in some respects, their innate capabilities and interests require a variety of teaching methodology. A mental retardate has the same emotional frustrations, personal preferences, and the same desires physically and socially as does the "normal" child. However, the unique mental and physical handicaps of these mentally retarded students may make any learning situation difficult.

I. PROBLEMS IN TEACHING MENTAL RETARDATES

It is evident that there are known problems involved in the teaching of any grade level, whether the classroom situation involves the mental retardate or the "normal" student. Teachers should be aware of the special characteristics and behavior of the educable mentally retarded student in order to help him. When these students are left without help they become lost and frustrated in the rest of society (6:18).
Children classified as educable mentally retarded obtain I.Q. scores of between about 50 and 80. These children are capable of being educated and trained to maintain themselves somewhat independently as adults. Garton lists fifteen factors considered when viewing the special problems of educating the mental retardate:

1. Sensitivity to surroundings
2. Slow reaction time
3. Short attention span
4. Language limitations
5. Lack of initiative for planning
6. Limited imagination
7. Limited use of concepts
8. Inability to evaluate efforts
9. Narrow range of interest
10. Difficulty in recognizing boundaries
11. Difficulty in distinguishing right from wrong
12. Emotionally unpredictable
13. Ability to be loyal
14. Ability to acquire habits

Garton discusses problems of visual perception and conceptualization when she says:

The teacher should realize that the educable mentally retarded have many characteristics that should be considered when she plans activities for them. Because they observe few details of any object or incident, they fail to understand a situation, to recognize an object, or to find a solution to the problem. They are unable to interpret others' actions or to speculate on the results of their own actions. Good habits must be formed through the teacher's presentation of many lessons and dramatizations demonstrating right from wrong (6:26).

When a teacher recognizes the characteristics of the mental retardate, he is recognizing a need to vary from the conventional approach to teaching found in the normal
classroom situation. Frampton and Gall relate the importance of recognizing special needs of the mental retardate when they state:

More and more professionals in the field of special education have come to see that the mentally handicapped, if they are to realize their potentialities, must be given a developmental program rather than a remedial or impractical adaptation of a normal program (4:479).

Because some educators agree that a curriculum for the educable mental retardate should be based not only upon their life needs as individuals, but also upon their needs as members of social groups in a democracy, "the basic skills are usually taught in relation to the core or unit" (4:449).

Problems inherent in many educable mental retardates are problems which could be inherent in some members of the normal classroom. The fact that these problems are compounded in a special education situation requires that a curriculum be built around solving these problems. Mental retardates are especially sensitive to praise and love. Coupled with this sensitivity to surroundings, this child displays short attention span and slow reaction time. This necessitates the use of a classroom environment and materials geared to his short attention span and containing an appeal to the child's senses. Garton states:

Most mentally retarded children have a better manual dexterity than mental performance, but it still is not in the normal range of ability. Even in a manual
program, mentally retarded children are called stubborn, lazy, and disobedient, because they have a slow reaction time (6:18-19).

When teaching the basic academic skills, the teacher of the mentally retarded can stimulate interest by calling attention to the environment and emotional appeal of the students. The narrow range of interest characteristic of these children require adaptability and correlation with all areas of learning. An added difficulty in teaching a skill is the inability of the teacher to show the long range benefits of learning a skill such as reading. Garton believes that the limitations of language ability are one of the greatest difficulties for the retarded to overcome. She further states that to "help overcome this deficiency in learning and in their knowledge, they must be shown many things and the likeness and differences must be pointed out repeatedly" (6:20). Garton states that language use is the key to academic learning and relates:

... the greatest difficulties for the retarded are in the use of verbal and numerical symbols. It is through the medium of words that thinking develops and that the comprehension of abstract meaning occurs (6:21).

The ability to view abstractions and theoretical concepts are greatly impaired with the mental retardate. Trapp and Himelstein discuss the factor of realism and
concrete example when viewing the problems of the mental retardate:

. . . realistic nature of the material places demands on the child which highlight the kind of logic and the maturity of conceptualization which he can bring to a problem (7:535).

The mentally retarded child, whether his affliction be the result of brain damage or so-called endogenous, familial, or hereditary type, usually exhibits disorders of conceptual thinking (7:469). Trapp and Himelstein relate the studies of Strauss and Werner regarding the motor and sensorimotor disturbances:

These studies have indicated that brain-injured mentally defective children are impaired in sensorimotor integration, i.e., visuo-motor, tactual-motor and auditory-motor performances (7:470).

These conclusions were also reached in studies made by Holden, Keller, Cruse, Weatherwax, and Benoit (7:485-508).

Other authorities have attempted to delineate the problems involved with the neurological organization of the mental retardate. Two researchers in the area of neurological study, Glenn Doman and Carl H. Delacato, believe:

. . . that the stages by which a child's whole nervous system normally develops--how it 'organizes' itself for increasingly complex functions--provide a key for diagnosis and treatment of certain kinds of brain injury, arrested development and associated learning problems (14:28).

The above factors, involving the problems characteristic of the educable mentally retarded child, are used as a foundation for building a curriculum within the special
education classroom. When these characteristics are delineated, the special education teacher can correlate teaching methodology around programs designed to teach abstract skills in concrete form.

II. VARIATION OF TEACHING APPROACHES

One of the purposes for educating the mental retardate is that they may be able, as adults, to assume a self-supportive occupational role, this purpose could be used as a premise for varying the teaching approach.

It has been pointed out that the academic program of the mental retardate should consider the unique and prevalent problems inherent in the mentally retarded student. It was shown that conceptual analysis skills were lacking in these individuals. There is a need for correlating abstract teachings with concrete examples when teaching the mental retardate. Mentally retarded students require special facilities, methods, and techniques (15:70). This points out a need for a teaching methodology which deviates from that of the normal classroom. These students require other approaches to solve their problems.

Garton discusses the need to combine skill teachings with art and music. She states that the academic material may be the cause of frustration and the teacher should realize this causative factor to serious emotional blocks
and future development (6:40). The author states the need for applying every area of contact to the teaching methodology of the basic skills. It is especially important for the teacher to realize the short attention span and lack of long range conceptualization and provide stimulating activities which complement and correlate:

This applies to every area of contact, whether it is art and craft work, physical education, homemaking, shop work, supervised play period, library period, a unit of work, or basic skills (6:42).

Garton advocates the use of the core unit in the curriculum of the educable mentally retarded. This core-unit type curriculum involves studies dealing with human relationships structured around centers of interest in which the basic subjects are integrated. When using this methodology, all basic subjects, including reading, would be correlated within the total realm of classroom learning experiences. She states:

The core unit may be planned for the group by selecting a topic of interest in the area of human relationships as represented in the social studies or science fields, and by grouping materials, activities, and experiences around it from many areas, thus producing a coherent and cohesive unit of study (6:72). The topic of interest around which the unit is centered may vary from day to day. One day (or period) it may include music, the next physical education and movement exercises.

Along with correlating subject content teachings, lessons should be planned which provide practice and
experience in motor-perception skills. This is necessary since the lack of such skills are predominant with the educable mental retardate. The utilization of these motor activities in the classroom environment help to overcome these learning obstacles (9:217-240).

Garton states that there must be "visual, auditory, and kinesthetic knowledge of the word to make it useful in oral and written language" (6:71). The attainment of this may require a variation to a conventional approach to teaching a subject. Kephart states the need for the programming of form perception, figure-ground relationships, and spatial relationships within the curriculum:

When figure-ground for form is encountered in the dimension of time, we know it as rhythm. Rhythm is important in kinesthetic and tactual problems since much of the information which we obtain from the senses is probably aided and militated by ability to establish and maintain rhythm relationships. In the auditory field, information is kept classified and organized through the imposition of rhythm upon auditory stimuli (9:235).

The practice of combining neurophysiological activities with basic classroom teaching methodology was instigated many years ago under the influence of Seguin and Montessori. However, practical application of the theory of training the muscular system, eye-hand coordination, auditory sense, voice and visual abilities is not present to any great extent in the classroom curriculum today (4:430).
The theory of "Movement Exploration" was instigated in Europe. This movement exploration provides for unlimited exploration of bodily movement through enjoyable physical activities and is immersing as an integral part of the total classroom teaching curriculum (1). The movement exploration program utilizes experiences involving hand-eye coordination and basic motor skills. Frostig also uses an approach to teaching reading which involves exercises in perception:

... success in learning to read depends on visual perception. A child with such a lag in their visual perceptual development is indeed handicapped ... Above all, the distortion and confusion with which he perceives visual symbols will make academic learning very difficult, if not impossible, no matter how intelligent he is (5:8).

Since problems in visual perception have been delineated as definite areas of concern with the mentally retarded, many educators are attempting to incorporate these perceptual development skills in the basic reading program.

Newman, in a study entitled "Motor and Visual Coordination as an Integral Part of Physical Education in the Elementary Schools," reported in March, 1966, that:

Current research shows that it is possible for a person to improve his general functioning at any age level. Activities dealing with drawing exercises, rhythmic training, body balancing exercises, and other physical activities have proven to be quite beneficial to the poor reader, brain-injured children, and stutterers. All this started in Philadelphia where Glen Doman and Carl Delacato learned that people are deficient in reading because of faulty neurological organization (11:3).
Along with physical education exercises, the use of music as an approach to teaching basic fundamentals has been recognized. Wallin states that in music appreciation and performance many of the mentally handicapped can function on a higher level than they can reach in the literary subjects (16:355).

It would appear that the use of music would provide necessary visual and auditory experience as well as complementing the basic curriculum with a concrete experience involving individual participation. The rhythm, the quick staccato tempos, and simple familiar songs all offer opportunities to improve motor-perception skills. Rothstein states that all types of rhythm have an important place in the lives of retarded children and should be utilized to the fullest. He says:

Practice in rhythm gives every child, no matter how retarded, an opportunity to do something, to create to express himself. The teacher should begin with the child's own natural degree of rhythm and continue from that point by fitting the music to the child's activity (13:256).

We have pointed out the problem of the mentally retarded's lack of attention span. One teacher found success in using music as a psychological therapy to calm children into becoming susceptible to learning activities. Loewy states:

... quarreling to music, aping the gestures of temper and sulkiness, making friends again, and just being silly;
all these things done to music help the child to overcome his folly and work out his irritation (10:141).

This same teacher utilized music as an aid for muscular therapy. She began by moving the child's arms and legs in time to the music until the child grasped the idea and could move his own limbs without her help (10:139).

When a teacher encompasses the necessary components to providing for pleasurable musical experiences, music and rhythm can compliment the teaching of other basic skills such as arithmetic. O'Toole urges the teacher of mental retardates to utilize music in all areas of curriculum and states:

Children quickly grasp the idea that music counts in two's, three's, and four's. The teacher may begin by tapping the rhythm out on a drum or a tambourine while the children clap or make some other rhythmic bodily motion. Simple rhythms in two-four, three-four, and four-four time can then be put up on the board for the children to read. Each child should have a turn playing the rhythms on an instrument while the others make some motion at their desks (12:73).

Drake agrees that music plays a vital part of the curriculum for the mentally retarded when he says:

... rhythmic performance of motor skills is related to reading and handwriting. Rhythm is different from coordination in that it denotes free and patterned motor skill rather than gross motor behavior. Poor readers may coordinate well but be arhythmic. Developing a child's sense of rhythm is important in helping him learn to read (2:202).

Drake relates two studies: one at the reading research institutes at Berea College, Berea, Kentucky, and
the other at Fryeburg Academy, Fryeburg, Maine. Research in these institutes indicates that children who have extreme difficulty in "decoding" words and who exhibit bizarre spelling and writing patterns usually have very little sense of rhythm. The population at both these institutes was made up of dyslexic pupils of normal or high intelligence who showed no major symptoms of personality disturbance, but who exhibited marked reading, spelling, and writing disabilities. These are remedial cases who are often gross underachievers, despite a history of strong motivation and effort on their part. Given proper remedial instruction they tend to become achievers. Drake further states that during six years of testing, observation, and research, it has become apparent that the development of rhythm is intimately related to the acquisition of reading, writing, and spelling skills (2:202).

Jenkinson relates the importance of proper motivation to successful learning. He states that all psychologists appear to accept the notion that both psychological and physiological motives affect organisms. He feels that teachers should understand the five psychological facts of cognitive drive, socialization, achievement and aspiration, interest incentive, and individual differences that are essential to learning achievement (8:49-50). Any approach to teaching the mentally retarded should entail means of
utilizing these physiological-psychological motives through an adaptable school curriculum.
CHAPTER III

PRESENTATION AND EVALUATION OF DATA

I. BACKGROUND INFORMATION

During the writer's student teaching experience, it became apparent through observation and instruction that there were complex problems involved in teaching academic subjects to mental retardates. The reasons for these problems were similar to those discussed in the subsequent chapters, such as the poor attention span and lack of visual and auditory discrimination on the part of the pupils. The writer's immediate concern was in the area of reading since the ability to read seemed to be an obvious goal of teachers of mentally retarded children in the Kirkland School District where the writer's student teaching experience took place.

During the writer's student teaching and observation of other classroom situations, it was noted that a strictly conventional approach to teaching reading was used with mental retardates. The lessons usually consisted of using several basal texts to facilitate the varying age and reading levels found in any mental retardate classroom. The usual word analysis skills were used with exercises involving experience charts, sight vocabulary, flash cards, and phonics. There were difficulties in keeping the attention of the students and using concrete materials to illustrate abstract
words. Experience charts, for example, proved insufficient in gaining the necessary attention required for transfer of learning. The lack of imagination and ability to visualize the long range benefits of the learning process was evident. Authorities cited in the previous chapter have illustrated special problems of the mental retardate.

During the summers of 1966 and 1967, the writer attended Camp Illahee as a counselor for retarded children. It was then the idea of using music as an approach to teaching reading was conceived.

After securing the appropriate permission from school officials, the writer set up a small scale pilot program using music as an approach to teaching reading from January through June, 1967. This took place in the special education classroom at Morgan Junior High School, Ellensburg, Washington.

The Morgan Junior High special education classroom was using a modified core curriculum approach to teaching, dealing with human relationships structured around centers of interest in which the basic subjects were integrated. The modified core curriculum provides a practical plan for teaching educable mentally retarded children. This plan has proved successful in holding interest throughout a series of experiences and activities. It is also useful for motivating the retention of information and basic skills and
for teaching other concepts and attitudes which lead to the final objective of producing a self-sufficient adult (6:72).

The reading program implemented at the Morgan Junior High special education classroom encompassed the use of various basal series with follow-up materials in addition to the supplementary texts. These follow-up materials included resources such as the Reader's Digest skill builders series. Provisions were made for persons who lacked visual awareness of their environment by such activities as having them act out direction, match colors, match shapes, match sizes, match objects, etc. Other phases of the program included developing auditory perception with the use of the tape recorder. The Movement Exploration Program was initiated in the state of Washington by an instructor of the special education class at Morgan and was also used in the curriculum. The purpose of this physical education program was to develop motor and visual conceptualization skills. Provisions were also made for the improvement of individual sight vocabularies, such as the use of word wheels, tachistoscopes and card games.

II. PROCEDURES USED

The first step in the investigation was to secure permission from the assistant superintendent of schools,
Mr. James Martin, to set up the pilot program. Permission was then obtained from the principal of the junior high school and the classroom teachers involved. It was recommended by the school district that the investigator use the *Durrell Analysis of Reading Difficulty* because this test is recommended by clinicians in diagnosis of reading problems, according to Albert J. Harris. Also, the Dolch reading vocabulary list was given in conjunction with the Durrell.

The instructors allowed the use of four pupils for the study. These students were chosen at random from the classroom by drawing their names from the list of students. Two boys and two girls were used.

Test 1 of the Durrell Analysis was administered the first week of March, 1967. The reading ability of all four children was found to be at the 2.5 grade level. A period of six weeks was allotted between test 1 and test 2 to determine whether or not the children in question had progressed, stayed the same, or regressed in relation to the conventional method of teaching reading currently being taught. This time lapse was used in lieu of a control group. Test 2 was administered on April 17, after which the writer proceeded to assess individual problems concerning word recognition and word analysis based on the tests given. Three days following test 2, the researcher set up an informal, flexible program of reading instruction incorporating music and rhythms.
The study was confined, by working with the students in a group for musical and rhythmic activities, and individually for work on specific word recognition and word analysis skills, as indicated on page nine of the individual record booklet of the Durrell. The first few lessons of the study dealt with music appreciation. The writer chose auditory discrimination at random as a beginning factor for the proposed method. The children were asked to bring phonograph records of their choosing to school so they could hear various sounds and rhythms. During this time the relationships between music and rhythm and rhythm and words were pointed out to the students. The children were instructed to hop around the room to get the feeling of various rhythms, such as rock and roll, bosenova, schottische, and waltz. The investigator continued to point out to each child that words and phrases could have a rhythm of their own. This procedure led to ensuing lessons in syllabication. Words were used in isolation as well as in context, so that the meaning of the word could be transferred into other learning situations.

Wallin relates several ways in which a mentally retarded child can approach the aspect of music appreciation. Rothstein further states that all types of rhythm have an important place in the lives of retarded children and should be utilized to the fullest (16:358; 13:260).
Rhythm instruments were introduced in the next series of lessons. These instruments included devices such as drums, sticks, and shakers. The children were instructed to use these instruments along with many of the songs that were incorporated in the lesson plans. The writer also used his guitar to help enrich the program, by playing well-known and delightful children's songs such as "She'll be Coming 'round the Mountain," "O' Susanna," "He's Got the Whole World in His Hands," and many more. Each child participated actively throughout every phase of the program, using bodily movements along with actual singing. Every student had the opportunity to produce different sounds and beats with these instruments; this helped to reinforce what we had previously discussed during past rhythm lessons. During these lessons, words to the songs were written on the chalkboard and the overhead projector. At the same time, the definitions and spellings of these words were discussed, using concrete objects for uses of clarification whenever the inability of a student to conceptualize deemed it necessary.

During the next set of lessons, which continued through the remainder of the study, the Dolch Reading Vocabulary List was utilized. The writer tested each child with the list, picking out words which were giving individual students difficulty. These words were taught using nonsense rhythm
and methods previously mentioned. To eliminate the possibility of rote memorization of words, the investigator selected several books from the school library incorporating the isolated Dolch words, which provided their use in unfamiliar material. It might be added that in the beginning the Dolch words were not used strictly in isolation but in texts as well. Rhythm was incorporated in order to show the children the relationship between music, rhythm, and the way one reads. Bodily activities continued to be used, as suggested in the list of games and activities in the Appendix.

The above procedure was used throughout the remaining seven weeks. At the end of the study, June 6, the investigator had each child read unfamiliar reading material, using words in context which were included in the individual record booklet of Dolch. Test 3 was given on the last day of the study and a comparison of the three tests was made.

III. RESULTS OF THE STUDY

The intent of this study was to ascertain whether or not teaching reading through the use of music and rhythms would be of relative value for use by a teacher of educable mentally retarded children.

The profile charts, including the results of the three tests, were extracted from the individual record booklet of the Durrell Analysis of Reading Difficulty with permission from the publisher. These charts are shown on
subsequent pages in the Appendix A, pages 40-43.

Three tests were given to each of the two boys and two girls in the study. Test 1 is indicated on the profile chart by a black line, Test 2 by a red line, and Test 3 by a green line. The results of each individual's test will be found in Tables I through IV, pages 27, 28, 29, and 31.

Boy No. 1

The oral reading test results showed this student at the 2.5 grade level on Test 1, the 3.0 grade level on Test 2, and the 3.5 grade level on Test 3, for an overall gain of 1.0 in grade reading level.

The silent reading test results showed this student at the 2.2 grade level on Test 1, the 2.8 grade level on Test 2, and the 3.5 grade level on Test 3, for an overall gain of 1.3 in grade reading level.

The listening test results showed this student at the 2.2 grade level on Test 1, the 3.2 grade level on Test 2, and the 4.0 grade level on Test 3, for an overall gain of a 1.8 grade reading level.

The flash words test results showed this student at the 2.0 grade level on Test 1, the 3.0 grade level on Test 2, and the 3.5 grade level on Test 3, for an overall gain of a 1.5 grade reading level.

The word analysis test results showed this student
at the 1.5 grade level for Test 1, the 2.5 grade level on Test 2, and the 3.5 grade level on Test 3, for an overall gain of a 2.0 grade reading level.

TABLE I

BOY NO. 1

TEST RESULTS OF DURRELL ANALYSIS OF READING DIFFICULTY

<table>
<thead>
<tr>
<th>Test</th>
<th>Oral</th>
<th>Silent</th>
<th>Listening</th>
<th>Flash Words</th>
<th>Word Analysis</th>
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<td>4.0</td>
<td>3.5</td>
<td>3.5</td>
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</tbody>
</table>

Boy No. 2

The oral reading test results showed this student at the 2.5 grade level on Test 1, the 3.5 grade level on Test 2, and the 4.0 grade level on Test 3, for a gain of a 1.5 grade reading level.

The silent reading test results showed this student at the 2.0 grade level on Test 1, the 3.0 grade level on Test 2, and the 3.8 grade level on Test 3, for a gain of a 1.8 grade reading level.

The listening test results showed this student at the 6.0 grade level on Test 1, the 5.5 grade level on Test 2, and the 6.0 grade level on Test 3, for no gain in reading grade level.
The flash words test results showed this student at the 3.0 grade level on Test 1, the 3.8 grade level on Test 2, and the 5.2 grade level for Test 3, for a gain of 2.2 grade reading level.

The word analysis test results showed this student at the 4.5 grade level for Test 1, the 5.0 grade level on Test 2, and the 5.8 grade level on Test 3, for a gain of 1.3 grade reading level.

### TABLE II

#### BOY NO. 2

<table>
<thead>
<tr>
<th>Test</th>
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<th>Word Analysis</th>
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<td>5.2</td>
<td>5.8</td>
</tr>
</tbody>
</table>

#### Girl No. 1

The oral reading test results showed this student at the 2.5 grade level on Test 1, the 3.0 grade level on Test 2, and the 3.5 grade level on Test 3, for a gain of 1.0 grade reading level.

The silent reading test results showed this student at the 2.7 grade level on Test 1, the 3.5 grade level on
Test 2, and the 4.0 grade level on Test 3, for a gain of 1.3 grade reading level.

The listening test results showed this student at the 4.5 grade level on Test 1, the 4.0 grade level on Test 2, and the 4.5 grade level on Test 3, for no gain in reading grade level.

The flash words test results showed this student at the 2.0 grade level on Test 1, the 2.5 grade level on Test 2, and the 3.5 grade level on Test 3, for a gain of 1.5 grade reading level.

The word analysis test results showed this student at the 1.5 grade level for Test 1, the 2.2 grade level on Test 2, and the 3.0 grade level on Test 3, for a gain of 1.5 grade reading level.

<table>
<thead>
<tr>
<th>Test</th>
<th>Oral</th>
<th>Silent</th>
<th>Listening</th>
<th>Flash Words</th>
<th>Word Analysis</th>
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TABLE III
GIRL NO. 1
TEST RESULTS OF DURRELL ANALYSIS OF READING DIFFICULTY

Girl No. 2

The oral reading test results showed this student
at the 3.0 grade level on Test 1, the 3.5 grade level on Test 2, and the 4.0 grade level on Test 3, for a gain of 1.0 in grade reading level.

The silent reading test results showed this student at the 2.8 grade level on Test 1, the 3.2 grade level on Test 2, and the 3.5 grade level on Test 3, for a gain of .7 in grade reading level.

The listening test results showed this student at the 2.9 grade level on Test 1, the 2.8 grade level on Test 2, and the 3.5 grade level for Test 3, for a gain of .6 in grade reading level.

The flash words test results showed this student at the 2.0 grade level on Test 1, the 2.5 grade level on Test 2, and the 3.5 grade level for Test 3, for a gain of 1.5 in grade reading level.

The word analysis test results showed this student at the 1.8 grade level for Test 1, the 2.5 grade level on Test 2, and the 4.0 grade level on Test 3, for a gain of 2.2 in grade reading level.
The results of these tests and the reading with music program indicated gains in most all areas except for two instances. Boy No. 2 maintained the same results on the listening subtest (6.0 grade reading level on both Test 1 and Test 3), and Girl No. 1 scored the same on the listening subtest (4.5 grade reading level on both Test 1 and Test 3).

The writer omitted the spelling and handwriting tests for Test 2 and Test 3 because of the time element involved in testing each child. It was realized that this study could have been altered by intervening variables such as inconsistent testing procedures, size of the group allotted, and time interval involved.
CHAPTER IV
SUMMARY AND RECOMMENDATIONS

I. SUMMARY

This study presented an approach to teaching educable mentally retarded children to read via the use of music and rhythms. In Chapter I the writer presented the problem and discussed the reasons for varying approaches to teaching reading to mental retardates.

In Chapter II the writer reviewed the opinions of authorities in the field of education. These opinions substantiated the acknowledgment of special problems inherent with the mental retardate and the need for varying approaches to teaching to overcome these problems. Specific characteristic problem areas of mental retardates were delineated and special approaches to teaching were illustrated in an effort to deal with these problems. The use of music was discussed as an activity which entailed the practice of developing motor, auditory, and visual skills.

The writer, in Chapter III, presented the background information and setting for the investigation. Procedures were set forth which explained the role of the investigator and discussed the conventional and modified core curriculum methodology being used at other schools and at Morgan Junior High School. Tests were given prior to, during, and after
the investigator's program was initiated. The music approach to reading was presented with some activities outlined. The results of three tests were given along with a comparison of scores obtained by the four students being tested.

II. RECOMMENDATIONS

The writer feels that the teaching of reading to the educable mentally retarded through music and rhythm, as an adjunctive approach with the basal reading program, does merit further consideration since it encompasses skill learning devices utilizing motor, visual, and auditory exercises.

The writer would recommend using an informal reading inventory made up from one of the basal reading series, i.e., Ginn, Scott-Foresman, Houghton-Mifflin, rather than the Durrell Analysis of Reading Difficulty. The checklist of errors is more important than the norms, according to Dr. Donald Durrell.

The writer would also recommend a longer period of time to investigate such a study, such as a year or two.

The present study involved junior high school age mental retardates. The writer recommends a study involving primary age children, since this is the level where basic skills are initiated. It is felt that the use of music as an aid to reading instruction would be especially useful
on this level for incentive purposes as well as skill
building purposes.

Teachers should have a knowledge of different
methods useful for teaching reading. One method might
not work effectively with all pupils; therefore, it is
recommended that a variety of approaches be used when
the conventional methodology fails. These approaches
could be utilized at the college reading education level
in order that prospective and regular teachers be given
the opportunity to explore new innovations and teaching
methodology.

The use of music as a supplement to the reading
program should be used only after extensive unit plan­
ing. If a teacher does not possess a minimum basic know­
ledge of music and rhythms, an adequate program might be
initiated with the help of the special music teacher
if time and facilities allow such special assistance.

Profile scores on the four students tested seemed
to indicate that transfer had taken place during the study.
The investigator feels there may be some connection between
music and rhythm and the way in which a person approaches
reading.

In conclusion, the diagnosis of reading problems
requires the knowledge and assistance of many to insure
proper identification, prevention, and treatment. The teacher should enlist the aid of specialists, psychologists, and medical personnel whenever possible, to insure an adequate diagnosis and a basis for using a variation in teaching approaches.
BIBLIOGRAPHY
BIBLIOGRAPHY


9. Kephart, Newell C. The Slow Learner in the Classroom. Columbus, Ohio:


**Durrell Analysis of Reading Difficulty**

NEW EDITION

BY Donald D. Durrell  Professor of Education and Director of Educational Clinic, Boston University

---

**NAME** Boy No. 1  **DATE**

**SCHOOL**  **GRADE 7**  **EXAMINER**

**AGE** 13  **REPORT TO**

**DATE OF BIRTH**  **ADDRESS**

---

### Profile Chart

**Key:**
- 1-Test 1
- 2-Test 2
- 3-Test 3

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<th>READING ANALYSIS TESTS</th>
<th>ADDITIONAL TESTS</th>
<th>AGE</th>
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Durrell Analysis of Reading Difficulty

New Edition

By Donald D. Durrell, Professor of Education and Director of Educational Clinic, Boston University

Name: Boy No. 2  Date: ________________

School: ____________________________  Examiner: ____________________________

Age: 13  Grade: 7  Report To: ____________________________

Date of Birth: ____________________________  Address: ____________________________

Profile Chart

Key: 1 - Test 1  2 - Test 2  3 - Test 3
**NAME**  Girl No. 1  

**SCHOOL**  

**AGE** 15  

**GRADE** 7  

**REPORT TO**  

**DATE**  

**DATE OF BIRTH**  

**ADDRESS**  

---

### Profile Chart

**Key:**  
1 - Test 1  
2 - Test 2  
3 - Test 3

<table>
<thead>
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<th>GRADE</th>
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<th>ADDITIONAL TESTS</th>
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Durrell Analysis of Reading Difficulty
NEW EDITION

BY Donald D. Durrell  Professor of Education and Director of Educational Clinic, Boston University

NAME  Girl No. 2  DATE  

SCHOOL  EXAMINER  

AGE  GRADE  REP  

DATE OF BIRTH  ADDRESS  

Profile Chart

Key:
1 - Test 1
2 - Test 2
3 - Test 3

APPENDIX B
LESSON PLAN

BACKGROUND:

Children and instructor have discussed the various kinds of music and the rhythms incorporated in them.

PURPOSE:

To have the children listen to music of their own choice (vocal or instrumental) and to discover the differences in rhythm for each type.

PROCEDURE:

1. Have children set up phonograph.
2. Play first selection, i.e. rock 'n roll
3. Have children dance to this rhythm to get the feel of the rhythm.
4. Play a waltz and demonstrate the rhythm, as above.
5. Discuss differences between rhythm of record #1 and #2. The same procedure may be followed to introduce several other rhythms, such as cha cha, march, fox trot, etc.

PROPS:

1. Record player
2. Records
3. Chalkboard
BACKGROUND:

Children have been introduced to instrumental and vocal music.

PURPOSE:

The purpose of this lesson is to show the relationship between the rhythm of music and the rhythm of words.

PROCEDURE:

1. Have children listen to records of popular recording artists.

2. Ask children to point out differences and similarities in the selections.

3. Write words from the various songs on the blackboard. Children follow the words as they are sung to note where the emphasis is placed on each word as it is sung.

5. Children sing a song of their choice, record it on tape and play back.

PROPS:

1. Record player

2. Recordings of popular music familiar to children.

3. Chalkboard

4. Tape recorder
APPENDIX C
TEXTBOOKS AND WORKBOOKS FOR TEACHING READING SKILLS

The following list of materials is suggested as none have age or grade designations on the cover. They can be used at any grade level without causing embarrassment to the student using them.


Phonics Skilltexts. Columbus, Ohio: Charles E. Merrill Co.

Records:

1. Holiday Songs
2. World of Marches
3. Children's Rhythms in Symphony
4. Singing Fun
5. More Singing Fun
6. Sing a Song of Holidays and Seasons
7. Sing a Song of Home, Neighborhood and Community
8. Holiday Rhythms
9. Songs for Children with Special Needs, Nos. 1, 2, and 3
10. Singing Games Nos. 1 and 2
11. Singing Games and Folk Dances No. 3
12. Folk Dances No. 5 (American)
13. Let's Sing a Round
14. Christmas Carols with Easy-to-Learn Descants
15. Our First Songs to Sing with Descants
16. Songs from Very Easy Descants
17. Songs from Intermediate Descants
18. Through Children's Eyes--Limeliters
19. Tubby the Tuba
20. Rusty in Orchestraville
21. The Wonderful Violin
22. Peter and the Wolf
23. Introduction to the Instruments of the Orchestra
MUSIC MATERIALS RECOMMENDED FOR USE

Special Songbooks for Primary Children:


5. "Favorite Songs of the McGuire Sisters"

Special Songbooks for Older Children:


Helpful Books for Music Methods:


Reading Skilltexts. Columbus, Ohio. Charles E. Merrill Co.


BOOK SELECTION

There are many sources of information available to the teacher for finding books which fit the individual child in both interest appeal and ease of reading. Harris warns the teacher that:

... the age and grade designations in many book lists are very broad; when specific, they are sometimes misleading in stressing the maturity of interest appeal rather than the level of readability.

Following is a list of sources a teacher might consult when recommending books to individual pupils or when adding books to the library, school, or classroom.


"Bibliography for Retarded Readers," Reading Clinic, St. Louis, Missouri: St. Louis Public Schools. 5 pp. (Mimeographed)


Books for Adult Beginners (Grades 1 to 8). Chicago: American Library Association, 1946.


"Easy Books Which Appeal to Poor Readers," Reading Clinic, Western Reserve University, Cleveland, Ohio, 2 pp. (Mimeographed.)

Hill, Margaret Keyser. A Bibliography of Reading Lists for Retarded Readers. State University of Iowa, Iowa City, Iowa, Bulletin No. 581, April 1, 1953.


Warner, Dorothy. "Bibliography of Reading Materials Suitable for Mentally Retarded Children (Pre-Primer to Grade Five)," Division of Special Education, State Department of Public Instruction, Topeka, Kansas, 4 pp. (Mimeoographed)

PHONIC DEVICES AND WORD GAMES

Many devices and games can be used by a teacher to break the monotony of traditional reading instruction and add variety and interest to the process of learning to read.

Following is a list of sources a teacher might use to locate suitable games for his or her individualized reading classroom. A teacher can also send to the various publishing houses for information on games commercially prepared.


100 Good Ways to Strengthen Reading Skills. Chicago: Scott Foresman, 1956, 24 p.


For additional information concerning instructional materials, interested persons should write to the following address:

INSTRUCTIONAL MATERIALS CENTER
The University of Oregon
Eugene, Oregon

Project Director:

Dr. Melton C. Martinson
Assistant Professor of Education
School of Education, Room 204
University of Oregon
Eugene, Oregon 97403
Phone (503) 342-1411, Ext. 1574