PHYSICAL EDUCATION OF THE EDUCABLE
MENTALLY RETARDED FOR
CASS COUNTY, IOWA

A Field Report
Presented to
The Graduate Division
Drake University

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

by
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PHYSICAL EDUCATION OF THE EDUCABLE
MENTALLY RETARDED FOR
CASS COUNTY, IOWA

by

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Approved by Committee:

[Signatures]

Dean of the Graduate Division
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>CHAPTER</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>The Problem</td>
<td>2</td>
</tr>
<tr>
<td>Purpose of the Study</td>
<td>4</td>
</tr>
<tr>
<td>Scope and Limitations</td>
<td>5</td>
</tr>
<tr>
<td>Definition of Terms Used</td>
<td>5</td>
</tr>
<tr>
<td>II. SURVEY OF RELATED LITERATURE</td>
<td>7</td>
</tr>
<tr>
<td>Definition of physical education</td>
<td>7</td>
</tr>
<tr>
<td>Identification of needs and limits of the retarded</td>
<td>8</td>
</tr>
<tr>
<td>Description of related studies and programs</td>
<td>10</td>
</tr>
<tr>
<td>III. PRESENTATION OF DATA AND PROPOSALS FOR A PROGRAM OF PHYSICAL EDUCATION FOR THE EDUCABLE MENTALLY RETARDED</td>
<td>16</td>
</tr>
<tr>
<td>IV. SUMMARY AND CONCLUSIONS</td>
<td>32</td>
</tr>
<tr>
<td>Summary</td>
<td>32</td>
</tr>
<tr>
<td>Conclusions</td>
<td>35</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>37</td>
</tr>
<tr>
<td>APPENDIX A. Letter of Transmittal</td>
<td>41</td>
</tr>
<tr>
<td>APPENDIX B. Questionnaire</td>
<td>42</td>
</tr>
<tr>
<td>APPENDIX C. List of Respondents to Questionnaire</td>
<td>48</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Objectives of a Program of Physical Education for the Educable Mentally Retarded</td>
<td>18</td>
</tr>
<tr>
<td>II. Limitations of Educable Mentally Retarded as Related to Physical Education</td>
<td>19</td>
</tr>
<tr>
<td>III. Positive Attributes of the Educable Mentally Retarded Student that Will Help Him Achieve Success in a Program of Physical Education</td>
<td>20</td>
</tr>
<tr>
<td>IV. Important Attributes for an Instructor of Physical Education for the Educable Mentally Retarded</td>
<td>21</td>
</tr>
<tr>
<td>V. Type of Activities that Would Best Achieve Objectives of a Program of Physical Education for the Educable Mentally Retarded</td>
<td>23</td>
</tr>
<tr>
<td>VI. Facilities Needed to Administer a Program of Physical Education for the Educable Mentally Retarded</td>
<td>24</td>
</tr>
<tr>
<td>VII. Type of Equipment Needed to Administer a Program of Physical Education for the Educable Mentally Retarded</td>
<td>25</td>
</tr>
<tr>
<td>VIII. Time Per Day to Be Used for Physical Education</td>
<td>26</td>
</tr>
<tr>
<td>IX. Days a Week that Physical Education Should Be Offered to the Educable Mentally Retarded</td>
<td>27</td>
</tr>
<tr>
<td>X. Pupil-Teacher Ratio for a Class of Physical Education for the Educable Mentally Retarded</td>
<td>29</td>
</tr>
<tr>
<td>XI. Evaluation Method to Be Used in a Program of Physical Education for the Educable Mentally Retarded</td>
<td>30</td>
</tr>
<tr>
<td>XII. Basis for Evaluation to Be Used in a Program of Physical Education for the Educable Mentally Retarded</td>
<td>31</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

The American educational system is committed to offering each and every child an equal opportunity to develop his talents and potential. The development of special class programs for the mentally retarded is a reflection of this principle. The mentally retarded are placed in special classes only because it offers them an improved opportunity to develop. Only in recent years has society begun to awaken to the importance and need for providing an adequate program of physical education for the educable mentally retarded children.

Educators in general have made substantial gains in the field of understanding and educating these children. They are teaching them the "why and how" for adjustment and survival in the demands made in the modern-day world.

These less gifted children are receiving instruction in such areas as home economics, crafts, shop work and basic academic subjects. They are also receiving training in courtesy and accepted social standards.

While diligently attempting to teach these children all the possible knowledge within the powers of their limited
mental capacity, it must be recognized that an equally important need exists. The need for values and benefits derived from instruction in the areas of physical and motor skills.

It has been said that to develop a mind to its greatest capacity, every individual must also gain knowledge that will help improve body function to its greatest potential. It is axiomatic that an ineffective body will not and cannot benefit the mind. 1

I. THE PROBLEM

Because of new approaches in the education of mentally retarded children, there is a need for improved curricula and programs to provide for their unique problems.

With the difficulties of meeting the environment designed for the average functioning individual, the mentally handicapped child meets more frustrations in and out of school than does the average person. It is therefore important that emphasis on physical and mental health for these youths be made. The specific areas under this heading may be listed as follows:

1. Awareness of bodily functions.
2. Practice and concepts in sanitation and hygiene.
3. Pride in personal appearance.
4. Understanding of health rules.
5. Establishing adequate values.
7. Acceptance of limitations.
8. Personal conduct.

Another important issue for educators is to determine whether motor performance of the mentally retarded can be modified by systematic instruction. Most motor skills are learned incidentally by the typical elementary aged child in regular classrooms. It is already evident in certain academic and social areas that mentally retarded children must be taught specifically what normal children seem to learn incidentally.

As Howe stated, "One of the aims in educating the mentally retarded is to help them to function in a normal society. If training in motor skills would render them less conspicuous in the eyes of the public, then it would enhance their potential for acceptance."^2

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II. PURPOSE OF THE STUDY

The practical necessity of providing a strong physical education program for the educable mentally retarded is made evident through a consideration of the basic reasons that lie behind most planned programs of physical education. Obviously there is a need to provide activities that will further physical development. In addition, the physical education program often provides activities that persist as hobbies, entertainment, and provides diversions in adult life. In the third place, activities learned in the physical education program also function as interests that are carried from school to the home life of the pupil. There, such learning may stand the pupil in good stead in the family or in the neighborhood group of children. The Iowa Department of Public Instruction recognizes that the area of physical education and activities is undoubtedly an area in which the educable mentally retarded pupil may compete with normal pupils on a more even basis than in most activities of childhood. To neglect this opportunity for the pupil to gain recognition and feel satisfaction in his accomplishment, as well, is to
place a further restriction upon his chance of success in school and in life.\(^1\)

It was the purpose of this study to investigate the limitations and needs of this special group of students in the area of physical education, and from this information, propose a useful program of physical education.

III. SCOPE AND LIMITATIONS

This study includes an activity program for educable mentally retarded students in Cass County, Iowa, from ages six to fourteen. As part of the educational program in Cass County, the students fifteen years and older would become part of a work-study program centered in the Atlantic, Iowa, school system and would no longer take part in the program proposed by this study.

This study does not include intramural or interscholastic activities.

IV. DEFINITION OF TERMS USED

The following are definitions of terms used in this field report:

\(^1\)Division of Special Education, Department of Public Instruction, Program Planning for Educable Mentally Retarded Children (Des Moines: State of Iowa, 1959), p. 15.
Adapted physical education. Adapted physical education is a physical education program adapted to the needs of those students who cannot receive maximum benefits from a regular program of physical education.

Educable mentally retarded. The educable mentally retarded are individuals, determined by an approved psychologist, after a psychological evaluation and an individual test of intelligence, who fall into the intelligence quotient range of fifty-five to seventy-nine.

Cass County plan. The Cass County plan is a proposed plan to bring all those eligible Cass County students into a centralized location for school.
CHAPTER II

SURVEY OF RELATED LITERATURE

The purpose of this section of the report is to first define physical education; second, to gain knowledge as to the needs and limits of the educable mentally retarded; and third, to give a description of some of the studies and programs that are now, or have been done in this area.

Definition of physical education.

Physical education is that part of education which proceeds by means of, or predominantly through, physical activity; it is not some separate, partially related field. This significant means of education furnishes one angle of approach in educating the entire individual, who is composed of many component, interrelated functional units, rather than of several distinctly compartmentalized faculties. The physical, mental, and social aspects must all be considered together. Physical education, when well taught, can contribute more to the goals of general education than can any other school subject.¹

To understand this statement is to appreciate that physical education is not a frill or an extra which has been included in the school's curriculum. Physical education is playing a very important part in achieving the objectives of general education.

The purpose of the physical education program in the school is to develop the student to his fullest potentialities in physical growth, neuromuscular development, emotional control, and social development. It should provide opportunities to acquire skill in a variety of activities, opportunities to develop leadership and fellowship, and should be conducted to give a sense of achievement and enjoyment through participation.

Directed physical education activities will aid students in the development of high standards of self-direction, and sportsmanlike attitudes toward defeat and victory. It must also achieve its share of the physical, mental, emotional, and social adjustments necessary to live efficiently and effectively in a cooperative democratic society.

**Identification of needs and limits of the retarded.**
There are a number of limitations that characterize the mentally retarded. In most instances, the mentally retarded child is less well developed physically than children his life age, and he has much less over-all agility and coordination.

The major handicap in the school situation is in his poor control of the small muscles. The arm, hand, and
particularly the fingers are difficult for the child to manage in the handling of small objects. Manual dexterity will improve with age and experience. The activities provided must correspond with the mental capacity of the child. The curricular content, when related to the capacity of the child, should be rich in equipment and extensive in opportunity for physical and muscular development.¹

To make up for some of these physical limitations, the investigator has recognized some very strong qualities in working with the mentally retarded in a physical education class at the Atlantic Junior High School. The mentally retarded students are persistent, easily satisfied with activities that would bore others, can be very obedient if they are interested, and are very anxious to please.

The needs of the mentally retarded student vary. The following eleven skills to be learned are considered important by Rothstien:

1. Learn to maintain a state of physical well-being.
2. Learn to live safely.
3. Learn to understand one's self.
4. To get along with others.
5. To communicate ideas.
6. To use leisure time.
7. To earn a living.
8. To be a home maker.
9. To enjoy life through the appreciation of art and dance.

¹Division of Special Education, loc. cit.
10. To adjust to the forces of nature.
11. To manage one's money.\(^1\)

In recognizing the health needs of the retarded, Ingram had this to say about the slow learner:

The slow-learning child should learn to practice personal habits of cleanliness, of good posture, and of healthful dress--\(sic\) habits that experience has shown are also directly related to the development of self-respect. The child should be taught to care for his eyes, ears, and throat; to appreciate the value of well-ventilated and well-lighted rooms, of exercise in the open, and of regularity in exercise and rest; to choose and prepare healthful foods; and to observe safety rules.

Habits and attitudes of hygienic living that will aid in the maintenance and promotion of the health of others are also necessary. The child should be guided to consider the effect of his health habits on the health and comfort of those around him as well as their effect on himself. He should learn about communicable diseases and how to use community health facilities and to administer some of the steps in first aid.\(^2\)

Description of related studies and programs. Although the area of health and physical education for the mentally retarded is still relatively infant, there have been some studies made into the needs of the students and what is being done to meet these needs. One such study was reported from Illinois.


A questionnaire was sent to each school district in Illinois having special classes for educable mentally handicapped children. The populations of the districts ranged from less than ten thousand to more than a million. The districts reporting, representing 99 per cent of the classes and the children in the state, answered these questions:

1. Is there research being done in the schools and not reported?
2. Is there a felt need for research in the area?
3. What sort of health and physical education programs are presently employed?

Although the majority of the districts reporting felt the need for research was great, none of the sixty districts indicated that any formal research was being carried on to determine how best to meet the needs of the educable mentally retarded.

It was concluded from the data of the Illinois study that: (1) health and physical education was considered important for the educable mentally retarded children; (2) the schools were not doing any formal research in this area; (3) the schools felt a need for research in this area; (4) although objectives were more or less agreed upon, the means of attaining them were not and; (5) the objectives of preparing the child for leisure time activity were being

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It is obvious that the research completed thus far represents only a start into the study of the needs and limitations of the mentally retarded and the relationship of physical education to them. Stein and Fangle list the following purposes for needed research:

1. To determine the effects of motivation upon psychomotor function of the mentally retarded and to ascertain techniques of motivation that are most effectively used with various groups.

2. To determine personality characteristics and professional competencies necessary for successful teaching of the mentally retarded in physical education.

3. To determine the effects of patterning techniques, assistive therapy, and other therapeutic and rehabilitative methods on psychomotor function and development of the mentally retarded.

4. To determine the efficacy of using psychomotor tests as diagnostic tools to differentiate among functional abilities of retarded and etiological groups.

5. To ascertain the optimum amount of physical activity necessary for retardates of different levels and at various times in their lives.

6. To develop standards, evaluate instruments, and criteria for evaluating programs of a psychomotor nature for the retarded taking into consideration their special needs, interests, abilities, and limitations.

7. To determine the effects of early identification of the retarded and their placement into programs emphasizing psychomotor development.

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1Ibid.
8. To determine the effects of participating and achieving various degrees of skill in a variety of specific psychomotor developmental activities upon the intellectual, psychological, emotional, social, and physical growth and development of retardates at different chronological and mental levels.

9. To determine the effect of participation by the retarded in a variety of psychomotor activities upon such factors as self-concept, body image, confidence, desire, level of aspiration, and competitive spirit.

10. To determine the effects of participation in psychomotor activities upon the organic efficiency and effectiveness of the retarded.

11. To determine the effect of participation in psychomotor activities upon the vocational competency of the retarded.

12. To find out how mentally retarded use their leisure time and to provide programs that will prepare them for active participation in a wide variety of recreational activities, especially those of a psychomotor nature.

13. To determine curricular content, methods, techniques, approaches, equipment, supplies, facilities, and adaptations needed for programs of physical education and recreation that stress psychomotor development for the retarded.  

Some experts have gone beyond the research stage of development and offer assistance in program planning that will take full advantage of the near normality of the educable mentally retarded pupil's physical abilities.

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The Division of Special Education of the Iowa State Department of Public Instruction believes the educable pupil may be expected to participate in many of the same games and activities ordinarily engaged in by children of the same chronological age. Because the educable child must conform to other children's wishes with respect to the choice of activities, the implication that the school has a responsibility to teach him games commonly engaged in by his own age group is clear.

Singing games that will develop skills of general motor development as well as providing for the acquisition of much basic knowledge such as the number names, names of familiar objects, parts of the body, and so on, are considered an appropriate beginning for the younger students. The activities should be of simple structure and should be continued only as long as interest directs. Games should be of the type that can be enjoyed at recess and other times the child would be engaged in free play.

Individual skill activities may be started when pupils reach the age of nine to eleven. Stunts, dual combat activities, and team games of very simple organization are appropriate at this age level. Relay races and similar team contests that involve physical fitness are also appropriate.
Junior and senior high school programs of physical education for the educable mentally retarded should devote a major portion of the available time toward attempting to develop skills that may transfer directly into the type of pursuits chosen by young adults as leisure-time activities.¹

¹Division of Special Education, State of Iowa, op. cit., p. 16.
CHAPTER III

PRESENTATION OF DATA AND PROPOSALS FOR A PROGRAM OF PHYSICAL EDUCATION FOR THE EDUCABLE MENTALLY RETARDED

The investigator, after working with special education students in a regular physical education class in the Atlantic Community School system for four years, formulated a questionnaire to be used in the study. In doing so, he utilized both teaching background and data he received from a review of related literature.

The data used in this study were obtained by means of a questionnaire to determine what type of a program of physical education could best meet the needs and limitations of educable mentally retarded children in Cass County, Iowa. A letter of inquiry and a questionnaire for validation were sent to a random sampling of physical educators, state officials and educators working with the mentally retarded, superintendents of schools, and parents of retarded children in southwest Iowa. A second letter of inquiry and a validated questionnaire were then sent to state department officials working in the field of special education, educators and parents located in what the State Department of
Public Instruction has designated as Area Education District XIII of the state of Iowa. A copy of the questionnaire¹ and the letter² used in making this study can be found in the appendix of the study.

The sampling was limited to Area XIII for it was there the program would be used and many of the sampling would be directly involved with the program. The sampling also included state department personnel who were located in Des Moines, Iowa.

The sections of this chapter are devoted to the presentation and analysis of the questionnaire data and proposals for a program of physical education for the educable mentally retarded. Much of the data will appear in tabular form; the investigator believed that this means would facilitate the ease of interpretation of the data. Percentage figures will be used.

The investigator was concerned, first of all, with the philosophy of the sampling toward the type of program of physical education for the educable mentally retarded. Of the sixteen respondents answering the questionnaire, nine or 56 per cent reported they felt the needs and limitations of the educable mentally retarded could best be met by a special program of physical education. Seven of the

¹Appendix B. ²Appendix A.
sixteen or 44 per cent reported they felt the educable mentally retarded should be placed in a regular program of physical education.

Table I indicates the need for a balanced program of physical education with greater emphasis on developing good health habits and a sense of social awareness. The respondents indicated that a knowledge of sports was the least important objective of a program of physical education for the educable mentally retarded.

TABLE I

OBJECTIVES OF A PROGRAM OF PHYSICAL EDUCATION FOR THE EDUCABLE MENTALLY RETARDED

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Number of Respondents Reporting</th>
<th>Number of Respondents Selecting Response</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good health habits</td>
<td>16</td>
<td>15</td>
<td>94</td>
</tr>
<tr>
<td>Social awareness</td>
<td>16</td>
<td>13</td>
<td>81</td>
</tr>
<tr>
<td>Physical fitness</td>
<td>16</td>
<td>12</td>
<td>75</td>
</tr>
<tr>
<td>Muscle coordination</td>
<td>16</td>
<td>12</td>
<td>75</td>
</tr>
<tr>
<td>Awareness of recreational values</td>
<td>16</td>
<td>11</td>
<td>69</td>
</tr>
<tr>
<td>Motor skills</td>
<td>16</td>
<td>11</td>
<td>69</td>
</tr>
<tr>
<td>Sports knowledge</td>
<td>16</td>
<td>8</td>
<td>50</td>
</tr>
</tbody>
</table>
Tables II and III are concerned with the limitations and positive attributes of the educable mentally retarded that would determine his needs and achievements in a program of physical education. As indicated in Table II, length of attention span, coordination, motor skills and retention were listed most frequently as limitations that would affect his performance in physical education.

**TABLE II**

**LIMITATIONS OF EDUCABLE MENTALLY RETARDED AS RELATED TO PHYSICAL EDUCATION**

<table>
<thead>
<tr>
<th>Limitations</th>
<th>Number of Respondents Reporting</th>
<th>Number of Respondents Selecting Response</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attention span</td>
<td>16</td>
<td>16</td>
<td>100</td>
</tr>
<tr>
<td>Coordination</td>
<td>16</td>
<td>15</td>
<td>94</td>
</tr>
<tr>
<td>Motor skills</td>
<td>16</td>
<td>13</td>
<td>81</td>
</tr>
<tr>
<td>Retention</td>
<td>16</td>
<td>11</td>
<td>69</td>
</tr>
<tr>
<td>Agility</td>
<td>16</td>
<td>9</td>
<td>56</td>
</tr>
<tr>
<td>Interest</td>
<td>16</td>
<td>8</td>
<td>50</td>
</tr>
<tr>
<td>Perseverance</td>
<td>16</td>
<td>5</td>
<td>31</td>
</tr>
<tr>
<td>Strength</td>
<td>16</td>
<td>4</td>
<td>25</td>
</tr>
<tr>
<td>Endurance</td>
<td>16</td>
<td>4</td>
<td>25</td>
</tr>
<tr>
<td>Attitude</td>
<td>16</td>
<td>4</td>
<td>25</td>
</tr>
<tr>
<td>Low vitality</td>
<td>16</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Social immaturity</td>
<td>16</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Ability to follow directions</td>
<td>16</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Bashfulness and self-consciousness</td>
<td>16</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>
On the positive side, as reported in Table III, the majority of the respondents indicated interest and determination as personal characteristics which would help the educable mentally retarded child achieve the values of a program of physical education.

TABLE III

POSITIVE ATTRIBUTES OF THE EDUCABLE MENTALLY RETARDED STUDENT THAT WILL HELP HIM ACHIEVE SUCCESS IN A PROGRAM OF PHYSICAL EDUCATION

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Number of Respondents Reporting</th>
<th>Number of Respondents Selecting Response</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest</td>
<td>16</td>
<td>11</td>
<td>69</td>
</tr>
<tr>
<td>Determination</td>
<td>16</td>
<td>10</td>
<td>63</td>
</tr>
<tr>
<td>Attitude</td>
<td>16</td>
<td>7</td>
<td>44</td>
</tr>
<tr>
<td>Respect for others</td>
<td>16</td>
<td>5</td>
<td>31</td>
</tr>
<tr>
<td>Perseverance</td>
<td>16</td>
<td>4</td>
<td>25</td>
</tr>
<tr>
<td>Attention</td>
<td>16</td>
<td>3</td>
<td>19</td>
</tr>
<tr>
<td>Retention</td>
<td>16</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

The most important part of a successful program of physical education for the educable mentally retarded is the selection of a qualified and capable instructor. There are many valuable attributes. A man or woman should particularly possess patience, understanding, and imagination. An
understanding of the characteristics of the mentally retarded child was also found to be significant as reported in Table IV.

<table>
<thead>
<tr>
<th>Attributes</th>
<th>Number of Respondents Reporting</th>
<th>Number of Respondents Selecting Response</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patience</td>
<td>16</td>
<td>16</td>
<td>100</td>
</tr>
<tr>
<td>Knowledge of characteristics of the mentally retarded child</td>
<td>16</td>
<td>16</td>
<td>100</td>
</tr>
<tr>
<td>Understanding</td>
<td>16</td>
<td>15</td>
<td>94</td>
</tr>
<tr>
<td>Imagination</td>
<td>16</td>
<td>13</td>
<td>81</td>
</tr>
<tr>
<td>Interest</td>
<td>16</td>
<td>10</td>
<td>63</td>
</tr>
<tr>
<td>Cheerfulness</td>
<td>16</td>
<td>10</td>
<td>63</td>
</tr>
<tr>
<td>Perseverance</td>
<td>16</td>
<td>7</td>
<td>44</td>
</tr>
<tr>
<td>Demanding</td>
<td>16</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>Emotional maturity</td>
<td>16</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Organizational ability</td>
<td>16</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Knowledge of physical education values</td>
<td>16</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>
The investigator divided the students into two groups. The primary level would consist of those students who are six to nine years of age and the intermediate level would consist of students in the ten to thirteen year range. Students beyond the intermediate age group would become part of a work-study program and would no longer participate in the physical education program.

In developing a curriculum of physical education for the educable mentally retarded, as in a regular program of physical education, important consideration must be given to the type of activities that will best meet the needs of the group. Table V is concerned with suggested activities on both the primary and intermediate level.
TABLE V
TYPE OF ACTIVITIES THAT WOULD BEST ACHIEVE
OBJECTIVES OF A PROGRAM OF PHYSICAL
EDUCATION FOR THE EDUCABLE
MENTALLY RETARDED

<table>
<thead>
<tr>
<th>Primary Level (6-9 years)</th>
<th>Activity</th>
<th>Number of Respondents Reporting</th>
<th>Number of Respondents Selecting Response</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rhythmical</td>
<td>16</td>
<td>16</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Simple games</td>
<td>16</td>
<td>16</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Large muscle</td>
<td>16</td>
<td>13</td>
<td>81</td>
</tr>
<tr>
<td></td>
<td>Aquatics</td>
<td>16</td>
<td>9</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>Stunts and self-testing</td>
<td>16</td>
<td>6</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Dramatic play</td>
<td>16</td>
<td>5</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Competitive</td>
<td>16</td>
<td>2</td>
<td>13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intermediate Level (10-13 years)</th>
<th>Activity</th>
<th>Number of Respondents Reporting</th>
<th>Number of Respondents Selecting Response</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rhythmical</td>
<td>16</td>
<td>14</td>
<td>88</td>
</tr>
<tr>
<td></td>
<td>Motor coordination</td>
<td>16</td>
<td>13</td>
<td>81</td>
</tr>
<tr>
<td></td>
<td>Physical fitness</td>
<td>16</td>
<td>12</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>Individual skill</td>
<td>16</td>
<td>11</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td>Team</td>
<td>16</td>
<td>11</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td>Stunts and self-testing</td>
<td>16</td>
<td>10</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>Aquatics</td>
<td>16</td>
<td>9</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>Competitive</td>
<td>16</td>
<td>7</td>
<td>44</td>
</tr>
</tbody>
</table>
Tables VI and VII indicate the type of facility and equipment needed to administer a complete program of physical education for the educable mentally retarded.

**TABLE VI**

**FACILITIES NEEDED TO ADMINISTER A PROGRAM OF PHYSICAL EDUCATION FOR THE EDUCABLE MENTALLY RETARDED**

<table>
<thead>
<tr>
<th>Facilities</th>
<th>Number of Respondents Reporting</th>
<th>Number of Respondents Selecting Response</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gymnasium</td>
<td>16</td>
<td>15</td>
<td>94</td>
</tr>
<tr>
<td>Permanent outside play apparatus</td>
<td>16</td>
<td>13</td>
<td>81</td>
</tr>
<tr>
<td>Softball and field game area</td>
<td>16</td>
<td>11</td>
<td>69</td>
</tr>
<tr>
<td>Pool</td>
<td>16</td>
<td>8</td>
<td>50</td>
</tr>
</tbody>
</table>
**TABLE VII**

**TYPE OF EQUIPMENT NEEDED TO ADMINISTER A PROGRAM OF PHYSICAL EDUCATION FOR THE EDUCABLE MENTALLY RETARDED**

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Number of Respondents Reporting</th>
<th>Number of Respondents Selecting Response</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Various types of balls</td>
<td>16</td>
<td>15</td>
<td>94</td>
</tr>
<tr>
<td>Climbing ropes</td>
<td>16</td>
<td>11</td>
<td>69</td>
</tr>
<tr>
<td>Chinning bars</td>
<td>16</td>
<td>11</td>
<td>69</td>
</tr>
<tr>
<td>Bats and gloves</td>
<td>16</td>
<td>10</td>
<td>63</td>
</tr>
<tr>
<td>Balance beam</td>
<td>16</td>
<td>9</td>
<td>56</td>
</tr>
<tr>
<td>Trampoline</td>
<td>16</td>
<td>7</td>
<td>44</td>
</tr>
<tr>
<td>Parallel bars</td>
<td>16</td>
<td>7</td>
<td>44</td>
</tr>
<tr>
<td>Side horse</td>
<td>16</td>
<td>5</td>
<td>31</td>
</tr>
<tr>
<td>Record player and records</td>
<td>16</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

In determining the time allotment for physical education in the over-all educational program, 63 per cent of the respondents felt that a class period of from thirty-one to forty-five minutes was sufficient for the intermediate level student while the majority felt a shorter period of from fifteen to thirty minutes was adequate for the primary students. The majority of the group did agree that a program that offered physical education five days a week was important for this special group of students. Tables VIII and IX indicate the time allotment selections of the sixteen respondents.
<table>
<thead>
<tr>
<th>Time</th>
<th>Number of Respondents Reporting</th>
<th>Number of Respondents Selecting Response</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-30 minutes</td>
<td>16</td>
<td>9</td>
<td>56</td>
</tr>
<tr>
<td>31-45 minutes</td>
<td>16</td>
<td>5</td>
<td>31</td>
</tr>
<tr>
<td>46-60 minutes</td>
<td>16</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>61-90 minutes</td>
<td>16</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>

**Intermediate Level (10-13 years)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Number of Respondents Reporting</th>
<th>Number of Respondents Selecting Response</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-30 minutes</td>
<td>16</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>31-45 minutes</td>
<td>16</td>
<td>10</td>
<td>63</td>
</tr>
<tr>
<td>46-60 minutes</td>
<td>16</td>
<td>4</td>
<td>25</td>
</tr>
<tr>
<td>61-90 minutes</td>
<td>16</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>
TABLE IX
DAYS A WEEK THAT PHYSICAL EDUCATION SHOULD BE OFFERED TO THE EDUCABLE MENTALLY RETARDED

<table>
<thead>
<tr>
<th>Number of days</th>
<th>Primary Level (6-9 years)</th>
<th>Intermediate Level (10-13 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Respondents</td>
<td>Number of Respondents</td>
</tr>
<tr>
<td></td>
<td>Reporting</td>
<td>Selecting Response</td>
</tr>
<tr>
<td>One day</td>
<td>16</td>
<td>0</td>
</tr>
<tr>
<td>Two days</td>
<td>16</td>
<td>1</td>
</tr>
<tr>
<td>Three days</td>
<td>16</td>
<td>3</td>
</tr>
<tr>
<td>Four days</td>
<td>16</td>
<td>1</td>
</tr>
<tr>
<td>Five days</td>
<td>16</td>
<td>11</td>
</tr>
</tbody>
</table>
In developing a complete program of physical education and including all the stated objectives, a need was found to organize the class coeducationally or to separate the class by sex. This will depend on the activity.

The majority of the respondents also stated this view, but 94 per cent of them indicated that basically the physical education program for the children at the primary level should be coeducational, and 81 per cent said the intermediate level program should be sex separated.

The question of pupil-teacher ratio brought a wide range of responses. No respondent thought the ratio should be over twenty to one, but there was no majority agreement on just what would be the best ratio. The strongest response was five of sixteen or 31 per cent. This indicated a fifteen to one ratio. Table X is concerned with the question of pupil-teacher ratio.
TABLE X
PUPIL-TEACHER RATIO FOR A CLASS OF PHYSICAL EDUCATION FOR THE EDUCABLE MENTALLY RETARDED

<table>
<thead>
<tr>
<th>Ratio</th>
<th>Number of Respondents Reporting</th>
<th>Number of Respondents Selecting Response</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fifteen to one</td>
<td>16</td>
<td>5</td>
<td>31</td>
</tr>
<tr>
<td>Ten to one</td>
<td>16</td>
<td>3</td>
<td>19</td>
</tr>
<tr>
<td>Twenty to one</td>
<td>16</td>
<td>3</td>
<td>19</td>
</tr>
<tr>
<td>Eight to one</td>
<td>16</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td>Twelve to one</td>
<td>16</td>
<td>2</td>
<td>13</td>
</tr>
</tbody>
</table>

A question was asked the respondents regarding the evaluating of children in physical education. Should an evaluation grade or mark be given in a program of physical education for the educable mentally retarded? Nine of the sixteen or 56 per cent answered negatively. It was found that three of the seven answering in the negative later indicated a view that some form of evaluation and report was necessary.

When asked what type of mark or method should be used to show evaluation, 67 per cent indicated a satisfactory or unsatisfactory mark would serve the purpose of reporting. Two of the sixteen did indicate a preference for
a periodical report of progress on each individual child. Table XI reports the percentage of selected responses on evaluation methods.

**TABLE XI**

**EVALUATION METHOD TO BE USED IN A PROGRAM OF PHYSICAL EDUCATION FOR THE EDUCABLE MENTALLY RETARDED**

<table>
<thead>
<tr>
<th>Method</th>
<th>Number of Respondents Reporting</th>
<th>Number of Respondents Selecting Response</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfactory or unsatisfactory</td>
<td>12</td>
<td>8</td>
<td>67</td>
</tr>
<tr>
<td>Progress report</td>
<td>12</td>
<td>2</td>
<td>17</td>
</tr>
<tr>
<td>Letter such as A, B, C</td>
<td>12</td>
<td>2</td>
<td>17</td>
</tr>
<tr>
<td>Number such as 1, 2, 3</td>
<td>12</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

It was very difficult to determine a basis for evaluation with a special group of children like the educable mentally retarded. In answer to this question the respondents strongly felt that participation should be the prime criterion for evaluation. Table XII reports the suggested criteria and the responses to them.
### TABLE XII

**BASIS FOR EVALUATION TO BE USED IN A PROGRAM OF PHYSICAL EDUCATION FOR THE EDUCABLE MENTALLY RETARDED**

<table>
<thead>
<tr>
<th>Based on</th>
<th>Number of Respondents Reporting</th>
<th>Number of Respondents Selecting Response</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation</td>
<td>12</td>
<td>11</td>
<td>92</td>
</tr>
<tr>
<td>Attitude</td>
<td>12</td>
<td>8</td>
<td>67</td>
</tr>
<tr>
<td>Ability</td>
<td>12</td>
<td>4</td>
<td>33</td>
</tr>
<tr>
<td>Skill tests</td>
<td>12</td>
<td>3</td>
<td>25</td>
</tr>
<tr>
<td>Physical fitness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>test results</td>
<td>12</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Written tests</td>
<td>12</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Improvement</td>
<td>12</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Over-all impression</td>
<td>12</td>
<td>1</td>
<td>8</td>
</tr>
</tbody>
</table>
CHAPTER IV

SUMMARY AND CONCLUSIONS

I. SUMMARY

A survey was taken by the Atlantic Mental Health Board to identify the educable mentally retarded children in Cass County, Iowa. After studying facilities, it was decided that each area school lacked room for its own local mentally handicapped. A town six miles east of Atlantic, Iowa, had an unused school building with adequate classroom space, gymnasium, shop, and kitchen. It was decided to try to transport all educable mentally retarded with a chronological age of from six to fourteen to Wiota, Iowa. Students over fourteen would attend their local schools on a work-study program.

The purpose of this study was to investigate the needs and limitations of the educable mentally retarded as they pertain to physical education and to propose a type of program to meet those needs and limitations. From a teaching background and a review of related literature, the investigator was able to formulate a questionnaire to be used in gathering the needed information. After validation by random sampling, the questionnaire was sent to sixteen parents, educators, and state department officials in southwest Iowa.
The data received on the questionnaires were analyzed and presented in tabular form in the study. The results indicated a need for special classes in physical education for the educable mentally retarded.

The objectives of a special program would be no different than those of a regular program of physical education. The emphasis, as reported in the findings, would be placed on good health habits, physical fitness, and muscle coordination. To achieve these objectives, it must be recognized that the educable mentally retarded child lacks endurance and retention even though he shows a great deal of interest and determination.

Leadership is very important to the success of a special program of physical education. The instructor of the special class must be very patient. He must also have a strong knowledge of the characteristics of the mentally retarded child and an understanding of the child, as reported in the findings of the study. Imagination is another attribute that will help make the program a strong one.

The findings indicate the type of activity enjoyed most on the primary level is based on simple games and rhythmical activities. At the intermediate level, the activity tends more to motor coordination, physical
fitness, as well as rhythmical games and dance activities. The facilities and equipment needed for these activities are no different than could be found in a regular physical education program.

The report indicates that the physical education program should provide a natural setting for teaching such social attributes as fair play, taking turns, respect for others, doing one's best, and carrying one's share of responsibility in a game. It is important then to have this setting available five times a week. The finding suggests a class period time for the primary level of between fifteen and thirty minutes while at the intermediate level a longer period of thirty to forty-five minutes in length.

As a result of the findings, a program whereby the primary level would be coeducational and the intermediate level divided by sex would seem to be the most acceptable. This organization could change with the type of activity. The size of the class should be kept small with a pupil-teacher ratio of fifteen to one recommended by the finding of the study.

The result of the study showed a very slight preference for a system of grading or evaluation in the special program of physical education for the educable mentally retarded. A mark of satisfactory or unsatisfactory was the
most widely accepted. The mark should be based entirely on participation and attitude.

II. CONCLUSIONS

Education through the medium of physical activity is an important part of the school program for the educable mentally retarded child. It affects not only his muscle and physical development but his entire personality.

Physical education programs must be based on the overall growth patterns and needs of children. The discussion of the educable mentally retarded child in relation to physical education indicates that the characteristic differences of these children must serve as the guide for developing a suitable physical education program for them. The basic needs of the educable mentally retarded child are the same as those of the child without a mental handicap. The general aims and objectives of a physical education program should be no different for retarded children than for the intellectually normal. Good health and physical fitness is the aim of all. The difference lies rather in the insistent emphasis upon simplification of the physical education principles and their application in keeping with the limited intellectual ability of retarded children.
To summarize, the author has chosen the following statement from Kirk and Johnson's *Educating the Retarded Child*:

A healthy child has a better chance to make friends, to have a vocation, and eventually to become a respected member of a community. Better emotional health and social adjustment may be aided through proper and appropriate physical education classes.

\[1\] Kirk and Johnson, loc. cit.
BIBLIOGRAPHY

A. BOOKS


B. PERIODICALS


C. PUBLIC DOCUMENTS


D. UNPUBLISHED MATERIALS


APPENDIXES
APPENDIX A

LETTER OF TRANSMITTAL

April 3, 1968

Dear Sir:

Enclosed you will find a questionnaire concerning the organization of a program of physical education for the educable mentally retarded.

The research study is being conducted as a partial requirement for the Master of Science in Education Degree with an emphasis on Health and Physical Education at Drake University, Des Moines, Iowa.

Would you assist by completing the questionnaire and returning it at your earliest convenience? A stamped, self-addressed envelope is enclosed to facilitate the return.

Thank you for your prompt action in having this questionnaire completed and returned. A summary of results will be sent to you on request.

Sincerely,

Charles M. Burnett
1408 Lincoln Drive
Atlantic, Iowa 50022
APPENDIX B

QUESTIONNAIRE

PHYSICAL EDUCATION FOR THE EDUCABLE MENTALLY RETARDED QUESTIONNAIRE

Directions: Place an (X) in the space before the answer (or answers) that best expresses your opinion.

I. Educational philosophy and objectives of physical education for the educable mentally retarded

1. What is your philosophy concerning a special program of physical education for the educable mentally retarded?

a. educable mentally retarded students should have a special program.

b. educable mentally retarded students should be included in the regular program of physical education.

Other:

2. What should be the objective(s) of a special program of physical education for the educable mentally retarded?

a. physical fitness

b. sports knowledge

c. muscle coordination

d. motor skills

e. good health habits

f. awareness of recreational values

g. social awareness

Others:
II. Characteristics of the educable mentally retarded as related to physical education

1. In your opinion what are the limitations of the educable mentally retarded that may determine a program of physical education?

   ___a. agility        ___f. attention span
   ___b. strength       ___g. retention
   ___c. coordination   ___h. attitude
   ___d. endurance      ___i. interest
   ___e. motor skills   ___j. perseverance

Others:

2. What positive attributes does an educable mentally retarded child have that will help him achieve success in a program of physical education?

   ___a. perseverance ___e. retention
   ___b. interest       ___f. determination
   ___c. attitude       ___g. respect for
   ___d. attention      ___h. others

Others:

III. The organizational structure of a program of physical education for the educable mentally retarded

1. What attributes are important for an instructor to have in a program of physical education for the educable mentally retarded?

   ___a. perseverance ___e. cheerfulness
   ___b. interest       ___f. imagination
   ___c. patience        ___g. demanding
   ___d. understanding   ___h. knowledge of characteristics of the mentally retarded child

Others:
2. What type of activities would best achieve the objective(s) of a program of physical education for the educable mentally retarded?

**Primary level** (6-9 yrs.)

- a. large muscle activities
- b. rhythmical activities
- c. simple games
- d. dramatic play activities
- e. competitive activities
- f. aquatics
- g. stunts and self-testing activities

Others:

**Intermediate level** (10-13 yrs.)

- a. rhythmical activities
- b. individual skill activities
- c. motor coordination activities
- d. team activities
- e. competitive activities
- f. physical fitness activities
- g. aquatics
- h. stunts and self-testing activities

Others:

3. What type of facilities are needed to administer a program of physical education for the educable mentally retarded?

- a. permanent outside play apparatus such as swings, see-saws, slides, jungle gym
- b. softball and field games area
- c. gymnasium
- d. pool

Others:
4. What type of equipment is needed to administer a program of physical education for the educable mentally retarded?

   a. balls for football, speedball, basketball, softball, and playground
   b. bats and gloves
   c. balance beam
   d. slide horse
   e. climbing ropes
   f. chinning bars
   g. trampoline
   h. parallel bars

Others:

5. How much time each day should be devoted to physical education?

   Primary level (6-9 yrs.)

     a. 15 to 30 minutes
     b. 31 to 45 minutes
     c. 46 to 60 minutes
     d. 61 to 90 minutes

Others:

   Intermediate level (10-13 yrs.)

     a. 15 to 30 minutes
     b. 31 to 45 minutes
     c. 46 to 60 minutes
     d. 61 to 90 minutes

Others:
6. How many days a week should physical education be offered?

**Primary level (6-9 yrs.)**

- **a.** one day
- **b.** two days
- **c.** three days
- **d.** four days
- **e.** five days

**Intermediate level (10-13 yrs.)**

- **a.** one day
- **b.** two days
- **c.** three days
- **d.** four days
- **e.** five days

7. Should physical education for the educable mentally retarded be coeducational?

- **a.** classes should be coeducational at the primary level
- **b.** classes should be sex segregated at the primary level
- **c.** classes should be coeducational at the intermediate level
- **d.** classes should be sex segregated at the intermediate level

8. What should be the pupil-teacher ratio in a physical education class for the educable mentally retarded?

- **a.** five to one  
- **b.** eight to one
- **c.** ten to one
- **d.** twelve to one
- **e.** fifteen to one
- **f.** twenty to one
- **g.** more than twenty

**Others:**

9. Should an evaluation or mark be given in a program of physical education for the educable mentally retarded?

- **a.** yes
- **b.** no
10. If a symbol of evaluation is given, what type of mark should it be?

____ a. letter grade such as A, B, C
____ b. number mark such as 1, 2, 3
____ c. satisfactory or unsatisfactory

Others:

11. If grade is given, on what should it be based?

____ a. physical fitness test results
____ b. written tests
____ c. skill tests
____ d. ability
____ e. participation
____ f. attitude

Others:

12. Do you desire a summary of the results of this study?

____ a. yes
____ b. no

Signed __________________________
Title ____________________________
Address __________________________
APPENDIX C

LIST OF RESPONDENTS TO QUESTIONNAIRE

Mr. Munro Shintani, Coordinator
Division of Special Education
Department of Public Instruction
Des Moines, Iowa

Miss Arlene Baker
Physical Education Instructor
Glenwood State Hospital School
Glenwood, Iowa

Mr. J. E. Brouhard
County Superintendent
Cass and Shelby County
Harlan, Iowa

Mr. John J. Dulin
County Superintendent
Audubon County
Audubon, Iowa

Miss Esther Hansleigh
County Superintendent
Page County
Shenandoah, Iowa

Mr. A. H. Schuler
Superintendent of Schools
Atlantic, Iowa

Mr. Richard Paulsen
Superintendent of Schools
Griswold, Iowa
Mr. John Harris  
Physical Education Instructor  
Corning Community Schools  
Corning, Iowa

Miss Betty Heflin  
Girls Physical Education Instructor  
Atlantic Community Schools  
Atlantic, Iowa

Miss Rose Bacon  
Girls Physical Education Instructor  
Harlan Community Schools  
Harlan, Iowa

Mr. William Morgan  
Special Education Instructor  
Atlantic Community Schools  
Atlantic, Iowa

Miss Elenore Tallman  
Special Education Instructor  
Harlan Community Schools  
Harlan, Iowa

Miss Evelyn Davison  
Special Education Instructor  
Clarinda Community Schools  
Clarinda, Iowa

Mr. and Mrs. Larry Fief  
Parents  
Atlantic, Iowa

Dr. & Mrs. Einer M. Juel  
Parents  
Atlantic, Iowa
Mrs. Janice Reason, President
Cass County Retarded Association
Parent
Marne, Iowa