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A Study of the Status of Physical Education for the Educable Mentally Retarded in North Dakota Schools

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A STUDY OF THE STATUS OF PHYSICAL EDUCATION FOR THE EDUCABLE MENTALLY RETARDED IN NORTH DAKOTA SCHOOLS

by

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This Thesis submitted by Richard G. Studsrud in partial fulfillment of the requirements for the Degree of Master of Science from the University of North Dakota is hereby approved by the Faculty Advisory Committee under whom the work has been done.

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Date 21 July 1964

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TABLE OF CONTENTS

LIST OF TABLES

ABSTRACT

This study was conducted during 1969 to determine current practices in the physical education programs for the educable mentally retarded in North Dakota schools. The purpose of the study was to obtain and analyze data concerning the following aspects of physical education: teacher qualification, scheduled class periods, type of instruction provided, activities, facilities, equipment and supplies used, tests or evaluation procedures used, and attitudes toward physical education.

Ninety-eight questionnaires were sent to physical education teachers of educable mentally handicapped students. Eighty-two questionnaires were returned and analyzed.

Findings of the study warranted a number of conclusions. A high percentage of teachers were not qualified physical educators for mentally handicapped students; class time allotment was not uniform throughout the state; there was ambivalence in grouping; the state curriculum guide was seldom used; there was a need for more facilities, equipment and supplies; basic physical education activities were used; tests or evaluation procedures were needed; and the attitudes of teachers was favorable toward physical education.

At this time many inadequacies existed in the physical education programs for the educable mentally retarded in North Dakota schools. The

writer recommends that the responsible citizens of North Dakota take immediate action to ameliorate those inadequacies.

CHAPTER I

INTRODUCTION

The educable mentally retarded child is a child placed in the 50-80 intelligence quotient range through intelligence tests individually administered. There were approximately 2 per cent or 3,200, school children in North Dakota who were included in this group in 1965.[1]

Educable mentally handicapped children find themselves confronted with a multiple handicap since the lack of mental ability could very well compound into social, emotional, psychological, and physical problems. Physical educators should be especially concerned about the problems in mental retardation and the methods by which problems can be ameliorated.

Janet M. Smaltz,[2] Director of Special Education in North Dakota, wrote:

> . . . that all human beings are of supreme and equal moral worth, that human life and well-being are to be valued above all material things, and that the dignity and worth of each person should be equally respected at all times and in all ways.

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[1]North Dakota, Department of Public Instruction, Guides to Special Education in North Dakota, Ed. Linnea M. Anderson and Janet M. Smaltz (Bismarck, 1965), p. 6.

[2]Ibid.

Statement of the Problem

This study was conducted in order to determine current practices in the physical education programs for the educable mentally retarded in selected North Dakota schools.

General purposes were: (1) to determine the scope of uniformity with respect to common practices, (2) to determine the number of schools which offered special classes in physical education, integrated physical education with normal classes and those with a recess period, (3) to determine the qualifications of teachers in teaching physical education to the educable mentally retarded, and (4) to determine the number of teachers of physical education for the educable mentally retarded who used the North Dakota curriculum guide, Guides to Special Education in North Dakota or another course of study.

Specific purposes were: (1) to determine the specific activity units taught, (2) to determine the extent the facilities and equipment adequately served the needs of the program, and (3) to determine tests and evaluations being utilized.

Need for the Study

A survey of the physical education programs for the educable mentally retarded in North Dakota schools was necessary to determine current practices. The writer was of the opinion that only through periodic program evaluation could recommendations be made.

Stevens wrote:

> The present accumulation of knowledge relating to mental retardation is insufficient to immediately initiate effective

programs of prevention, methods of treatment, and services to minimize the effects of mental retardation. Obviously this can only be accomplished through greatly expanded research efforts.[3]

Kirk stated:

In view of Sequin's earlier efforts with the physiological method of training defectives and the sporadic attempts to use physical activity as an educational media, research in this area may be worthwhile. This is an area of research that has been seriously neglected.[4]

Thorne wrote:

The lack of research in the area of recreation and physical education is a real tragedy for the mentally retarded because so many important questions remain unanswered. . . . The profession (physical education) needs to understand that the mentally retarded can benefit from programs in physical education and recreation. There is a profound responsibility for the profession to meet the needs of the retarded as well as the needs of other citizens.[5]

Dr. Steven Harlow highly recommended studies in the area of physical education for the educable mentally retarded. Harlow was unaware of any studies pertaining to physical education for the educable mentally retarded done within the state of North Dakota.[6]

Janet M. Smaltz in a personal letter wrote:

I am sure that there is no reason why such a survey should not be conducted and it probably would stimulate some interest

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[3]Harvey A. Stevens and Rick Heber, Mental Retardation: A Review of Research (Chicago and London: The University of Chicago Press, 1964), p. 14.

[4]Samuel A. Kirk, "Education," Mental Retardation: A Review of Research, Ed. Harvey A. Stevens and Rick Heber (Chicago and London: The University of Chicago Press, 1946), p. 94.

[5]John Thorne, "Everybody's Problem," Journal of Health, Physical Education and Recreation, XXXVII (April, 1966), p. 35.

[6]Personal interview with Dr. Steven Harlow, Assistant Professor of Education, University of North Dakota, March 14, 1969.

> on the part of the individuals who would need to answer your questions. A survey in itself does not do anyone any good, but the results of the increased interest can be very helpful.[7]

The writer, a physical education teacher, was appointed to supervise a physical education program for the educable mentally retarded in his school in 1966. A lack of knowledge pointed out the writer's need to learn more about physical education for the educable mentally retarded. The writer could find no preceding studies concerned with the status of physical education for the educable mentally retarded in North Dakota.

Definition of Terms

Mentally Retarded:--The term mentally retarded is an all-inclusive term used to designate the group of retarded children when not specifically referring to any particular level of ability.[8]

Educable Mentally Retarded or Handicapped:--The educable mentally retarded or handicapped are the group of children with scores on individually administered intelligence tests in the 50 to 80 range.[9] Hereafter referred to as EMR.

Exceptional Children:--Exceptional children have been defined as those who deviate from what is supposed to be average in physical, mental, emotional, or social characteristics to such an extent that

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[7]Personal letter from Janet M. Smaltz, North Dakota Director of Special Education, August 16, 1966.

[8]North Dakota Department of Public Instruction, Guides to Special Education, 1965, p. 7.

[9]Ibid.

They require special education services in order to develop to their maximum capacity.[10]

Special Education:--Special education is the provision of facilities, instruction, supervision, and other necessary services not otherwise provided such children in the public schools and institutions.[11]

Physical Education Programs:--Physical education programs are professional plans which are the sum of man's physical activities selected as to kind, and conducted as to outcomes.[12]

Schools:--Schools are places for instruction in any branch of knowledge.[13]

American Association for Health, Physical Education and Recreation Test:--A seven item test used to determine a level of physical fitness. Hereafter referred to as AAHPER.

Cowell Personal Distance Scale:--The Cowell Personal Distance Scale is used to measure the mean gain scores on social status.

Wechsler Intelligence Scale for Children:--Consists of 12 tests divided into verbal and performance subgroups. Hereafter referred to as WISC.

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[10]National Association for the Study of Education. Forty-ninth Yearbook, Part II (Chicago: The University of Chicago Press, 1950), p. 3.

[11]North Dakota Department of Public Instruction, Guides to Special Education in North Dakota, "Review of Special Education Programs," (Bismarck, 1961), p. 4.

[12]Jesse Williams and Clifford L. Brownell, The Administration of Health Education and Physical Education (W. B. Saunders Co., Philadelphia, 1958), p. 10.

[13]Webster's New Collegiate Dictionary (G. & C. Merriam Co., Publishers, Springfield, Mass., 1960), p. 756.

Willcoxens Test:--A nonparametric test used to analyze pull-up performance when groups do not assume a normal distribution.

Warner's Index of Status Characteristics:--A means to determine if data are contaminated when a comparison of social classes between groups is conducted.

Limitations

This study was limited to the physical education programs for the educable mentally retarded in North Dakota schools. The survey included school physical educators and/or classroom teachers of physical education. Only schools with a special education program were surveyed. The study was restricted by the limitations of the survey instrument.

Related Literature

The History of the Development of Special Education in North Dakota

The following history is a development of special education in North Dakota. A summation of the information was found in the College of Education Record.[14]

The inception of special classes for the educable mentally retarded was not new on the national scene. Providence, Rhode Island, generally accepted as being the first to develop a public school class for the retarded in this country, established its first class in 1896.

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[14] Janet M. Smaltz and Linnea M. Anderson, The College of Education Record, Ed. John Q. Adams (Special Education: College of Education: University of North Dakota), XLVII (May, 1962), pp. 114-128.

A program of special education for exceptional children in North Dakota began with the passage of the Special Education Law in 1951. House Bill 540 was introduced in this year by the Legislative Research Committee under the leadership of committee chairman Roy Holand.

The Department of Public Instruction, under the leadership of Superintendent M. F. Peterson, received an appropriation of $50,000.00 for the 1951-1953 biennium. This department was responsible for establishing requirements, pupil eligibility, classrooms, teacher education standards, reimbursements, and other related items.

Dr. Harrie Selznick was secured to head the program and continued in this position from September, 1951, to September, 1955. Dr. Selznick was succeeded by Janet M. Smaltz, the present director, in January, 1956.

The Special Education Law has not been considered mandatory. Rather, it has been permissive and flexible. It authorized school districts to provide the special education for exceptional children. These programs should be adapted to fit the needs and different disabilities of the children in the district. The law limited per capita instructional costs to $300.00 and any additional costs including equipment, transportation, and residential care to $500.00 per capita.[15]

The Special Education Law was established in 1951. It was not until 1953 that a teacher education program was initiated in institutions

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[15]North Dakota Department of Public Instruction, Guides to Special Education, 1965, p. 2.

of higher learning. In that year Linnea M. Anderson was added to the staff at Minot State Teachers College to conduct a demonstration class for educable mentally handicapped children and to prepare teachers in this area. When Linnea Anderson left the state for further study in 1956, the yearly program was discontinued and the course work was changed to the summer session. Minot State College has continued to offer training programs during the summer session.

The University of North Dakota followed with a special education workshop in 1958. Erwin H. Bitz conducted a study in 1959-1960 which indicated the importance of providing a teacher education program for teachers of the mentally handicapped in North Dakota. Bitz surveyed 36 of the instructors teaching state approved classes for the educable mentally handicapped during the 1959-1960 school year. He received 34 replies. The study revealed the following information:

> The 19 who held the Second Grade Professional Teacher's Certificate had a mean of 11.47 years of regular classroom teaching and 2.63 years of teaching the retarded. On the other hand, the mean years of regular teaching experience for those who held the First Grade Professional Teacher's Certificate was 6.73 years, while the mean years of teaching the retarded was 2.33 years. Those teachers who did not have degrees reported a mean of 5.68 semester hours of "Special Coursework in Methods of Teaching the Mentally Handicapped" with 3 teachers reporting that they had taken no special courses. Those with degrees reported a mean of 4.0 semester hours of special coursework with 4 teachers reporting that they had taken no special courses. Of the 7 teachers who reported that they had taken no special methods, 4 were teaching a special class for the first time.[16]

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[16]Erwin H. Bitz, The College of Education Record, Ed. John Q. Adams (Special Education; College of Education: University of North Dakota), XLVII (May, 1962), pp. 114-128.

Linnea Anderson was added to the University of North Dakota staff in February of 1962. She was to develop special education courses during the regular academic year. Anderson stated the aims and objectives of special education in The College of Education Record:

> The purposes of all special education programs are similar to the goals and objectives for all education. These may be described in terms of the four objectives of the Educational Policies Commission: (1) self-realization, (2) human relationships, (3) economic responsibility, and (4) civic responsibility.[17]

There was no state institution, until February, 1962, which offered a year-round program for prospective teachers. It was at this time that the University of North Dakota established a combined major for students interested in preparation as qualified elementary teachers as well as teachers of the mentally handicapped. These requirements were much higher than the state requirements. The state required that teachers have two years of teaching experience, three semester hours of methods of teaching the retarded, and a teaching certificate.

The State of North Dakota raised the requirements in 1965 by establishing an Advanced Credential and a Basic Credential in teaching the retarded. The requirements necessary to obtain these credentials may be found in Guides to Special Education in North Dakota, Department of Public Instruction, 1965 revision.

There were two institutions of higher learning in North Dakota in 1969 which had a teacher education program for the instruction of educable mentally retarded children. They were the University of North

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[17]Anderson, College of Education Record, Vol. XLVII, pp. 114-128.

Dakota and Minot State College. The extent to which the classroom teacher was trained in physical education in each of these schools was limited to the basic courses of study required for the elementary teaching degree. The only course of study relating to the teaching of the mentally retarded, available to physical educators, was the adaptive class.

Curriculum and Physical Education Administration Studies

The first curriculum guide for special education appeared in 1956. It was prepared by Linnea M. Anderson, the Supervisor of Special Education, Minot State Teachers College, and Janet M. Smaltz, Director, Division of Special Education, Department of Public Instruction. Two 45 minute play periods were recommended in which individual and group games were stressed. The Elementary Course of Study for the State of North Dakota was cited as a reference which could be used with limitations. Revisions, in the first curriculum guide, were made in 1961 and 1965.

A physical education program, prepared by Donald J. Harrison of Seattle, Washington, for Education 417 at the University of North Dakota was inserted in the 1961 Guide to Special Education in North Dakota.[18] Harrison emphasized three main areas. These were: (1) the need for adapted physical education, (2) organizing the program, and (3) what physical education can contribute.

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[18]Donald J. Harrison, North Dakota Department of Public Instruction, Guides to Special Education in North Dakota (Bismarck, 1961), pp. 110-120.

Harrison indicated children should be divided into a primary class (ages 6-8) and an intermediate class (9-11). The physical education programs were similar for each level. Rhythms, dance, games, and self-testing activities were recommended for each group. However, they were gradient in complexity for the intermediate group. Posture exercises for scoliosis and round shoulders were indicated.

The following physical education program characteristics were emphasized in the Illinois Plan for Special Education of Exceptional Children, A Curriculum Guide for Teachers of the Educable Mentally Handicapped: (1) The importance of an adapted physical education program, (2) the basic needs of the educable mentally handicapped child, and (3) the different patterns of organization and administration of the program. The guide divided the children into a primary group (chronological age 6-9), an intermediate group (chronological age 10-13), and an advanced group (chronological age 14 and up). The daily class period was 15-30 minutes for the primary group, 20-40 minutes for the intermediate, and 30-60 minutes for the advanced group. Skills or types of activity suggested in the guide were: (1) skills of locomotion, (2) skills using the body in work and play, (3) skills stressing coordination, and (4) rhythmical and miscellaneous activities.[19]

Robert Carroll described his physical education program for the mentally handicapped. Carroll indicated four categories of mentally retarded in his classes. There were older educables (ages 13-21),

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[19]Illinois Department of Public Instruction, The Illinois Plan for Special Education of Exceptional Children, A Guide for Teachers of the Educable Mentally Handicapped, Ed. Herbert Goldstein and Dorothy M. Seigle (Springfield, 1958), pp. 1-10.

younger educables (ages 6-12), older trainables (ages 13-21), and younger trainables (ages 6-12). Physical education was divided into two programs and entitled the recreational and the individual development plans.[20]

The recreational session was held either in the gymnasium or outdoors for 30 minute periods. Calisthenics preceded one or two selected activities. The recreational session was primarily designed to teach children how to play.

The individual development program attempted to discover physical education strengths and weaknesses. Tests were used to evaluate overall coordination and strength. The children were placed with a group of four or five for two 30 minute periods per week. Strength apparatus was utilized to a great extent. The AAHPER Test was used twice a year. According to Carroll:

> These tangible results [as shown by the AAHPER Test] are of least importance when compared with the advances in learning to play and live harmoniously with one's peers, with the gains in self-confidence, and with the improvement of classroom conduct and performance. Test results and close observation indicate that our children have risen on the scale in all these areas. . . . It is our judgment that the successes mentioned above were possible because the need for physical and recreational expression had been satisfied.[21]

Beck, because of the scarcity of reported research on physical education for the educable mentally handicapped, sent a questionnaire to each of the 62 school districts in Illinois having special classes

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[20]Robert Carroll, "To Play is the Thing," Journal of Health, Physical Education, and Recreation, XXXVII (April, 1966), pp. 31-32.

[21]Ibid.

for educable mentally handicapped children.[22] Sixty districts reported, representing better than 99 per cent of the special classes and children enrolled in them. The findings indicated that there was general agreement as to the objectives of a physical education program but that the means of attaining these objectives varied considerably. The general pattern was for the teacher of the educable mentally handicapped to teach physical education in the primary classes. At the intermediate level the teacher of the educable handicapped shared the teaching with the physical education instructor and from 14 years on the physical education instructor took over the responsibility. In a small number of cases the regular grade teachers handled the physical education assignment. It was concluded from the data available that:

1. Physical education is important for educable mentally handicapped children.
2. The schools are not doing formal research in this area.
3. The schools feel a need for research in this area.
4. Although objectives are more or less agreed upon, the means of attaining them is not.
5. The objective of preparing the child for leisure time activity has been largely overlooked or ignored.

Benoit wrote:

> A program should consist of such goals as--health, strength, vigor, reaction time, inner well-being, wholesome self-awareness, a sense of purpose and achievement, motivation for self-improvement, sense of belonging and sharing, ability to relate to others, self-control, and comfort in the social group.[23]

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[22]Harry S. Beck, "Present Status of Physical Education in Special Classes for the Educable Mentally Handicapped," American Journal of Mental Deficiency, LXI (July, 1956), 117-121.

[23]J. Paul Benoit, "Extending the Mind Through the Body," Journal of Health, Physical Education, and Recreation, XXXVII (April, 1966), 28-30.

Benoit indicated physical activities should be made as pleasant as possible, and the more unusual, the greater the willingness to act. Carefully planned social support was necessary for sustained interest in physical activity.

Benoit summarized his article:

> Essentially the basic approach behind the comments presented here is to train the retarded individuals to solve his problems by means of an extended program of pleasant motor experiences.[24]

Carlson and Ginglend indicated that a teacher in a program for the educable mentally retarded should ask certain questions.[25] Among these were the following: (1) Does he work better? (2) Can he use his hands more effectively? (3) Has his coordination improved? (4) Can he use any play equipment that he could not use before? (5) Does he sleep more soundly?

Stein reviewed guidelines for curriculum and the selection of specific activities.[26] He indicated that mental age was the most important guideline in activity determination. Stein also pointed out there was little transfer of learning from one skill to another and that a diversified program of developmental activities, suited to the interests, capacities, and limitations of each individual within the

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[24] Ibid.

[25] Bernice Carlson (Wells) and David R. Ginglend, Play Activities for the Retarded Child (Abingdon Press, New York: 1961), p. 21.

[26] Julian U. Stein, "Adapted Physical Education for Educable Mentally Retarded," Journal of Health, Physical Education and Recreation, XXXII (December, 1962), 30-33, 50-51.

[27] Ibid.

class, was needed. The media through which objectives were fulfilled were through activities.

Stein wrote:

> Activities should have few rules; require little strategy, or movement patterns; and stress concrete rather than abstract approaches. . . . The curriculum should include activities such as: gymnastics, apparatus and tumbling, individual and dual games, games and relays, team sports, and much emphasis on physical fitness.[27]

Grading and evaluation, according to Stein, should be an objective appraisal of the progress each individual has made in the attainment of class objectives. This should be supplemented by a narrative report to the parents of the child's status and progress.

Shotick and Thate initiated a program of physical education for seven children in a class for the mentally retarded.[28] For three months, observers anecdotally recorded the performances and reactions of the children. They tabulated the responses as "Enthusiastic," "Response to Instruction" (the degree to which individuals could follow instruction for a given activity), and "Reaction to Other Children." No statistical analysis was made of the study, but the activities that showed more enthusiastic response and those showing adequate response to instruction were noted.

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[27] Ibid.

[28] A. Shotick and C. Thate, "Reactions of a Group of Educable Mentally Retarded Handicapped Children to a Program of Physical Education," Exceptional Child, XXVI (January, 1960), 248-252.

The Special Class Versus the Regular Class

The studies which follow were not directly concerned with physical education. The studies were, however, related to mental retardation and the much debated topic of special class versus regular class.

Bennett found in 1932 that retarded children in the regular grades were superior, in academic and/or educational achievement, to retarded children in the special class.[29] Bennett was later supported in studies by Pertsch,[30] Elenbogen,[31] and Thurstone.[32]

Blatt, in 1958, found no significant difference in academic and/or educational achievement between retarded children in regular

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[29]Annette Bennett, A Comparative Study of Subnormal Children in the Elementary Grades (New York: Teachers College, Columbia University, 1932), p. 81.

[30]F. Frederick Pertsch, "A Comparative Study of the Progress of Normal Pupils in Grades and in Special Classes" (unpublished doctoral dissertation, Columbia University, 1936), p. 101.

[31]M. L. Elenbogen, "A Comparative Study of Some Aspects of Academic and Social Adjustment of Two Groups of Mentally Retarded Children in Special Classes and in Regular Grades." Dissertation Abstracts, Vol. 17 (1967), p. 2497.

[32]Thelma G. Thurstone, "An Evaluation of Educable Mentally Handicapped Children in Special Classes and in Regular Grades." U. S. Office of Education Cooperative Research Program, Project No. OE-SAE-6452. Chapel Hill: University of North Carolina, 1960.

classes and retarded children in special classes.[33] Blatt was later supported by Ainsworth,[34] Wrightstone et al.,[35] and Mullen and Itkin.[36]

Bennett reported special class children were inferior to retarded children in regular classes in physical characteristics such as vision, speech defects, and motor coordination.[37] Blatt, however, found that those in special classes were not different, with regard to physical status, than retarded pupils in regular classes, except that uncorrected or permanent physical defects were more prevalent in the special class group.

Johnson found in 1950 that mentally retarded pupils in special classes were superior in social adjustment to mentally retarded pupils

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[33]B. Blatt, "The Physical, Personality, and Academic Status of Children Who are Mentally Retarded Attending Special Classes as Compared with Children Who are Mentally Retarded and Attending Regular Classes," American Journal of Mental Deficiency, LXII (March, 1957), 810-818.

[34]S. H. Ainsworth, "An Exploratory Study of Education, Social and Emotional Factors in the Education of Mentally Retarded Children in Georgia Public Schools." U. S. Office of Education Cooperative Research Program, Project #171 (6470). Athens, Georgia: University of Georgia, 1959.

[35]J. W. Wrightstone, et al., "A Comparison of Educational Outcomes Under Single-Track and Two-Track Plans for Educable Mentally Retarded Children." U. S. Office of Education Cooperative Research Program, Project #144. New York: New York Board of Education.

[36]F. A. Mullen and W. Itkin, "Achievement and Adjustment of Educable Mentally Handicapped Children." U. S. Office of Education Cooperative Research Program, Project SAE-6529. Chicago, Illinois: Board of Education, City of Chicago.

[37]Bennett, Comparative Studies Elementary Grades, p. 81.

in regular classes.[38] Johnson was later supported in his findings by Johnson and Kirk,[39] Elenbogen,[40] Thurstone,[41] Cassidy and Stanton,[42] and Wrightstone et al.[43]

Blatt found no significant difference in social adjustment between retarded students in regular classes and retarded students placed in special classes.[44] Blatt was later supported by Ainsworth.[45] Pertsch found retarded children in the regular classes to be superior in personal adjustment to retarded children in special classes.[46]

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[38]G. O. Johnson, "A Study of the Social Position of Mentally Handicapped Children in the Regular Grades," American Journal of Mental Deficiency, LV (July, 1950), 60-89.

[39]G. O. Johnson and S. A. Kirk, "Are Mentally Handicapped Children Segregated in Regular Grades?", Exceptional Children, XVII (1950), 65-68, 87-88.

[40]Elenbogen, Comparative Study Mentally Retarded Special Classes, Vol. 17, p. 2497.

[41]Thurstone, Evaluation Mentally Retarded Special Classes, U. S. Research Project No. OE-SAE-6452.

[42]Viola M. Cassidy and Jeannette E. Stanton, "An Investigation of Factors Involved in the Educational Placement of Mentally Retarded Children: A Study of Differences Between Children in Special and Regular Classes in Ohio." U. S. Office of Education Cooperative Research Program, Project #043. Columbus, Ohio: State University, 1959.

[43]Wrightstone, et al., Comparison Educational Outcomes, U. S. Research Project #144.

[44]Blatt, Physical, Personality, and Academic Status, Vol. LXII, 810-818.

[45]Ainsworth, Exploratory Study of Education, Georgia Public Schools, Research Project #171.

[46]Pertsch, Progress Study of Normal Pupils, dissertation (Columbia University, 1936), p. 101.

Baldwin concluded that mentally retarded children in the fourth, fifth, and sixth grades of public schools were less accepted socially than were non-mentally handicapped students.[47]

The writer felt, due to the large number of studies which have been researched on the issue of the special class versus the regular class, several should be included in the related literature. The studies indicated neither the special class nor the regular class enjoyed a definite consensus of opinion.

Studies Related to Physical Education

Francis and Rarick studied gross motor abilities of educable mentally retarded children.[48] Their subjects were 284 educable mentally retarded children (intelligence quotient 50 to 90, chronological age seven years, six months to fourteen years, six months) from special public school classes.

A battery of 11 motor performance test items was administered to each subject. These tests included measures of static strength, running speed, dynamic strength, agility, and balance. The results indicated mentally retarded children were significantly inferior to normal children on all motor proficiency tests, with scores ranging from two to four years below published age norms. Further, the discrepancy between

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[47]Willie Kate Baldwin, "The Social Position of the Educable Mentally Retarded in Regular Grades in Public Schools," Exceptional Children, XXV (November, 1958), 106-108.

[48]R. J. Francis and G. L. Rarick, "Motor Characteristics of the Mentally Retarded," American Journal of Mental Deficiency, LXIII (March, 1959), 792-811.

the performance of the retarded and normals tended to increase with advancing age. The study refuted the common belief that non-organic educable mentally retarded children do not show deficiencies in motor skill development.

Howe conducted a study in which he compared 43 normal boys and girls with 43 mentally retarded boys and girls on 11 motor tasks.[49] On all tests--Sargent-Jump, balancing on foot, tracing speed, dotting speed, and so forth--the normal children were significantly superior to the mentally retarded.

Sengstock tried to determine if mentally retarded boys differed from intellectually normal boys in physical fitness.[50] The following factors were involved: (1) height and weight, (2) socioeconomic (according to Warner's Index of Status Characteristics), (3) chronological age, mental age, and intelligence quotients (WISC Full Scale Intelligence Test), (4) AAHPER Youth Fitness Test Battery, and (5) Willcoxen's test for matched samples on the pull-ups since the educable mentally retarded and young normals did not assume a normal distribution. Sengstock matched 30 educable mentally retarded boys with 30 normal boys of comparable chronological age (which he called the old normal) and another group of 30 boys of comparable mental age (which he called the young normal). Sengstock concluded:

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[49]Clifford E. Howe, "Comparison of Motor Skills of Mentally Retarded Children and Normal Children," Exceptional Children, XXV (April, 1959), 352-354.

[50]Wayne L. Sengstock, "Physical Fitness of Mentally Retarded Boys," Research Quarterly, XXXVII (March, 1966), 113-120.

1. The old normal group was significantly superior to the educable mentally retarded in all seven items of the AAHPER test.

2. The educable mentally retarded were significantly superior to the young normal group on five of the seven test items.

3. Overall, the educable mentally retarded group was about midway between the mean performances of the old normal and the young normal group of boys.

4. The policy of placing the educable mentally retarded with chronological peers for physical education is open to serious question if only motor performance is assumed.

5. There is a relationship between intelligences and motor performance, but to what extent cannot be determined in this study.[51]

Maynard C. Reynolds, Director, Department of Special Education, University of Minnesota, wrote:

> All of life's purposes and activities meet limits at the point of physical fitness, and its clear that problems of mental retardation are frequently compounded by fitness problems. As a group, mentally retarded are markedly below the generality of their age mates in motor abilities. It's not clear whether this is in some measure inherent or a product of relative neglect.[52]

Social Aspects and Physical Education

Kenyon wrote:

> What evidence is there to suggest that experiences provided through physical education programs facilitate socialization into either specific or diffuse roles? The simplest and perhaps most honest answer is, "very little." This is not to suggest that evidence abounds supporting the negative view. The truth is that despite the availability of both theory and empirical

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[51]Sengstock, Physical Fitness in Mentally Retarded Boys, XXXVII, pp. 113-120.

[52]Maynard C. Reynolds, "A New Dawn," Programming for the Mentally Retarded (Washington D. C.: American Association for Health, Physical Education and Recreation, 1968), 3-10.

> findings concerning the process of socialization in general and the contribution of the social system in particular, few investigators have undertaken studies to determine the unique contributions of the physical education curriculum.[53]

DaPonte established a physical education class composed of eight educable mentally retarded students (five boys and three girls, chronological age 11-12) and 10 neurologically impaired children of the same chronological age.[54] The exceptional class was taught as a single unit on Monday and Wednesday by the classroom teachers. On Friday the exceptional class joined normal fourth grade boys and girls in two physical education periods taught by an itinerant physical education specialist. Integrated physical education sessions were organized so that separate groups of boys and girls participated as units; each of four squads consisted of both exceptional and normal children. DaPonte wrote:

> Observations were made of physical and social characteristics during both integrated and separate class sessions, and comparisons were drawn between the two organizational patterns. Little evidence of real social interaction between the children in the two groups was revealed. Whenever free choice of activity was permitted both exceptional and normal children chose their own friends, so that the youngsters from the special classes still congregated among themselves.[55]

Lowks indicated eight mentally retarded boys were socially integrated into a physical education class of 29 normal boys.[56] The special

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[53]Gerald S. Kenyon, "Fact and Fancy: Sociological Considerations," Journal of Health, Physical Education, and Recreation, XXXIX (November-December, 1968), 31-33.

[54]Anthony T. DaPonte, "Separate Classes: Yes! Integrated Classes: Yes!", Challenge, III (September, 1967), 7.

[55]Ibid.

[56]Marion Lowks, "Integrating Special Education Students," Challenge, III (September, 1967), 7.

students learned to put on a uniform, to participate in activities, and to shower with the nonretarded classmates. They were able to work a combination lock and to dress themselves. It was observed that the nonretarded students helped the retarded boys in the locker room and in the various activities played. Lowks summarized:

> Neither fellow students nor instructor criticized the ability or performance of the retardates but, instead, look for opportunities to encourage and praise them. The regular students have not complained or made remarks to the special students even if a point has been lost because of poor play. They appear to realize that the retardates need understanding and that the instructor is looking to them for assistance.[57]

Intelligence and Physical Education

Sequin developed a physiologic method of teaching the mentally retarded.[58] He postulated that special training of the peripheral nervous system through muscle and sense training would strengthen the receptors, bombard the central nervous system, and stimulate the cortex to greater mental functioning.

Brockway wrote: "It is a biologic law down through the ages that man has grown mentally in direct ratio to the skill he has developed in the performance of constructive motor activities."[59]

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[57] Ibid.

[58] E. Sequin, Idiocy and Its Treatment of the Physiological Method (Albany: Columbia University, Brandow Printing Co., 1907), p. 4.

[59] A. Brockway, "The Problem of the Spastic Child," Journal of the American Medical Association, CVI (May, 1936), 1635-1638.

Oliver watched two groups of educationally subnormal boys, and gave a ten-week course of physical conditioning to one group in addition to the regular schooling, while the control group received only schooling.[60] According to Oliver, the experimental group gained 4.25 IQ points on the Revised Stanford-Binet Scale, while the control group gained 0.9 IQ points. The difference was significant at the .01 level. The results showed that the improvement by the experimental group in physical qualities and abilities was highly significant. There was also significant improvement in the mental tasks. Oliver indicated:

> The factor responsible for the improvement on the mental side is probably largely emotional. It is likely to be a combination of (a) the effort of achievement and success, (b) improved adjustment, (c) improved physical conditioning, (d) the effects of feeling better. The conclusion is that these effects have been achieved through the medium of physical activity.[61]

Oliver felt there was no means of estimating the emphasis of the gains from the study. He does point out that, "the improvement is so marked, however, as to suggest that more emphasis should be given to the physical education of educationally sub-normal boys."

Clarke and Clarke wrote:

> A number of researchers support the belief that physical fitness is related to mental accomplishments, especially as affecting mental alertness. Thus, it may be contended that a person's

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[60] James N. Oliver, "Effect of Physical Conditioning Exercises and Activities on the Mental Characteristics of Educationally Subnormal Boys," British Journal of Educational Psychology, XXVIII (1958), 155-165.

[61] Ibid.

> general learning potential, for a given level of intelligence is increased or decreased in accordance with his degree of physical fitness.[62]

Kephart stressed the importance of perceptual-motor orientation in the child as a foundation for the symbolic and conceptual activities of the classroom. He stated:

> Consistent and efficient motor patterns permit the child to explore his environment and systematize his relationship to it. Perceptual data are similarly systematized by comparing them with his motoric system. Through such perceptual-motor matching the perceptual world of the child and his behavioral world come to coincide. It is with this organized system of perceptual input and behavioral output that the child attacks and manipulates symbolic and conceptual material in a veridical fashion.[63]

Corder gave an intensive twenty-day program of physical education to eight retarded boys.[64] Eight retarded boys designated as "officials" met each day with the training group while eight retarded boys served as controls. Pretests and post tests were given on the Wechsler Intelligence Scale for Children, the Youth Physical Fitness Test, and the Cowell Personal Distance Scale. The training group made significant intelligence quotient gain scores on the Full Scale and Verbal Scale of the WICS over the control group. The training group made significant gain scores on the youth Physical Fitness Test over

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[62]H. Harrison Clarke and David H. Clarke, Developmental and Adapted Physical Education (Englewood Cliffs, New Jersey: Prentice-Hall International, Inc., 1963), p. 106.

[63]Newell C. Kephardt, "Perceptual-Motor Aspects of Learning Disabilities," Exceptional Children, XXXI (December, 1964), 201-206.

[64]W. Owens Corder, "Effect of Physical Education on the Intellectual, Physical and Social Development of Educable Mentally Retarded Boys," Exceptional Children, XXXII (February, 1966), 357-364.

the officials and the control group, but there was no difference in social status.

Stein indicated motor proficiency and intelligence were more highly correlated in retarded than in normal children.[65] He indicated almost no relationship had been found between intelligence quotient and measurements of physical proficiency among normal subjects. He indicated correlations have been low when assessing this relationship among the retarded; they have been higher and have shown more positive trends than with non-retarded. Stein showed:

> Complexity of movements, previous experience, motivation, and ability to understand and follow directions could be factors of great consequence in limiting motor performance of the retarded--thus resulting in higher statistical correlations--than the lack of motor ability per se.[66]

Stein indicated that activities can stimulate intellectual development. He wrote:

> But even more, these activities can be the stimulus and impetus for greater intellectual development. Retarded children have used participation in physical education, recreation, camping and outdoor education as a basis for art lessons, oral expression activities, written assignments, arithmetic manipulations, music sessions, health discussions, safety understandings, creative thought and problem solving. When something has meaning and significance for the retarded, they are much more likely to learn and remember.[67]

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[65] Julian U. Stein, "What Research Says About Psychomotor Function of the Retarded," Journal of Health, Physical Education, and Recreation , XXXVII (April, 1966), 36.

[66] Ibid.

[67] Julian U. Stien, Programming for the Mentally Retarded (Washington, D. C.: National Education Association, American Association for Health, Physical Education, and Recreation Department. Report of a National Conference, October 31 - November 2, 1966), 16-20.

Williams pointed out:

> There appears to be considerable positive opinion upon certain intellectual-cognitive performances of the individual. However, a careful look at the available literature reveals that there is little if any systematic research which quantifies, in a clear and precise way, the effects of exercise or programs of physical activity upon the perceptual-cognitive-intellectual functioning of either the normal or the mentally retarded individual.[68]

Summary of Review of Related Literature

1. Providence, Rhode Island, generally accepted as being the first to develop a public school class for the retarded in this country, established its first class in 1896.

2. A program of special education for exceptional children in North Dakota began in 1951 with the passage of Special Education Law - House Bill 540.

3. The Department of Public Instruction under the leadership of Superintendent M. F. Peterson was responsible for the administration of the initial $50,000.00 appropriation for the 1951-1953 North Dakota program.

4. Dr. Harrie Selznick headed the program from September, 1951, to September, 1955, and was succeeded by Janet M. Smaltz, the present director, in 1955.

5. The Special Education Law has not been considered mandatory. Rather, it has been permissive and flexible. It authorized school districts to provide special education for exceptional children. The law

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[68]Harriet G. Williams, "Fact and Fancy: Learning," Journal of Health, Physical Education, and Recreation, XXXIX (November-December, 1968), 30-31.

limited per capita instructional costs to $300.00 and any additional costs, including equipment, transportation, and residential care to $500.00 per capita.

6. Linnea M. Anderson established the first teacher education program in North Dakota in 1953 at Minot State Teacher's College. A year-around program was first established at the University of North Dakota in 1962. These institutions of higher learning were the only ones currently offering programs in the education of teachers for the field of mental retardation instruction.

7. The State of North Dakota established an Advanced Credential and a Basic Credential in teaching the retarded in 1965.

8. The first curriculum guide to special education appeared in 1956. It was prepared by Linnea M. Anderson and Janet M. Smaltz. There was no physical education program per se in the first guide. Two 45 minute play periods were recommended, however, in which individual and group games were stressed.

9. A physical education program, prepared by Donald J. Harrison for Education 417 at the University of North Dakota, was inserted in the 1961 Guide to Special Education in North Dakota.

10. Studies regarding curriculum and physical education administration indicated a wide range of physical education programs for the educable mentally retarded.

11. A review of literature indicated the efficacy of special-class placement has been studied mainly by comparing retarded children placed in special classes with retarded children in regular classes.

Criteria for placement in either special or regular classes has been physical, social, emotional, and intellectual standards.

12. The literature indicated that neither the special class or the regular class method of educating the educable mentally retarded enjoyed a definite consensus of opinion.

13. The literature indicated some advantage to a special class in physical education from a motor standpoint. Opinions varied concerning social and intellectual aspects of educable mentally retarded children in special or regular physical education classes.

14. The question of the educable mentally retarded in special or regular physical education classes was unanswered in this study and remained open to debate and discussion.

CHAPTER II

PROCEDURES

The survey method was used to secure data regarding the status of physical education programs for the educable mentally retarded in North Dakota schools. These schools were widely scattered throughout the state of North Dakota; therefore, the survey method was the most feasible for obtaining data.

An objective, check-list type of questionnaire was developed. This questionnaire was based on the findings of a national survey administered by David K. Brace, Professor Emeritus, at the University of Texas, Austin, Texas, and on related literature pertinent to the mentally retarded and mentally retarded with respect to physical education.

The construction of the questionnaire was based on suggestions and written materials offered by fellow students and instructors, from the national survey administered by David K. Brace, and textbook information--namely Research Methods in Health, Physical Education, and Recreation, edited by M. Gladys Scott, 1959.

The questions were formulated after general categories were established. These categories included questions on general information, information on teachers of physical education, on provision of

instruction, on activities, facilities, equipment and supplies, on tests and evaluation procedures, and on personal opinions.

Selection of Schools and Teachers

Only teachers of the educable mentally retarded in North Dakota were surveyed. There were 98 teachers of the educable mentally retarded in North Dakota schools. These teachers were listed in the 1968-1969 Special Education Directory provided by the Department of Public Instruction in Bismarck, North Dakota.

Collection of the Data

Questionnaires were mailed to each teacher named in the 1968-1969 Special Education Directory on February 17, 1969. The letter of transmittal (Appendix A) which accompanied the questionnaire (Appendix B) presented a background concerning the need for the study. The questionnaire was to be returned by March 10, 1969.

On March 10, 1969, when returns totaled 53, a follow-up personal telephone call was made to all teachers who had not returned their questionnaires. They were urged to complete the questionnaire and return it.

The final return on March 20, 1969, revealed that 82 usable questionnaires of the 98 mailed had been returned. This number represented nearly 84 per cent of the total that had been mailed.

The information obtained on the questionnaire was transferred to computer cards for analysis.

CHAPTER III

INTERPRETATION OF DATA

This chapter presents statistics concerning the number and per cent of teachers who responded to the study of the status of physical education programs for the educable mentally retarded in North Dakota schools. Responses were organized in various ways in an attempt to describe as fully as possible the characteristics of the population. Factors to be given consideration are: teachers, class periods, provision of instruction, activities, facilities, equipment and supplies, test and evaluation procedures, and opinions concerning instruction.

General Information

Questionnaires were sent to 98 teachers of the EMR. There were 82, or 83.67 per cent, of the teachers of the EMR who returned the questionnaire.

Adequate response has been considered necessary in survey research. Bookwalter, Davis, and Smith, commented as follows on what may be considered adequate returns:

> Adequate responses must be had to assure valid findings. What constitutes adequate responses varies with the nature of the study, but returns of over 50 per cent are generally considered fairly satisfactory.[69]

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[69]Karl W. Bookwalter, Elwood C. Davis, and Henry L. Smith, "Survey Methods," in Research Methods Applied to Health, Physical Education, and Recreation (Washington, D. C.: American Association for Health, Physical Education, and Recreation, 1967), p. 345.

The responses constituted nearly an 84 per cent return for the survey. This was about 34 per cent over the 50 per cent considered valid in survey research for interpretation and conclusions.

Table 1 referred to the number and per cent of the respondents to the questionnaire. The table showed a comparison between the number and per cent of respondents according to school levels. An "other" category was established to accommodate combinations of school levels. This category accounted for about 13 per cent of the responses.

TABLE 1

NUMBER AND PER CENT OF RESPONDENTS ACCORDING TO SCHOOL LEVELS

School Level	Number of Respondents to Questionnaire	School Levels No.	%
Total Population	82		
K-6		55	67.07
7-9		10	12.20
10-12		6	7.32
Other		11	13.41

Table 1 revealed about 67 per cent of the respondents were involved with the EMR at the "K - 6" grade levels. Approximately 12 per cent of the responses were from teachers in grades "7 - 9," while 7 per cent of the respondents taught the EMR in grades "10 - 12."

Table 2, p. 34, referred to the number of respondents to the questionnaire. The table compared the number and per cent of the

respondents according to the population of the community and to Class A and Class B schools.

TABLE 2

NUMBER AND PER CENT OF RESPONDENTS ACCORDING TO THE POPULATION OF THE COMMUNITY AND CLASS A AND CLASS B SCHOOLS

Population of Community and School Classification	Response to Questionnaire	
	No.	%
0- 5,000	34	41.46
5,000-20,000	16	19.51
Over 20,000	32	39.02
School Classification:		
Class A	56	68.29
Class B	26	31.71

Table 2 denoted 41 per cent of the responses came from communities "under 5,000" population. Twenty per cent of the responses were from communities "over 5,000" but less than "20,000," while 39 per cent were from communities "over 20,000" population.

Table 2 also indicated the number and per cent of responses compared with Class A and Class B schools. About 68 per cent of the respondents were from Class A schools, whereas, about 32 per cent of the questionnaires were returned from Class B schools.

Specific Information

Table 3, p. 36, presented information concerning the teacher of the physical education of the EMR. Table 3 showed the number and per cent of teachers of the EMR, sex of the teacher, years of teaching experience, and the academic certification of the teacher. Information concerning physical education teachers of the EMR was compared to school level, population of community, and classification of the school.

An inspection of Table 3 revealed that classroom teachers were the instructors who taught physical education to the EMR more often than any other group. It may be seen that 39 per cent of the respondents indicated the classroom teacher was responsible for the EMR in physical education. Physical education teachers and a combination of classroom and physical education teachers were second and third, respectively. Six responses were placed in an "other" category. These six are listed below:

Teacher of the EMR	Number
A paraprofessional	1
Teachers aide and physical education teacher	2
Grade principal	1
An aide with one year of college experience	1
Classroom teacher and principal	1

It was interesting to find no classroom teachers taught physical education in grades "7 - 9" and only 17 per cent on the "10 - 12" grade level. Approximately 18 per cent of physical educators, used as

TABLE 3

NUMBER AND PER CENT OF TEACHERS OF EMR, SEX OF TEACHER, YEARS OF EXPERIENCE AND ACADEMIC CERTIFICATION ACCORDING TO LEVEL OF SCHOOL, POPULATION OF COMMUNITY, AND SCHOOL CLASSIFICATION

Teachers, Sex, Years of Experience and Academic Certifications	Teachers of EMR		School Level								Population of Community						School Classification			
			K-6		7-9		10-12		Other		0-5,000		5,000-20,000		Over 20,000		Class A		Class B	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Total Population			55	67.06	10	12.20	6	7.32	11	13.41	34	41.46	16	19.51	32	39.02	56	68.29	26	31.71
Classroom Teachers	32	39.02	28	50.91			1	16.67	3	27.27	18	52.94	7	43.75	7	21.88	18	32.14	14	53.85
Physical Education Teachers	26	31.71	10	18.18	10	100.00	4	66.67	2	18.18	7	20.59	5	31.25	14	43.75	21	37.50	5	19.23
Classroom and Physical Education Teachers	18	21.95	12	21.82			1	16.67	5	45.45	7	20.59	2	12.50	9	28.13	14	25.00	4	15.38
Others	6	7.32	5	9.09					1	9.09	2	5.88	2	12.50	2	6.25	3	5.36	3	11.54
Sex of Teachers of EMR:																				
Female	42	51.22	36	65.45	1	10.00			5	45.45	20	58.82	9	56.25	13	40.63	25	44.64	17	65.38
Male	17	20.73	10	18.18	1	10.00	3	50.00	3	27.27	8	23.53	3	18.75	6	18.75	11	19.64	6	23.08
Female and Male	22	26.83	8	14.55	8	80.00	3	50.00	3	27.27	6	17.65	3	18.75	13	40.63	20	35.71	2	7.69
No Response	1	1.22	1	1.82									1	6.25					1	3.85
Years of Teaching Experience:																				
0-1	23	28.05	17	30.91	2	20.00			4	36.36	14	41.18	4	25.00	5	15.63	13	23.21	10	38.46
1-3	30	36.59	20	36.36	2	20.00	2	33.33	6	54.55	13	38.24	6	37.50	11	34.38	19	33.93	11	42.31
4-6	10	12.20	7	12.73	2	20.00	1	16.67			2	5.88	2	12.50	6	18.75	8	14.29	2	7.69
7-10	11	13.41	6	10.91	2	20.00	2	33.33	1	9.09	3	8.82			8	25.00	10	17.86	1	3.85
Over 10	5	6.10	3	5.45	2	20.00					2	5.88	2	12.50	1	3.13	4	7.14	1	3.85
No Response	3	3.66	2	3.64			1	16.67					2	12.50	1	3.13	2	3.57	1	3.85
Academic Certification:																				
Standard	20	24.39	18	32.73			1	16.67	1	9.09	15	44.12	2	12.50	3	9.38	8	14.29	12	46.15
BA or BS	51	62.20	32	58.18	6	60.00	4	66.67	9	81.82	18	52.94	10	62.50	23	71.88	39	69.64	12	46.15
MA or MS	7	8.54	2	3.64	3	30.00	1	16.67	1	9.09			3	18.75	4	12.50	6	10.71	1	3.85
Specialist	1	1.22			1	10.00									1	3.13	1	1.79		
No Response	3	3.66	3	5.45							1	2.94	1	6.25	1	3.13	2	3.57	1	3.85

teachers for the EMR, were found in grades "K - 6," whereas all of the teachers on the "7 - 9" grade level were physical educators.

Nearly 53 per cent of all teachers of physical education of the EMR were classroom teachers living in communities in the "0 - 5,000" population range. It was interesting to note that about 13 per cent of the respondents indicated using a combination classroom and physical educator to teach physical education to the EMR in the "5,000 - 20,000" population range. Approximately 28 per cent of a combination of classroom teacher and physical education teacher were indicated in the "over 20,000" population range.

Table 3, p. 35, indicated that the largest percentage of EMR physical education teachers in Class A schools were physical educators. Nearly 44 per cent of teachers in Class B schools were classroom teachers.

The largest percentage of teachers who taught physical education to the EMR were female. Approximately 65 per cent of those females were on the "K - 6" school level. It was interesting to note there were no females teaching physical education to the EMR in grades "10 - 12." The majority of male teachers were also teaching on the "K - 6" grade level. About 80 per cent of the respondents in grade level "7 - 9" indicated that both a male and a female taught physical education to the EMR.

About 59 per cent of the female respondents, and 24 per cent of the male respondents lived in the "0 - 5,000" community population range. It was interesting to note that 41 per cent of the respondents in the "over 20,000" population range indicated a male and a female taught physical education to the EMR.

The greatest percentage, 65 per cent, of the females were found in the B school classification as were 23 per cent of the males. A male teacher and female teacher combination was mentioned by 35 per cent of the respondents in Class A schools, while about 8 per cent was indicated in Class B schools.

Table 3, p. 35, showed that about 37 per cent of the respondents had one to three years of teaching experience. Approximately 13 per cent had over 10 years of teaching experience. Twenty-eight per cent had one or less years of teaching experience.

Twenty per cent of the respondents in the "K - 6" grade levels had taught one to three years. About 5 per cent of the respondents had taught over 10 years in the "K - 6" grade level.

It was interesting to note that no particular level of teaching experience dominated grade levels "7 - 9." It may also be noted that there were no teachers with less than two or more than 10 years of teaching experience on the "10 - 12" grade levels.

Teachers with under four years of teaching experience dominated in the "0 - 5,000" community population range. Interesting to note was the fact there were no teachers with "7 - 10" years of teaching experience in communities of "5,000 - 20,000" population. Twenty-five per cent of the teachers in cities "over 20,000" population had "7 - 10" years of teaching experience, however. Table 3 indicated 34 per cent of Class A respondents and 42 per cent of Class B respondents had over one, but less than four years of teaching experience.

Table 3 revealed information concerning the academic certification of teachers. The majority of the respondents had either a BA or

BS academic certification. There was a large percentage who maintained the standard certification.

The greatest percentage of the respondents on all school levels had either a BA or BS degree. Approximately 33 per cent of those, who indicated a standard degree, taught in the "K - 6" grade level, while about 17 per cent who indicated a standard degree were found above grade six.

It was interesting to find none of the respondents who had hours beyond the BA or BS degree taught in communities of "0 - 5,000" population. Nearly 53 per cent of the BA or BS degree holders and 44 per cent of the standard degree respondents taught in the "0 - 5,000" population range. The vast majority of teachers living in communities over 20,000 population held a BA or BS certification.

The largest percentage of teachers holding a BA or BS degree taught in Class A schools. Forty-six per cent of the individuals, with a standard degree, taught in Class B schools, while 14 per cent of the respondents were in Class A schools. Only 4 per cent of the respondents who had hours beyond a BA or BS degree taught in a Class B school.

Table 4, p. 40, presented information related to the number and per cent of teachers of the EMR with professional training in physical education. Teachers of the EMR with professional training were compared with school levels, population of community, and school classification.

Table 4 indicated that 84 per cent of the respondents were exposed to college physical education and the teaching of physical education to normal students. Nearly 14 per cent of them had not been exposed.

TABLE 4

NUMBER AND PER CENT OF TEACHERS OF EMR WITH PROFESSIONAL TRAINING IN PHYSICAL EDUCATION

College Exposure to Physical Education and Physical Education Subject Background	Teachers of EMR		School Level								Population of Community						School Classification			
			K-6		7-9		10-12		Other		0-5,000		5,000-20,000		Over 20,000		Class A		Class B	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Total Population			55	67.07	10	12.20	6	7.32	11	13.41	34	41.16	16	19.51	32	39.02	56	68.29	26	31.71
Exposure to College Physical Education and Teaching "Normal" Students:																				
Yes	69	84.15	47	85.45	10	100.00	5	83.33	7	63.64	30	88.24	11	68.75	28	87.50	47	83.93	22	84.62
No	11	13.41	6	10.91			1	16.67	4	36.36	4	11.76	3	18.75	4	12.50	8	14.29	3	11.54
No Response	2	2.44	2	3.64									2	12.50			1	1.79	1	3.85
Exposure to College Physical Education and Teaching EMR Students:																				
Yes	16	19.51	12	21.82					4	36.36	7	20.59	3	18.75	6	18.75	12	21.43	4	15.38
No	64	78.05	41	74.55	10	100.00	6	100.00	7	63.64	27	79.41	11	68.75	26	81.25	43	76.79	21	80.77
No Response	2	2.44	2	3.64									2	12.50			1	1.79	1	3.85
Physical Education Subject Background:																				
Team Activities	65	79.27	43	78.18	9	90.00	5	83.33	8	72.73	32	94.12	8	50.00	25	78.13	42	75.00	23	88.46
Individual Activities	49	59.76	28	50.91	9	90.00	4	66.67	8	72.73	19	55.88	8	50.00	22	68.75	36	64.29	13	50.00
Dual Activities	38	46.34	24	43.64	6	60.00	4	66.67	4	36.36	14	41.18	6	37.50	18	56.25	29	51.79	9	34.62
Group Games	67	81.71	46	83.64	8	80.00	5	83.33	8	72.73	30	88.24	11	68.75	26	81.25	44	78.57	23	88.46
Dance	56	68.29	36	65.45	8	80.00	5	83.33	7	63.64	24	70.59	9	56.25	23	71.88	39	69.64	17	65.38
Adaptive or Correctives	21	25.61	15	27.27	2	20.00	1	16.67	3	27.27	8	23.53	3	18.75	10	31.25	14	25.00	7	26.92
Calisthenics or Conditioning	50	60.98	32	58.18	8	80.00	4	66.67	6	54.55	22	64.71	7	43.75	21	65.63	34	60.71	16	61.54
Rhythms	48	58.54	29	52.73	7	70.00	3	50.00	9	81.82	20	58.82	5	31.25	23	71.88	36	64.29	12	46.15
Swimming	35	42.68	19	34.55	5	50.00	3	50.00	8	72.73	12	35.29	7	43.75	16	50.00	27	48.21	8	30.77
Gymnastics and Tumbling	41	50.00	24	43.64	7	70.00	4	66.67	6	54.55	14	41.18	8	50.00	19	59.38	32	57.14	9	34.62

It was interesting to note well over 60 per cent of the teachers on grade levels "K - 12," in communities "over 20,000" population, and in both Class A and Class B schools had been exposed to college physical education courses and the teaching of physical education to normal children. The largest percentage of teachers, with an exposure to college physical education courses and the teaching of physical education to normals, were on the "K - 6" grade level, in communities of "0 - 5,000" and were in Class B schools.

On the other hand, Table 4, p. 40, denoted 78 per cent of the respondents to the questionnaire had not been exposed to college physical education courses related to the EMR and the teaching of physical education to the EMR students. About 20 per cent had been exposed to college physical education courses related to the EMR and had taught EMR students. Well over 60 per cent of the teachers on all grade levels of "K - 12" in cities less than "20,000" population, and in both Class A and B schools had not been exposed to college physical education courses related to EMR and the teaching of physical education to the EMR.

Table 4 revealed that variety characterized the physical education subject background of the teachers. The table showed the most prevalent background subject was group games. It was interesting to find the smallest percentage was related to adaptive or corrective subjects.

Generally speaking, teachers in grades "7 - 12" had been exposed to more college physical education subjects than those on the "K - 6" grade level. The greatest percentage of teachers on the "7 - 12" grade levels indicated a college background in both team and individual activities. Group games was mentioned as the most common college background

subject in the "5,000 - 20,000" population range. A similar situation occurred in the "over 20,000" population range. Here 81 per cent responded with the same type of activity.

The Class A teachers, as shown by nearly 79 per cent of the responses, indicated group games as the most common college background subject. The most common college background subjects, according to Class B teachers, were team activities and group games.

Table 5, p. 43, related information regarding the number of physical education periods per week allotted to the EMR. The number of physical education periods per week allotted to the EMR were compared with school level, population of the community, and school classification.

The number of physical education periods per week most often indicated by the respondents was two. Two class periods per week were mentioned by 24 per cent of the respondents. Three periods and five periods per week were the second and third most common time allotments.

Five periods per week were used by nearly 24 per cent of the respondents in grades "K - 6." Three periods per week were used most often by the respondents in grades "7 - 12."

Approximately 33 per cent of the respondents in cities of "0 - 5,000" population indicated two periods per week. Two periods were also indicated as the high percentage in the "5,000 - 20,000" population range. It was interesting to note there were no schools in the "5,000 - 20,000" population range with one period per week. It was also interesting to note that in cities "over 20,000" population 28 per cent of the respondents used five periods per week for physical education.

TABLE 5

NUMBER OF PHYSICAL EDUCATION PERIODS PER WEEK
ALLOTTED TO THE EMR

Number, Length and Time of Physical Education Periods	Class Periods for EMR		School Level								Population of Community						School Classification			
			K-6		7-9		10-12		Other		0-5,000		5,000-20,000		Over 20,00		Class A		Class B	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Total Population			55	67.07	10	12.20	6	7.32	11	13.41	34	41.46	16	19.51	32	39.02	56	68.29	26	31.71
Scheduled Class Periods:																				
1	5	6.10	4	7.27	1	10.00			5	45.45	2	5.88			3	9.38	4	7.14	1	3.85
2	20	24.39	12	21.82	3	30.00			5	45.45	11	32.35	6	37.50	3	9.38	13	23.21	7	26.92
3	17	20.73	7	12.73	4	40.00	3	50.00	3	27.27	6	17.65	3	18.75	8	25.00	12	21.43	5	19.23
4	13	15.85	9	16.36	1	10.00	1	16.67	2	18.18	4	11.76	3	18.75	6	18.75	11	19.64	2	7.69
5	15	18.29	13	23.64	1	10.00	1	16.67			5	14.71	1	6.25	9	28.13	9	16.07	6	23.08
Other	10	12.20	9	16.36			1	16.67			6	17.65	1	6.25	3	9.38	6	10.71	4	15.38
No Response	2	2.44	1	1.82					1	9.09			2	12.50			1	1.79	1	3.85
Length of Physical Education Periods:																				
15 Minutes	15	18.29	15	27.27							10	29.41	3	18.75	2	6.25	6	10.71	9	34.62
30 Minutes	23	28.05	19	34.55					4	36.36	9	26.47	2	12.50	12	37.50	15	26.79	8	30.77
45 Minutes	9	10.98	6	10.91			1	16.67	2	18.18	5	14.71	2	12.50	2	6.25	6	10.71	3	11.54
60 Minutes	14	17.07	2	3.64	6	60.00	4	66.67	2	18.18	5	14.71	2	12.50	7	21.88	12	21.43	2	7.69
Other	18	21.95	11	20.00	4	40.00	1	16.67	2	18.18	5	14.71	4	25.00	9	28.13	15	26.79	3	11.54
No Response	3	3.66	2	3.64					1	9.09			3	18.75			2	3.57	1	3.85
Designated Time:																				
A.M.	27	32.93	18	32.72	2	2.00	1	16.67	6	54.55	11	32.35	6	37.50	10	31.25	21	37.50	6	23.08
P.M.	19	23.17	15	27.27	3	3.00			1	9.09	9	26.47	2	12.50	8	25.00	13	23.21	6	23.08
A.M. and P.M.	21	25.61	16	29.09	3	3.00			2	18.18	10	29.41	4	25.00	7	21.88	12	21.43	9	34.62
No Specific Time	5	6.10	2	3.36			3	50.00			2	5.88	1	6.25	2	6.25	3	5.36	2	7.69
No Response	10	12.20	5	9.09	2	2.00	1	16.67	2	18.18	1	2.41	3	18.75	6	18.75	8	14.28	2	7.69

As a general rule, two periods per week typified Class A and Class B schools. Twenty-three per cent of the respondents were from Class A schools and about 27 per cent from Class B schools. The writer found it interesting to note that about four per cent of the respondents in Class B schools indicated one period per week for physical education, while in Class A schools, 7 per cent indicated one period per week.

Table 5, p. 43, gave information relating to the length of physical education periods for the EMR. About 28 per cent said 30 minute periods were used most often. A large percentage, about 22 per cent, stated something other than the choices listed in the questionnaire.

Nearly 35 per cent of the respondents mentioned 30 minutes per period in grades "K - 6." It was interesting to find only 17 per cent responded to anything less than 45 minute periods in grades "7 - 12."

The length of the physical education period per week varied with the population of the community. About 29 per cent of the respondents in cities of "0 - 5,000" population said their physical education period per week was 15 minutes and 26 per cent in the same population group indicated 30 minutes. Only 19 per cent of the respondents checked 15 minutes and nearly 13 per cent indicated 30 minutes in communities between "5,000 - 20,000" population.

A large percentage of the respondents in communities "over 20,000" population listed 30 minutes per week for physical education. It was encouraging, however, to find about 22 per cent of the respondents in communities "over 20,000" used 60 minute periods.

Class B respondents stated the length of their physical education periods was usually a 15 minute session, while 31 per cent of the

Class B respondents indicated a 30 minute session. Nearly 27 per cent checked 60 minute periods for physical education.

Table 5, p. 43, gave information on the time of day (AM or PM) designated for physical education. Nearly 33 per cent of the respondents used morning time. It was interesting to note about 6 per cent of all respondents had no specific time designated for physical education of the EMR.

It was also interesting to note 50 per cent of the respondents teaching on grade levels "10 - 12," had no specific time designated. A large percentage of respondents in grades "K - 9" checked the morning as being designated for physical education for the EMR.

Respondents in all population groups indicated the morning as the designated time for physical education. Nearly 38 per cent of the respondents, from Class A schools, stated they used the morning for physical education. About 35 per cent in Class B schools indicated both AM and PM. Class B schools had a higher percentage of no designated time than Class A schools.

Table 6, p. 46, presented information regarding the number and per cent of the type of instruction provided the EMR and whether or not Guides to Special Education were used as a course of study in North Dakota schools. Responses desired by the writer in determining the status of Guides to Special Education were: "yes," "no," "other," and "no response." Eight responses were placed in an "other" category. These eight are listed on p. 47.

TABLE 6

TYPE OF INSTRUCTION PROVIDED THE EMR IN PHYSICAL EDUCATION

Type of Instruction and Use of Guides to Special Education	Schools for EMR		School Level								Population of Community						School Classification			
			K-6		7-9		10-12		Other		0-5,000		5,000-20,000		Over 20,000		Class A		Class B	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Total Population			55	67.07	10	12.20	6	7.32	11	13.41	34	41.46	16	19.51	32	39.02	56	68.29	26	31.71
EMR Physical Education Taught Separately From "Normal" Classes	31	37.80	25	45.46	1	10.00	1	16.67	4	36.36	9	26.47	6	37.50	16	50.00	23	41.07	8	30.76
EMR Physical Education Taught In Regular Classes	17	20.73	7	12.73	6	60.00	1	16.67	3	27.27	8	23.53	3	18.75	6	18.75	12	21.42	5	19.23
EMR Physical Education Taught With "Normals," But Given Modified Action	3	3.66	1	1.82			2	33.33			1	2.94	1	6.25	1	3.13	2	3.57	1	3.84
EMR Physical Education Taught On Some Days With "Normals" Depending On Activities Scheduled	1	1.22	1	1.82											1	3.13	1	1.78		
EMR Physical Education Taught On A Free Play Or Recess Basis Only	9	10.98	8	14.55					1	9.09	6	17.65	3	18.75			2	3.57	7	26.92
Other Arrangements for EMR Physical Education	20	24.39	13	23.64	3	30.00	1	16.67	3	27.27	8	23.53	3	18.75	8	25.00	15	26.78	5	19.23
No Response	1	1.22					1	16.67			2	5.88					1	1.78		
Use of Guide			55	67.07	10	12.20	6	7.32	11	13.41	34	41.46	16	19.51	32	39.02	56	68.29	26	31.71
Yes	24	29.27	19	34.55	2	20.00			3	27.27	15	44.12	4	25.00	5	15.63	12	21.42	12	46.15
No	33	40.24	16	29.09	6	60.00	4	66.67	7	63.64	13	38.24	7	43.75	13	40.63	23	41.07	10	38.48
Other	8	9.76	7	12.73	1	10.00					2	5.88	2	12.50	4	12.50	6	10.72	2	7.69
No Response	17	20.73	13	23.64	1	10.00	2	33.33	1	9.09	4	11.76	3	18.75	10	31.25	15	26.78	2	7.69

Curriculum Guide other than Guides to Special Education	Number
Frostig Program	1
Visual-motor Tactile Skills Program by Getman, Kane, Holgren, and McKee	1
Remediation of Learning Disabilities by R. Valett and Guide to Movement Exploration by Hackett and Jenson	1
Manual of Perceptual Motor Activities by MaFex Association Incorporated	1
Programs developed by the school	4

Information concerning the type of instruction and the use of Guides to Special Education was compared to the school levels, population of the community, and the school classification.

Table 6, p. 46, indicated the largest percentage of physical education programs do not include the EMR with normal students. Separate classes were mentioned in 38 per cent of the responses. Nearly 21 per cent of the respondents had the EMR integrated with normal students. It was interesting to note the large percentage of respondents who made other arrangements for physical education for the EMR.

Totally separate classes were characteristic of grades "K - 6," of communities "over 20,000" population, and of Class A schools. Integrated classes were prevalent in grades "K - 9," in communities with a "0 - 5,000" population, and in Class A schools.

Recess or free play was entirely localized in grades "K - 6," and was of the greatest significance in communities of "5,000 - 20,000" population. Recess or free play was predominately found in Class B schools.

Table 6, p. 46, indicated the number and percentage of the respondents using Guides to Special Education. About 40 per cent of the respondents mentioned they were not using this guide, while 29 per cent stated they were using Guides to Special Education.

The largest percentage of respondents who used Guides to Special Education were in grades "K - 6." Most of the respondents in grades "7 - 12" were not using Guides to Special Education. The largest percentage of respondents who used Guides to Special Education were in communities of "0 - 5,000" population.

About 41 per cent of the respondents did not use the guide in Class A schools, while 38 per cent of the respondents did utilize the guide in Class B schools. About 11 per cent of the respondents in Class A and 8 per cent in Class B schools indicated using a program other than Guides to Special Education.

Table 7, p. 49, related information regarding the number and per cent of North Dakota physical education activities used in the program for the EMR. Information regarding physical education activities used in the EMR program was compared to school level, population of the community, and the school classification.

The most popular physical education activity disclosed in Table 7 was basic movements. Calisthenics or conditioning, games to teach body parts, and physical fitness tests were the second, third, and fourth most common physical education activities for the EMR. It was interesting to note that just 50 per cent of the respondents used corrective exercises in the physical education program.

TABLE 7

PHYSICAL EDUCATION ACTIVITIES USED IN THE PROGRAM FOR THE EMR

Activities Used in Physical Education Program for EMR	Activities Taught EMR		School Level								Population of Community						School Classification			
			K-6		7-9		10-12		Other		0-5,000		5,000-20,000		Over 20,000		Class A		Class B	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Total Population			55	67.07	10	12.20	6	7.32	11	13.41	34	41.46	16	19.51	32	39.02	56	68.29	26	31.71
Basic Movements	75	91.46	53	96.36	7	70.00	5	83.33	10	90.91	32	94.12	14	87.50	29	90.63	51	91.07	24	92.31
Bowling	20	24.39	11	20.00	2	20.00	2	33.33	5	45.45	7	20.59	5	31.25	8	25.00	15	26.79	5	19.23
Calisthenics and Conditioning	71	86.79	48	87.27	10	100.00	6	100.00	7	63.64	29	85.29	11	68.75	31	96.88	49	87.50	22	84.62
Combatives	28	34.15	13	23.64	8	80.00	4	66.67	3	27.27	9	26.47	5	31.25	14	43.75	23	41.07	5	19.23
Corrective Exercises	41	50.00	31	56.36	4	40.00	3	50.00	3	27.27	18	52.94	6	37.50	17	53.13	30	53.57	11	42.31
Games to Teach Body Parts	61	74.39	46	83.64	5	50.00	4	66.67	6	54.55	26	76.47	13	81.25	22	68.75	41	73.21	20	76.92
Gymnastics	57	69.51	34	61.82	10	100.00	6	100.00	7	63.64	20	58.82	9	56.25	28	87.50	43	76.79	14	53.85
Highly Organized Games	49	59.76	29	52.73	10	100.00	4	66.67	6	54.55	19	55.88	9	56.25	21	65.63	36	64.29	13	50.00
Musical Play	42	51.22	35	63.64	1	10.00	1	16.67	5	45.45	18	52.94	8	50.00	16	50.00	26	46.43	16	61.54
Physical Fitness Tests	58	70.73	36	65.45	10	100.00	6	100.00	6	54.55	20	58.82	8	50.00	30	93.75	45	80.36	13	50.00
Posture Improvement	46	56.10	33	60.00	5	50.00	3	50.00	5	45.45	18	52.94	6	37.50	22	68.75	33	58.93	13	50.00
Racket Play	21	25.61	9	16.36	6	60.00	3	50.00	3	27.27	7	20.59	1	6.25	13	40.63	17	30.36	4	15.38
Rhythms	46	56.10	32	58.18	5	60.00	2	33.33	6	54.55	17	50.00	7	43.75	22	68.75	33	58.93	13	50.00
Simple Games	56	68.29	42	76.36	5	50.00	1	16.67	8	72.73	23	67.65	10	62.50	23	71.88	39	69.64	17	65.38
Stunts, Tumbling	39	47.56	20	36.36	10	100.00	5	83.33	4	36.36	10	29.41	6	37.50	23	71.88	31	55.36	8	30.77
Swimming	15	18.29	10	18.18	1	10.00	3	50.00	1	9.09			3	18.75	12	37.50	15	26.79		
Team Sports	44	53.66	24	43.64	10	100.00	6	100.00	4	36.36	19	55.88	6	37.50	19	59.38	31	55.36	13	50.00
Track and Field	31	37.80	18	32.73	7	70.00	4	66.67	2	18.18	12	35.29	3	18.75	16	50.00	24	42.86	7	26.92
Winter Play	12	14.63	9	16.36	1	10.00			2	18.18	5	14.71	2	12.50	5	15.63	8	14.29	4	15.38
Others	2	2.44	1	1.82			1	16.67							2	6.25	2	3.57		

Respondents denoted basic movements and racket play as the most common activities in grades "K - 6." Winter play was the least common in grades "K - 6." Corrective exercise was mentioned by 56 per cent of the respondents in grades "K - 6." It was interesting to find only 10 per cent in grades "7 - 9," and 17 per cent in grades "10 - 12" used musical play.

Corrective exercises were used by 40 per cent of the respondents in grades "7 - 9" and 50 per cent in grades "10 - 12." A number of activities were utilized by all respondents from grades "7 - 12." These were calisthenics and conditioning, gymnastics, physical fitness tests, and team sports.

Swimming activities were marked by 18 per cent, by 10 per cent, and by 50 per cent of the respondents on grade levels "K - 6," " 7 - 9," and "10 - 12" respectively. Percentage-wise, rhythms were on the increase from grades "K - 9" but took a sharp decrease in grades "10 - 12." Over 58 per cent of the respondents denoted the use of rhythms on the "K - 6" level, and 60 per cent on the "7 - 9" grade level. Only 33 per cent of the respondents utilized rhythms in grades "10 - 12."

The largest percentage of respondents in the communities of less than "20,000" population checked basic movement as the most common activity. In communities of "over 20,000" in population, calisthenics and conditioning activities were most often used.

Swimming was not indicated as an activity in communities "under 5,000" in population. In communities "over 20,000" in population, winter play was the least used physical education activity for the EMR.

Combative activities progressed in popularity from 26 per cent, to 31 per cent, to 44 per cent, in communities "under 5,000," between "5,000 - 20,000," and "over 20,000" population, respectively. Highly organized games progressed in popularity within all population levels as did stunts and tumbling.

Information in Table 7, p. 49, disclosed the most common activity taught in both Class A and B schools was basic movement. Calisthenics and conditioning were second in popularity in both Class A and Class B schools. It was interesting to note not one respondent from a Class B school indicated swimming as an activity. In Class A schools the activity least used was winter play.

Respondents from Class B schools revealed that they used more games designed to teach body parts, musical play, and winter play than Class A schools. Class A schools, on the other hand, stressed bowling, calisthenics and conditioning, combatives, corrective exercises, gymnastics, highly organized games, physical fitness tests, posture improvement, racket play, rhythms, simple games, stunts and tumbling, swimming, team sports, and track and field, more than Class B schools.

Table 8, p. 52, presented information related to the school physical education facilities available to the EMR. The number and per cent of school facilities available to the EMR was compared to school levels, population of the community, and school classification.

Table 8 revealed that the playground and the gymnasium floor were the most common facilities available to the EMR. Almost 88 per cent of the respondents were able to use a playground, while 87 per cent mentioned a gymnasium floor was available. The basketball court

TABLE 8

PHYSICAL EDUCATION FACILITIES AVAILABLE TO THE EMR

Facilities Available to the EMR in Physical Education	Facilities Available for EMR		School Level								Population of Community						School Classification			
			K-6		7-9		10-12		Other		0-5,000		5,000-20,000		Over 20,000		Class A		Class B	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Total Population			55	67.07	10	12.20	6	7.32	11	13.41	34	41.46	16	19.51	32	39.02	56	68.29	26	31.71
Playground	72	87.80	52	94.55	9	90.00	4	66.67	7	63.64	32	94.12	12	75.00	28	87.50	47	83.93	25	96.15
Athletic Fields	46	56.10	28	50.91	10	100.00	5	83.33	3	27.27	19	55.88	7	43.75	20	62.50	30	53.57	16	61.54
Basketball Court	52	63.41	33	60.00	9	90.00	6	100.00	4	36.36	20	58.82	9	56.25	23	71.88	36	64.29	16	61.54
Bowling Site	13	15.85	5	9.09	3	30.00	2	33.33	3	27.27	6	17.65	5	31.25	2	6.25	9	17.07	4	15.38
Corrective Exercise Room	10	12.20	7	12.73	1	10.00	1	16.67	1	9.09	5	14.71	1	6.25	4	12.50	6	10.71	4	15.38
Camp Site	1	1.22							1	9.09	1	2.94							1	3.85
Gymnasium Floor	71	86.59	46	83.64	10	100.00	6	100.00	9	81.82	28	82.35	12	75.00	31	96.88	51	91.07	20	76.92
Handball Court and Wall	5	6.10	3	5.45	1	10.00	1	16.67			3	8.82	1	6.25	1	3.13	2	3.57	3	11.54
Running Track and Field	21	25.61	8	14.55	6	60.00	5	83.33	2	18.18	10	29.41	1	6.25	10	31.25	14	25.00	7	26.92
Shower and Dressing Rooms	34	41.46	16	29.09	9	90.00	6	100.00	3	27.27	16	47.06	4	25.00	14	43.75	23	41.07	11	42.31
Swimming Pool	18	21.95	10	18.18	3	30.00	4	66.67	1	9.09			4	25.00	14	43.75	18	32.14		
Tennis Court	9	10.98	3	5.45	4	40.00	2	33.33			4	11.76	1	6.25	4	12.50	7	12.50	2	7.69
Others	2	2.44							2	18.18			1	6.25	1	3.13	2	3.57		

was the third most common available facility. It was interesting to find that only 12 per cent of the respondents had a corrective exercise room available. It was also interesting to note only 1 per cent of all respondents had a camp site facility available.

The playground and the gymnasium floor were indicated as the most available facilities in grades "K - 6," while athletic fields and the gymnasium floor were the most common in grades "7 - 9." The basketball court and the gymnasium floor were the most common facilities available in grades "10 - 12."

Facilities least available for the EMR on all grade levels were the campsite and the handball court or wall. A corrective exercise room was available to 13 per cent of the respondents in grades "K - 6," 10 per cent in grades "7 - 9," and 17 per cent in grades "10 - 12."

Facilities available on an increasingly progressive basis from grades "K - 12" were: the basketball court, bowling site, gymnasium floor, handball court or wall, running track and field, shower and dressing rooms, and a swimming pool. Facilities used on a declining basis from "K - 12" grades were: the playground and the corrective exercise room.

Information concerning the physical education facilities available to the EMR compared to the population of the community was indicated in Table 8, p. 52. The table pointed out the playground as the most common facility in communities "under 20,000" in population, while the gymnasium floor was the most available facility in communities "over 20,000" population.

The least used facilities in all population groups were the campsite and the handball court or wall. It was interesting to find no swimming pools indicated in communities "under 5,000" population. Approximately 44 per cent of the respondents in communities "over 20,000" population stated a swimming pool facility was available.

The lack of a corrective exercise room was evident in Table 8, p. 52, in all population groups. Only 15 per cent of the respondents in communities "under 5,000" population indicated a corrective exercise room was available, whereas 6 per cent, and 13 per cent were indicated in communities between "5,000 - 20,000" and "over 20,000" population.

Communities between "5,000 - 20,000" population seemed to have fewer available facilities for the EMR than the other two population groups. Exceptions were noted, however, in the bowling site and in the swimming pool. Communities "under 5,000" population were markedly low in percentage points in the following facilities: running track and field, shower and dressing rooms, and tennis courts.

Table 8 presented information about the physical education facilities available to the EMR compared to school classification. Table 8 disclosed over 91 per cent of the respondents in Class A schools indicated the gymnasium floor to be the most available facility. In Class B schools, 96 per cent of the respondents mentioned the playground was the most available facility.

There were some outstanding differences in percentage points between Class A and Class B schools in available facilities. The greatest percentage difference was noted in the swimming pool.

Thirty-two per cent of all Class A respondents listed a swimming pool, whereas no respondents from Class B schools indicated such a facility available.

Table 8, p. 52, showed a comparison between Class A schools and Class B schools in available facilities. Swimming pools, basketball courts, bowling sites, gymnasium floors, and tennis courts were more available in Class A schools than Class B schools.

When percentages were compared, it was interesting to find that Class B schools had more facilities available to the EMR than Class A schools. Class B schools indicated higher percentages over Class A schools in the following facilities: playgrounds, athletic fields, corrective exercise rooms, campsites, handball courts or walls, running tracks and fields, and shower and dressing rooms.

Table 9, pp. 56-57, presented information concerning the physical education equipment and supplies used by the EMR. Information regarding physical education equipment and supplies used by the EMR were compared to school level, population of the community, and school classification.

The table indicated major categories of supplies and equipment. The table also indicated the most commonly used piece of equipment or supply within that major category. A summary of the major categories and the most commonly used examples of equipment within those major categories were: playground--slides; indoor apparatus--balance beam; musical--record player; winter--ice skates; indoor play--scooters; balls--basketballs; mats--tumbling; weight training--bar bells and dumbbells; ropes--jumping; and game equipment--bean bags.

TABLE 9

PHYSICAL EDUCATION EQUIPMENT AND SUPPLIES USED BY THE EMR

Equipment and Supplies Used in Physical Education for the EMR	Equipment and Supplies for EMR		School Level								Population of Community						School Classification			
			K-6		7-9		10-12		Other		0-5,000		5,000-20,000		Over 20,000		Class A		Class B	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Total Population			55	67.07	10	12.20	6	7.32	11	13.41	34	41.46	16	19.51	32	39.02	56	68.29	26	31.71
Playground:																				
Slides	41	50.00	33	60.00	2	20.00			6	54.55	25	73.53	5	31.25	11	34.38	19	33.39	22	84.62
Swings	40	48.78	32	58.18	2	20.00			6	54.55	24	70.59	4	25.00	12	37.50	19	33.39	21	80.77
Jungle Gym	19	23.17	16	29.09					3	27.27	6	17.65	4	25.00	9	28.13	13	23.21	6	23.08
Obstacles	5	6.10	3	5.45					2	18.18	1	2.94	1	6.25	3	9.38	4	7.14	1	3.85
Other	8	9.76	8	14.55							3	8.82	3	18.75	2	6.25	4	7.14	4	15.38
Indoor Apparatus:																				
Trampoline	41	50.00	18	32.73	10	100.00	6	100.00	7	63.64	16	47.06	8	50.00	17	53.13	29	51.79	12	46.15
Side Horse	11	13.41	2	3.64	3	30.00	3	50.00	3	27.27	1	2.94	3	18.75	7	21.88	10	17.86	1	3.85
Balance Beam	52	63.41	34	61.82	7	70.00	5	83.33	6	54.55	14	41.18	9	56.25	29	90.63	41	73.21	11	42.31
Parallel Bars	22	26.83	8	14.55	6	60.00	5	83.33	3	27.27	4	11.76	4	25.00	14	43.75	18	32.41	4	15.38
Uneven Bars	12	14.63	3	5.45	4	40.00	2	33.33	3	27.27	1	2.94	3	18.75	8	25.00	12	21.43		
Horizontal Bars	17	20.73	7	12.73	3	30.00	4	66.67	3	27.27	4	11.76	4	25.00	9	28.13	16	28.57	1	3.85
Other	10	12.20	8	14.55	1	10.00			1	9.09	2	5.88	2	12.50	6	18.75	8	14.29	2	7.69
Musical:																				
Piano	28	34.15	24	43.64	1	10.00			3	27.27	14	41.18	5	31.25	9	28.13	16	28.57	12	46.15
Record Player	65	79.27	48	87.27	6	60.00	3	50.00	8	72.73	28	82.35	11	68.75	26	81.25	42	75.00	23	88.46
Records	59	71.95	43	78.18	6	60.00	2	33.33	8	72.73	26	76.47	9	56.25	24	75.00	40	71.43	19	73.08
Rhythm Equipment	28	34.15	21	38.18	3	30.00	1	16.67	3	27.27	8	23.53	6	37.50	14	43.75	20	35.71	8	30.77
Other	4	4.88	3	5.45					1	9.09	1	2.94	1	6.25	2	6.25	3	5.36	1	3.85
Winter:																				
Ice Skates	7	8.54	6	10.91					1	9.09	3	8.82			4	12.50	5	8.93	2	7.69
Sleds	6	7.32	4	7.27	1	10.00			1	9.09	5	14.71			1	3.13	2	3.57	4	15.38
Hockey Equipment	2	2.44							2	18.18	1	2.94			1	3.13	1	1.79	1	3.85
Other																				
Indoor Play:																				
Wagons	4	4.88	4	7.27							1	2.94			3	9.38	4	7.14		
Tricycles	2	2.44	2	3.64											2	6.25	2	3.57		
Scooters	12	14.63	10	18.18					2	18.18	1	2.94			11	34.38	12	21.43		
Other	3	3.66	3	5.45							1	2.94			2	6.25	2	3.57	1	3.85

TABLE 9--Continued

Equipment and Supplies Used in Physical Education for the EMR	Equipment and Supplies for EMR		School Level								Population of Community						School Classification			
			K-6		7-9		10-12		Other		0-5,000		5,000-20,000		Over 20,000		Class A		Class B	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Balls:																				
Basketballs	72	87.80	47	85.45	10	100.00	6	100.00	9	81.82	30	88.24	13	81.25	29	90.63	49	87.50	23	88.46
Footballs	44	53.66	28	50.91	7	70.00	5	83.33	4	36.36	19	55.88	5	31.25	20	62.50	31	55.36	13	50.00
Softballs	57	69.51	35	63.64	10	100.00	6	100.00	6	54.55	23	67.65	9	56.25	25	78.13	40	71.43	17	65.38
All-Purpose	57	69.51	40	72.73	5	50.00	4	66.67	8	72.73	21	61.76	10	62.50	26	81.25	44	78.57	13	50.00
Other	10	12.20	4	7.27	3	30.00	1	16.67	2	18.18	2	5.88	3	18.75	5	15.63	9	16.07	1	3.85
Mats:																				
Wrestling	23	28.05	7	12.73	7	70.00	4	66.67	5	45.45	6	17.65	6	37.50	11	34.38	20	35.71	3	11.54
Tumbling	57	69.51	35	63.64	9	90.00	6	100.00	7	63.64	19	55.88	8	50.00	30	93.75	44	78.57	13	50.00
Other	1	1.22	1	1.82											1	3.13	1	1.79		
Weight Training:																				
Bar Bells	13	15.85	5	9.09	4	40.00	2	33.33	2	18.18	7	20.59	3	18.75	3	9.38	10	17.86	3	11.54
Dumbbells	13	15.85	6	10.91	4	40.00	1	16.67	2	18.18	6	17.65	2	12.50	5	15.63	10	17.86	3	11.54
Exer-Genie	9	10.98	2	3.64	3	30.00	3	50.00	1	9.09	5	14.71	1	6.25	3	9.38	6	10.71	3	11.54
Other	3	3.66			2	20.00	1	16.67							3	9.38	3	5.36		
Ropes:																				
Climbing	37	45.12	21	38.18	7	70.00	5	83.33	4	36.36	12	35.29	5	31.25	20	62.50	31	55.36	6	23.08
Jumping	62	75.61	42	76.36	7	70.00	6	100.00	7	63.64	24	70.59	11	68.75	27	84.38	44	78.57	18	69.23
Other																				
Games:																				
Beanbags	40	48.78	33	60.00					7	63.64	17	50.00	8	50.00	15	46.88	26	46.43	14	53.85
Horseshoes	19	23.17	14	25.45	2	20.00	1	16.67	2	18.18	7	20.59	5	31.25	7	21.88	14	25.00	5	19.23
Sticks	17	20.73	15	27.27	2	20.00					8	23.53	1	6.25	8	25.00	13	23.21	4	15.38
Bowling Pins	29	35.37	22	40.00	2	20.00	1	16.67	4	36.36	9	26.47	5	31.25	15	46.88	24	42.86	5	19.23
Other	4	4.88	2	3.64	1	10.00			1	9.09	1	2.94			3	9.38	3	5.36	1	3.85

Slides and swings were the most commonly used pieces of playground equipment in grades "10 - 12." Slides and swings were also used in all population levels and in both Class A and Class B schools. Only a small percentage of the total respondents in all school levels, all population groups, and in both Class A and B schools indicated using obstacles.

Indoor apparatus of all types were not used to a great extent by the respondents. Individually, the trampoline was used by 50 per cent and the balance beam by 63 per cent of the respondents. Generally, indoor apparatus was used more in grades "7 - 12," than in grades "K - 6."

Table 9, pp. 56-57, revealed the greater the community population the more indoor apparatus was used by the respondents. This same tendency was observed from Class B schools to Class A schools.

Two pieces of equipment, the side horse and the uneven bars, were used very little in all population groups. The same observation was true in both the Class A and Class B school. It was interesting to note not a single Class B respondent used the uneven bars and only 4 per cent used the side horse.

The record player and records were the pieces of musical equipment and supplies utilized most often by the respondents. This was true in all grade levels, population groups, and in both Class A and Class B schools. It was interesting to find rhythm equipment was used progressively less from grades "K - 12," but progressively more from smaller to larger community populations, and from Class B to Class A schools.

Table 9, pp. 55-56, disclosed winter play equipment or supplies were not utilized in the physical education program for grades "10 - 12" or in cities with a population from "5,000 - 20,000." Winter play equipment was most frequently used in grades "K - 6," in communities "under 5,000" population, and in Class B schools.

Indoor play equipment and supplies were not utilized in grades "7 - 12," in Class B schools, or in communities between "5,000 - 20,000" population. It was interesting to find indoor play equipment and supplies were used to the greatest extent in grades "K - 6," in communities "over 20,000" population, and in Class A schools.

Basketballs were used more than other types of balls in all school levels, community populations, and in both Class A and Class B schools. Balls of all types were generally used most often in grades "7 - 12," in community populations "over 20,000," and in Class A schools.

Tumbling mats were utilized more often by the respondents than other mats in all school levels, population levels, and in both Class A and Class B schools. Use of the tumbling mat was indicated by over 60 per cent of the respondents in most areas of comparison.

Weight training equipment was not extensively used in any school level, population range, or in either Class A or B schools. One piece of weight training equipment was used by 50 per cent of the respondents and that was the exer-genie in grades "10 - 12."

Jumping ropes were employed by the largest percentage of respondents in all school levels, population ranges, and in both Class A and B schools. Jumping ropes were used by fewer respondents in grades "7 - 9," in communities of "5,000 - 20,000" population and in Class B schools.

Game equipment and supplies were not extensively used in physical education in any level of school, population range, or in either Class A or B schools. The bean bag, although used more often than other game equipment in all population levels, and in Class A and B schools, was not used in grades "7 - 12." Bean bags were used by 60 per cent of the respondents in grades "K - 6." Game equipment was more significantly used in grades "K - 6" than the other school levels. It was also predominant in Class A schools.

Table 10, p. 61, presented information on opinions of the respondents concerning physical education for the EMR. The respondents were asked to indicate whether they "agreed," "disagreed," were "undecided," or "not qualified to answer."

The respondents seemed to feel the personnel responsible for teaching physical education to the EMR, whether it be the physical educator or the classroom teacher, should have some professional preparation with the EMR. Over 97 per cent of the respondents believed all EMR instructors should have a basic understanding of physical education.

It was interesting to find such a difference of opinion regarding the advisability of using the unprepared physical educator as the teacher. Twenty-eight per cent of the respondents agreed the physical educator should teach the EMR even though he had no preparation with the EMR. About 27 per cent of the individuals disagreed, 29 per cent were undecided, and about 17 per cent felt unqualified to answer.

Ninety per cent of the respondents believed colleges should add special courses in physical education for the EMR. Nine of the respondents disagreed, and only two per cent were undecided.

TABLE 10

OPINIONS OF RESPONDENTS CONCERNING PHYSICAL EDUCATION FOR EMR'S

Opinions of Instructions in Physical Education for EMR	Agree		Disagree		Undecided		Qualified to Answer		No Response	
	No.	%	No.	%	No.	%	No.	%	No.	%
The EMR can be taught satisfactorily in physical education classes with "normal" students.	30	36.59	26	31.71	14	17.07	6	7.32	6	7.32
Physical education teachers with EMR students in their classes should have professional preparation for work with EMR.	58	70.73	3	3.66	11	13.41	6	7.32	4	4.88
Teachers of the EMR whose duties include teaching physical education should have some preparation in physical education.	78	95.12	1	1.22			2	2.44	1	1.22
The EMR should be taught physical education by the regular physical education teacher even if they have no preparation for the EMR.	23	28.05	22	26.83	24	29.27	12	14.63	1	1.22
All workers with the EMR should have a basic understanding of physical education.	80	97.56			2	2.44				
Colleges should add special courses in physical education for work with the EMR.	74	90.24	1	1.22	5	6.10	2	2.44		
Instruction in physical education can help social and mental development of the EMR.	80	97.56	1	1.22	1	1.22				
EMR children referred to special classes have more uncorrected or permanent physical defects than EMR retained in regular classes.	22	26.83	22	26.83	10	12.20	27	32.93	1	1.22
EMR children referred to special classes are superior in social adjustment to EMR retained in regular classes.	20	24.39	18	21.95	25	30.49	17	20.73	2	2.44
"Normal" children are significantly superior to the EMR in motor proficiency.	43	52.44	24	29.27	8	9.76	6	7.32	1	1.22
The purpose of physical education for the EMR is to develop the co-ordination and personality of the child without any expectation of developing intelligence.	16	19.51	56	68.29	2	2.44	3	3.66	5	6.10
The purpose of physical education for the EMR is to develop the total person including co-ordination, personality and intelligence.	72	87.80	5	6.10	2	2.44	1	1.22	2	2.44

Table 10, p. 61, indicated split opinions on whether the EMR could be taught satisfactorily in physical education class with "normal" students. About 37 per cent of the respondents agreed that EMR could be taught satisfactorily, 32 per cent disagreed and 17 per cent were undecided.

It was encouraging to find the large percentage of respondents who felt physical education instruction could contribute to social and mental development of the EMR. Nearly 98 per cent of the respondents believed this could be done.

About 33 per cent felt unqualified to answer whether EMR children referred to special classes had more uncorrected or permanent physical defects than EMR retained in regular classes. Nearly 27 per cent of the respondents agreed, about 27 per cent disagreed and 12 per cent were undecided.

Thirty per cent of the respondents were undecided how to compare the social adjustment of the special class referrals to the EMR retained in regular classes. Approximately 24 per cent of the respondents felt the EMR special class referrals were superior in social adjustment, while about 22 per cent disagreed. About 21 per cent felt unqualified to answer.

Approximately 52 per cent of the respondents believed "normal" children were significantly superior to the EMR in motor proficiency. Twenty-nine per cent of the respondents disagreed.

It was interesting to find 88 per cent of the respondents believed the purpose of physical education for the EMR was to develop the

total person including coordination, personality, and intelligence. Only six per cent of the respondents disagreed.

Table 11, pp. 64-65, presented information regarding tests and evaluation procedures required in the physical education program. Tests and evaluation procedures were compared with school level, population of the community, and school classification.

Approximately 9 per cent of all the respondents signified medical examinations were given annually. Annual medical examinations were predominantly found in grades "K - 6," in cities with a population "under 5,000," and in Class B schools.

Medical examinations every two or three years, in terms of percentage, were less common than annual medical examinations. Only 7 per cent of the respondents indicated medical examinations were given every two or three years. Respondents who checked the use of medical examinations every two or three years were predominantly in grades "K - 6," in communities between "5,000 - 20,000" population, and in Class A schools.

The most significant medical evaluations were daily observations by a teacher or a nurse. This percentage, about 65 per cent, remained constant throughout all grade levels, population groups, and in both Class A and Class B schools.

Only 15 per cent of all the respondents used annual intelligence tests. Annual intelligence tests were found exclusively in grades "K - 6," primarily in communities "under 5,000" population, and mostly in Class B schools. Intelligence tests, given every two or three years, were mentioned by nearly 33 per cent of the respondents. Intelligence

TABLE 11

TESTS AND EVALUATION PROCEDURES REQUIRED IN THE PHYSICAL EDUCATION PROGRAM

Tests and Evaluations Procedures Used With EMR	Tests and Evaluations Used		School Level								Population of Community						School Classification			
			K-6		7-9		10-12		Over		0-5,000		5,000-20,000		Over 20,000		Class A		Class B	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Total Population			55	67.07	10	12.20	6	7.32	11	13.41	34	41.46	16	19.51	32	39.02	56	68.29	26	31.71
Medical Examinations Are Given Annually	7	8.54	5	9.09			1	16.67	1	9.09	6	17.65			1	3.13	3	5.36	4	15.38
Medical Examinations Are Given Periodically, Every 2 or 3 Years	6	7.32	4	7.27	1	10.00	1	16.67			2	5.88	2	12.50	2	6.25	5	8.93	1	3.85
Medical Examinations Are Given at Entrance and When Referred by Teachers or a Nurse	42	51.22	27	49.09	5	50.00	3	50.00	7	63.64	22	64.71	6	37.50	14	43.75	28	50.00	14	53.85
There Are Daily Observations of Health Signs by Teachers or Nurses	53	64.63	33	60.00	6	60.00	5	83.33	9	81.82	20	58.82	10	62.50	23	71.88	35	62.50	18	69.23
Intelligence Tests Are Given Annually	12	14.63	11	20.00					1	9.09	8	23.53	1	6.25	3	9.38	8	14.29	4	15.38
Intelligence Tests Are Given Periodically, Every 2 or 3 Years	27	32.93	15	27.27	4	40.00	2	33.33	6	54.55	6	17.68	7	43.75	14	43.75	20	35.71	7	26.92
Intelligence Tests Are Given at Entrance and When Referred by Teachers or a Nurse	44	53.66	29	52.73	7	70.00	2	33.33	6	54.55	22	64.71	6	37.50	16	50.00	27	48.21	17	65.38

TABLE 11--Continued

Tests and Evaluations Procedures Used With EMR	Tests and Evaluations Used		School Level								Population of Community						School Classification			
			K-6		7-9		10-12		Other		0-5,000		5,000-20,000		Over 20,000		Class A		Class B	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Physical Fitness Tests Are Used (Such as AAHPER Youth Fitness Test)	26	31.71	12	21.82	8	80.00	2	33.33	4	36.36	7	20.59	2	12.50	17	53.13	20	35.71	6	23.08
Grades on Achievement in Physical Education Are Given at Regular Intervals	31	37.80	15	27.27	8	80.00	4	66.67	4	36.36	12	35.29	3	18.75	16	50.00	21	37.50	10	38.46
Height and Weight Are Recorded at Regular Intervals	47	57.32	36	65.45	4	40.00	3	50.00	4	36.36	21	61.76	11	68.75	15	46.88	30	53.57	17	65.38
There Is a Plan for Self-Evaluation Leading to an Improvement in Growth and Development	12	14.63	9	16.36	2	20.00			1	9.09	3	8.82	1	6.25	8	25.00	9	16.07	3	11.54
There Is a Plan for Evaluating Social and Emotional Development	16	19.51	13	23.64	1	10.00	1	16.67	1	9.09	4	11.76	3	18.75	9	28.13	12	21.43	4	15.38

tests given every two or three years were found primarily in grades "7 - 9," in cities with a population "over 5,000" and in Class A schools.

About 38 per cent of all respondents indicated giving grades in achievement in physical education at regular intervals. The greatest percentage of the respondents using this procedure was in grades "7 - 9," in communities "over 20,000" population and in Class B schools. Grades in achievement in physical education were stressed least in grades "K - 6" and in communities with a population between "5,000 - 20,000."

Over 57 per cent of all the respondents stated that height and weight were recorded at regular intervals. This procedure was used by 65 per cent of the respondents in grades "K - 6," by 69 per cent of the respondents in communities between "5,000 - 20,000" population, and in 65 per cent of Class B schools.

A plan for self-evaluation leading to an improvement in growth and development was checked by only 15 per cent of the respondents. This procedure was most common in grades "K - 9." There was no procedure for self-evaluation in grades "10 - 12." A plan for self-evaluation was predominantly used in cities "over 20,000" population and in Class A schools.

Only 20 per cent of all respondents indicated they used a plan for evaluation of social and emotional development. Respondents indicated grades "K - 6," communities "over 20,000" population, and Class A schools used this procedure most often. It was interesting to note that the greater the school level the less a plan for evaluating social and emotional development was used.

Table 12 related information concerning opinions on improvement of physical education programs for the EMR. The respondents were asked to answer a "yes" or "no" to the opinions.

TABLE 12

OPINIONS ELICITED ON IMPROVEMENT OF PHYSICAL EDUCATION PROGRAMS FOR THE EMR

Opinions Concerning Instructional Improvement	Yes		No	
	No.	%	No.	%
Total Population				
A Special Teacher of Physical Education	47	57.32	35	42.68
More Facilities and Equipment	41	50.00	41	50.00
More Time for Physical Education	30	36.59	52	63.41
Improved Understanding				
Faculty	26	31.71	56	58.29
Administration	24	29.27	58	70.73
Community	33	40.24	49	59.76
Better Grouping by Chronological Age	24	29.27	58	70.73
More Adequate College Preparation for Teachers of EMR	50	60.98	32	39.02
Others	7	8.54	75	91.46

Table 12 disclosed that 57 per cent of the teachers believed special teachers of physical education would contribute to instructional improvement. It was interesting to find that about half of the respondents believed more facilities and equipment would significantly improve physical education instruction. It was also interesting to

find 63 per cent of the respondents did not believe instructional improvements could be made with more time allotted to physical education. Nearly 61 per cent of the respondents had a strong belief that more adequate college preparation for teachers of EMR was necessary.

Seven responses were placed in an "other" category. These seven are the following:

Opinions Concerning Instructional Improvement	Number
Use of the paraprofessional	1
Occasional time for integrating EMR with "normal" students	2
More time for physical education personnel to work on specifics with the EMR	2
A physical therapist to plan programs for the physically handicapped	1
Change the term EMR to the term "ungraded"	1

Five of the seven responses were from grades "K - 6." Five of the responses were from communities "over 20,000" population and also from Class A schools.

CHAPTER IV

DISCUSSION

The writer believed a study designed to ascertain the present status of physical education for the educable mentally retarded was the best means by which to determine current program practices. Very little work had been done in the evaluation of such programs in North Dakota; although a national survey on physical education and recreation for mentally retarded pupils in public schools was conducted by David K. Brace in 1966.

The writer worked with the EMR in physical education for two years. Initially there were some anxious moments since the situation was unique, but, considering the total experience, it was an opportunity. Working with the EMR classes, with admittedly novice credentials, led to the conception of a state-wide study to learn how other physical education programs for the EMR were conducted.

Those two years did not leave much doubt in the mind of the writer that physical education could contribute a great deal to the education of mentally retarded students. The fact that EMR pupils enjoyed participation in activity and were exposed to a program based on physical, social, and intellectual values justified the program.

The study exposed a number of interesting factors concerning physical education for the EMR. The specific information was useful in

formulating a picture of current status and in drawing some conclusions about EMR physical education in North Dakota schools.

Fundamentals related to a balanced physical education program for the EMR were, the writer believes, limited to certain instances or situations. Also, there was evidence of a lack of concern by North Dakota school districts in the area of EMR physical education.

Generally speaking, the EMR were in a position to receive the most benefit from physical education in North Dakota schools if: they were in grades "7 - 9," in communities with "over 20,000" population, and in Class A schools. These three areas seemed to have the greatest, or nearly the greatest, percentage or number of items related to a balanced program. A balanced program, the writer believed, referred to the following factors: the use of the physical educator as the instructor of EMR physical education, instructors with a great deal of teaching experience, academic certification beyond the standard degree, programs with planned activity beyond recess or free play, five periods per week, large variety of activities in the program, integration of the EMR into "normal" physical education classes, unlimited equipment and supplies, and the use of tests and evaluation procedures.

North Dakota schools have need to continually evaluate their physical education programs for the EMR and should make every effort to update those programs. Balanced physical education programs should not be limited to certain grade levels, community populations, or school

classifications if all EMR students are to have an equal opportunity to reach their education potentials.

The specific information indicated to the writer that physical education for the EMR did not enjoy a widespread concern of school districts in North Dakota with an EMR program. The following paragraphs may serve to exemplify the point.

Physical educators did not bear the major responsibility for teaching the EMR physical education. It was possible that North Dakota did experience a scarcity of physical educators, especially on the elementary level, or that physical educators had no available time in their schedules for the EMR. These factors may have caused the classroom teacher to play the major role in teaching the EMR physical education. On the other hand, it was just possible that school districts were not sufficiently concerned or knowledgeable about physical education to hire full-time personnel.

There were too many instructors of the EMR who still maintained the standard degree. The writer felt teachers with a standard degree should be encouraged to return to school. Only by continuing their education can teachers be of the greatest benefit to their students and to themselves.

Many instructors were inadequately prepared to teach the EMR physical education. There was a large number of respondents who indicated no college background in physical education courses related to the EMR. There were no student teaching experiences in EMR physical education reported. A large number of respondents believed colleges should add special courses in physical education for the EMR. This may be part

of the answer but the existing programs in physical education need to be utilized to the fullest also.

There did not seem to be much consistency within the state with respect to the number and length of physical education periods per week. The writer believed there should be daily physical education classes for the EMR and should be similar to regular classes in length.

Many programs did not include adaptive activity or corrective exercises in their physical education programs. It had been the writer's experience that some activities needed to be adapted to the abilities of the EMR, and that some physical problems could be relieved by corrective exercise.

There were many instructors who indicated that tests or evaluation procedures were not emphasized in their programs. The writer believed that unless an instructor evaluated all phases of the program it was difficult to determine to what extent education was being furthered. Certainly medical examinations should be scheduled periodically, as should intelligence tests, to ascertain the current status of physical health and mental capabilities.

There were still schools that offered a physical education program that consisted entirely of recess or free play. Recess or free play was characteristic of the elementary grades. The writer believed grades "K - 6" represent the formative or developmental years of the child and that the recess or free play type of program was not as capable of administering to the needs of the EMR student as was the teacher directed program.

It was the writer's opinion that physical education could be of educational value to mentally handicapped students. He also believed there was room for improvement in every phase of the organization and administration of such programs in North Dakota schools.

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This study was designed to survey and analyze the status of physical education for the educable mentally retarded in North Dakota schools. The writer believed information obtained from the study would be of value to teachers and administrators of physical education for the educable mentally retarded.

Summary of the Study

The procedure used to study the problem included the following steps:

1. A review of the digest of findings of David K. Brace in his survey on physical education and recreation for mentally retarded pupils in public schools was made. The study was a national survey supported by the Joseph P. Kennedy, Jr., Foundation.

2. A review was made of the literature concerning the history of the development of special education in North Dakota curriculum and physical education administration studies, the special versus the regular class, and studies related to physical education: motor, social, and intellectual.

3. From the experience of the writer, a review of the David K. Brace Survey, and a review of related literature, an objective

check-list type of questionnaire was developed. The questionnaire was the method by which data were secured from the instructors surveyed.

4. The questionnaire with a letter of transmittal was sent to 98 instructors of educable mentally retarded students in North Dakota. The names and addresses of these instructors were identified from the 1968-1969 Special Education Directory published by the Department of Public Instruction at Bismarck, North Dakota.

5. The questionnaire and letter of transmittal were mailed out and returned between the dates of February 17, 1969, and March 20, 1969.

6. Data received from the returned questionnaire were subjected to computer analysis and responses were organized in an attempt to reveal significant relationships and comparisons. Factors that were given consideration included school levels, community population, and school classifications.

Findings of the Study

The analysis and interpretations of the data collected in this survey revealed the following findings:

1. There was a total response to the questionnaire of nearly 84 per cent. This defined population was considered adequate response for survey research.

2. The response to the survey questionnaire was representative of the total population of instructors who taught the EMR physical education, of all school levels, community populations, and school classifications.

3. The greatest per cent of the returns were from teachers on the "K - 6" grade level, from communities "under 5,000" in population, and from Class A schools.

4. Classroom teachers were used as the EMR physical education instructors more often than any other person. Classroom teachers of the EMR physical education class were predominantly found in grades "K - 6," in communities in the "0 - 5,000" population range, and Class B schools. The classroom teacher was predominantly female, who had one to three years of teaching experience. The majority of the classroom teachers held a BA or BS academic certification.

5. The majority of respondents indicated an exposure to college physical education and the teaching of physical education to "normal" students. The majority of respondents were not, however, exposed to the teaching of physical education to the EMR or to college physical education courses related to the EMR.

6. The most prevalent background subject was group games. Team activities, dance, and calisthenics or conditioning were second, third, and fourth most prevalent, respectively. The smallest percentage was related to adaptive or corrective subjects.

7. The number of physical education periods per week most often indicated by the respondents was two. The length of the physical education period for the EMR most indicated by the respondents was 30 minutes. The morning hours were indicated as the most common designated time for EMR physical education.

8. The largest percentage of physical education programs for the EMR in North Dakota schools did not include the EMR with "normal"

students. Recess or free play was the only means of physical education in a number of North Dakota schools.

9. About 40 per cent of the respondents did not use the North Dakota State curriculum guide, Guides to Special Education.

10. The most popular physical education activity for the EMR was basic movements. Calisthenics or conditioning, games to teach body parts, and physical fitness tests were second, third, and fourth most common physical education activities for the EMR. Just 50 per cent of the respondents used corrective exercise in the physical education program.

11. The playground and the gymnasium floor were the most common facilities available to the EMR. The basketball court was the third most common available facility. Only 12 per cent of the respondents had a corrective exercise room available.

12. The most common pieces of equipment used in physical education for the EMR were slides, balance beam, record player, ice skates, scooters, basketballs, tumbling mats, bar bells, and dumbbells, jump ropes, and bean bags.

13. Over 85 per cent of respondents believed all EMR instructors should have a basic understanding of physical education, that colleges should add special courses in physical education for the EMR, that physical education instruction could contribute to the social and mental development of the EMR, and that the purpose of physical education for the EMR was to develop the total person, including coordination, personality and intelligence.

14. The largest per cent of respondents believed that the EMR could be taught satisfactorily with "normal" students and that "normal" children were significantly superior to the EMR in motor proficiency.

15. Medical examinations, intelligence tests, grades in achievement, a plan for self-evaluation leading to an improvement in growth and development, and a plan for evaluating social and emotional development are not widely used as required procedures in physical education programs for the EMR in North Dakota schools.

16. The majority of the respondents were of the opinion that physical education for the EMR could not be improved by grouping the EMR by chronological age or by allocating more time to physical education.

Conclusions

From the findings of this study, the following conclusions were drawn:

1. A high percentage of North Dakota teachers were not qualified and therefore did not possess the knowledge or skills necessary to teach a sound program in physical education for the EMR.

2. Physical education goals for the EMR in North Dakota had little hope of being realized with respect to the amount of time spent in class and to the ambivalent methods of grouping.

3. Intra-state transient students could not expect uniformity of program in North Dakota since the state curriculum guide, Guides to Special Education, was seldom used.

4. Physical education programs in North Dakota were basically sound in terms of activities offered the EMR.

5. The physical education programs for the EMR in North Dakota had a definite need in terms of facilities, equipment, and supplies.

6. Special education teachers in North Dakota indicated that physical education programs could contribute to the overall development of the EMR.

7. Tests or evaluation procedures concerning the true mental, physical, or achievement ability status of the EMR were not known by teachers in North Dakota.

8. Special education teachers in North Dakota desired a specialized physical educator; however, they felt that more time devoted to physical activities was not necessary or desirable. The opinions elicited also indicated that these personnel were not desirous of grouping students by chronological age.

Recommendations

The following recommendations are made relative to this study:

1. It is recommended that further study and research in physical education for the educable mentally retarded be undertaken relative to the following topics:

   a. EMR physical education curriculum and administration;

   b. The special class versus the regular class;

   c. The relationship between physical education and motor development;

d. The implication of physical education to social adjustment;

e. The effect of physical education on intelligence.

2. It is recommended that teachers with a standard degree be encouraged to return to school.

3. It is recommended that teachers place the EMR into "normal" classes when possible.

4. It is recommended that teachers strive to establish tests and evaluation procedures into their program, especially periodic medical and intelligence examinations.

5. It is recommended that school districts direct physical education teachers to teach physical education to the EMR.

6. It is recommended that school districts eliminate recess or free play as the only physical education program and replace it with a teacher directed program.

7. It is recommended that school districts hire full-time physical educators.

8. It is recommended that school districts make every attempt to correct all phases of the physical education program which does not lend itself to the education of EMR children.

9. It is recommended that colleges in North Dakota expose potential teachers to physical education courses related to the EMR and to require these individuals to student teach physical education to the EMR.

10. It is recommended that the special education department and physical education department in North Dakota colleges work more cooperatively to prepare potential teachers of the EMR.

11. It is recommended that the Department of Public Instruction in cooperation with the Department of Special Education formulate definite standards regarding to the length and number of physical education periods per week and require schools to follow those standards.

12. It is recommended that the Department of Special Education update its curriculum guide, Guides to Special Education.

13. It is recommended that the Department of Public Instruction appoint a qualified individual to act in the capacity of state director of physical education.

14. It is recommended that the Department of Special Education increase its effort to inform all concerned on the values of physical education for the EMR.

APPENDIX A

UNIVERSITY OF NORTH DAKOTA

Grand Forks, North Dakota

Dr. LaVernia Jorgensen
Chairman

February 17, 1969

The attached questionnaire is designed to be answered by the person responsible for teaching physical education to the educable mentally retarded student.

The questionnaire, concerned with the current status of physical education for the educable mentally retarded, is part of a statewide study. The data gathered should be of significant value in making generalizations concerning the current status of physical education programs for the educable mentally retarded.

We are desirous of obtaining the responses of the teacher of physical education for the educable mentally retarded student. The experience of this person will contribute significantly toward understanding and perhaps solving some of the problems we face in this important area of education. The average time required for several pilot groups trying out the questionnaire was fifteen minutes.

It will be appreciated if you will complete the questionnaire prior to March 10th and return it in the stamped, self-addressed envelope enclosed. Since there are fewer than one hundred teachers of the educable mentally retarded, it is essential that you return a completed questionnaire. Other phases of this research cannot be carried on until we complete analysis of the questionnaire data. We would welcome any comments that you may have concerning any aspect of physical education for the educable mentally retarded not covered in the questionnaire. We will be pleased to send you a summary of the questionnaire results if you desire. Thank you for your cooperation.

Sincerely yours,

Richard Studsrud

Richard Studsrud

APPENDIX B

INSTRUCTIONS FOR COMPLETING QUESTIONNAIRE

Please check and/or fill in those spaces which will indicate the status of the physical education program for the educable mentally retarded in your school and teaching situation.

DEFINITION OF TERMS OR WORDS USED IN QUESTIONNAIRE

EMR: Educable mentally retarded

EDUCABLE MENTALLY RETARDED: The group of children with scores on individually administered intelligence tests in the 50's, 60's, and 70's.

NORMAL: A general term referring to individuals not mentally handicapped.

PHYSICAL EDUCATION PROGRAMS: A professional plan in elementary and secondary schools of educational activities designed to promote the good of the individual.

GUIDES TO SPECIAL EDUCATION IN NORTH DAKOTA: The booklet guide, produced by the Department of Public Instruction in Bismarck, North Dakota, which discusses classes for educable mentally handicapped children.

GENERAL INFORMATION

Name of person completing questionnaire _____

Title of person completing questionnaire _____

Name of school _____

Location of school _____
(City)

1. Our school enrolls:
   - ☐ a. both "normal" and the EMR
   - ☐ b. the EMR only

2. What are the school levels of the EMR?

☐ a. kindergarten	number of boys_____	number of girls_____
☐ b. grades 1-3	number of boys_____	number of girls_____
☐ c. grades 4-6	number of boys_____	number of girls_____
☐ d. grades 7-9	number of boys_____	number of girls_____
☐ e. grades 10-12	number of boys_____	number of girls_____

3. What is the population of your community?
   - ☐ a. under 1,000
   - ☐ b. 1,000 to 2,500
   - ☐ c. 2,500 to 5,000
   - ☐ d. 5,000 to 10,000
   - ☐ e. 10,000 to 20,000
   - ☐ f. 20,000 to 50,000
   - ☐ g. over 50,000

4. What is the classification of your school?
   - ☐ a. class A
   - ☐ b. class B

Information Concerning Teachers of Physical Education for the EMR

5. Physical education for the EMR is taught by:
   - ☐ a. the classroom teacher
   - ☐ b. the physical education teacher
   - ☐ c. specialist
   - ☐ d. other (specify) _____

6. Sex of the teacher of physical education for the EMR is:
   - ☐ a. female
   - ☐ b. male

7. How many years have you taught physical education to the EMR?
   - ☐ a. less than one year
   - ☐ b. 1-3 years
   - ☐ c. 4-6 years
   - ☐ d. 7-10 years
   - ☐ e. over 10 years

8. Please indicate your academic certification:
   - ☐ a. Standard
   - ☐ b. B.A. or B.S.
   - ☐ c. M.A. or M.S.
   - ☐ d. Specialist
   - ☐ e. Doctorate

9. Were you exposed, while in college, to physical education and the teaching of physical education to "normal" students?
   - ☐ a. yes
   - ☐ b. no

10. Were you exposed, while in college, to physical education and the teaching of physical education specifically for the EMR?
    - ☐ a. yes
    - ☐ b. no

11. Which subjects or courses are included in your college physical education background?
    - ☐ a. team activities
    - ☐ b. individual activities
    - ☐ c. dual activities
    - ☐ d. group games
    - ☐ e. folk and/or social dance
    - ☐ f. adapted or corrective activities
    - ☐ g. calisthenics or conditioning
    - ☐ h. rhythms
    - ☐ i. swimming
    - ☐ j. gymnastics and tumbling

Physical Education Class Periods Per Week for the EMR

12. What is the average number of physical education periods per week for the EMR?
    - ☐ a. one
    - ☐ b. two
    - ☐ c. three
    - ☐ d. four
    - ☐ e. five
    - ☐ f. other (specify) _____

13. What is the length of the physical education period for the EMR?
    - ☐ a. 15 minutes
    - ☐ b. 30 minutes
    - ☐ c. 45 minutes
    - ☐ d. 60 minutes
    - ☐ e. other (specify) _____

14. Which hour(s) is designated for physical education for the EMR?

	Number of	Number of
a. 8-9	EMR boys_____	EMR girls_____
b. 9-10	EMR boys_____	EMR girls_____
c. 10-11	EMR boys_____	EMR girls_____
d. 11-12	EMR boys_____	EMR girls_____
e. 12-1	EMR boys_____	EMR girls_____
f. 1-2	EMR boys_____	EMR girls_____
g. 2-3	EMR boys_____	EMR girls_____
h. 3-4	EMR boys_____	EMR girls_____
i. Other	EMR boys_____	EMR girls_____

(specify) _____

_____

_____

Provision of Instruction in Physical Education for EMR

DIRECTIONS: Please check only one of the following (15-20), that applicable to your teaching situation.

☐ 15. Physical education for EMR is taught in classes separate from those of "normal" students.
   a. number of EMR boys_____ grade level(s)_____
   b. number of EMR girls_____ grade level(s)_____

☐ 16. Physical education for the EMR is taught in regular classes with "normal" students.
   a. number of EMR boys_____ grade level(s)_____
   b. number of EMR girls_____ grade level(s)_____

☐ 17. Physical education for the EMR is taught in classes with "normal" pupils, but the EMR are given modified activities.
   a. number of EMR boys_____ grade level(s)_____
   b. number of EMR girls_____ grade level(s)_____

☐ 18. Physical education for the EMR is taught on some days with "normal" pupils, depending on the kind of activities are scheduled.
   a. number of EMR boys_____ grade level(s)_____
   b. number of EMR girls_____ grade level(s)_____

☐ 19. There is no formal instruction in physical education for EMR, but free play or recess is provided.
   a. number of EMR boys_____ grade level(s)_____
   b. number of EMR girls_____ grade level(s)_____

☐ 20. If arrangements are made for physical education for EMR other than those mentioned above, please explain here, indicating the number of boys and girls involved and their grade level.

_____

_____

   a. number of EMR boys_____ grade level(s)_____
   b. number of EMR girls_____ grade level(s)_____

21. Are you using **Guides to Special Education in North Dakota** as a prime physical education reference source?
   ☐ a. yes
   ☐ b. no

22. If you are not using **Guides to Special Education in North Dakota** please indicate what course of study you are following.

DIRECTIONS: Please indicate with a check those activities, facilities, equipment and supplies applicable to your school and teaching situation.

23. **Activities Taught the EMR in Physical Education**
   ☐ a. basic movements (i.e., walking, skipping, hopping, jumping etc.)
   ☐ b. bowling on gym floor or alleys
   ☐ c. calisthenics and conditioning exercises
   ☐ d. combatives (hand contests, wrestling, tug-of-war)
   ☐ e. corrective exercises or adapted physical education
   ☐ f. games designed to teach body parts, directions
   ☐ g. gymnastic activity (bars, vaulting, balance beam, ropes, trampoline)
   ☐ h. highly organized games (kickball, dodgeball etc.)
   ☐ i. musical play (singing games, rhythm band etc.)
   ☐ j. physical fitness tests (running, jumping, throwing, pull-ups, and sit-ups)
   ☐ k. posture improvement activities
   ☐ l. racket play (tennis, badminton, paddle tennis)
   ☐ m. rhythms (folk dance, social dance, marching)
   ☐ n. simple games (lead-up games, chasing games)
   ☐ o. stunts, tumbling, mimetics, pyramids
   ☐ p. swimming (diving, water games, boating, fishing)
   ☐ q. team sports (softball, basketball, volleyball etc)
   ☐ r. track and field (relays, distance hikes, cross-country running)
   ☐ s. winter play (skating, sledding etc.)
   ☐ t. others (specify) _____

_____

24. What Facilities Are Available for the EMR in Physical Education?

- ☐ a. playground
- ☐ b. athletic fields: softball & baseball diamonds, football field
- ☐ c. basketball court
- ☐ d. bowling site
- ☐ e. corrective exercise room
- ☐ f. camp site
- ☐ g. Gymnasium floor
- ☐ h. handball court or wall
- ☐ i. running track and field
- ☐ j. shower and dressing rooms
- ☐ k. swimming pool
- ☐ l. tennis court
- ☐ m. other (specify) _____

_____

_____

25. What Equipment and Supplies Are Used in Physical Education for EMR?

A. Playground: slides ☐ swings ☐ jungle gym ☐ obstacles ☐
others (specify) _____

B. INDOOR APPARATUS: trampoline ☐ side horse ☐ balance beam ☐
parallel bars ☐ uneven bars ☐ horizontal bars ☐ other (specify) _____

_____

C. MUSICAL: piano ☐ record player ☐ records ☐ rhythm equipment ☐
others (specify) _____

D. WINTER: ice skates ☐ sleds ☐ hockey equipment ☐ others (specify) _____

_____

E. INDOOR PLAY: wagons ☐ tricycles ☐ scooters ☐ (others specify) _____

_____

F. BALLS: basketballs ☐ footballs ☐ softballs ☐ all-purpose ☐
others (specify) _____

G. MATS: wrestling ☐ tumbling ☐ others (specify) _____

_____

H. WEIGHT TRAINING: barbells ☐ dumbbells ☐ exer-genie ☐
others (specify) _____

I. ROPES: climbing ☐ jumping ☐ others (specify) _____

_____

J. GAME: bean bags ☐ horse shoes ☐ sticks ☐ bowling pins ☐
others (specify) _____

_____

K. OTHER EQUIPMENT AND/OR SUPPLIES: _____

_____

_____

_____

OPINIONS OF INSTRUCTION IN PHYSICAL EDUCATION FOR THE EMR

26. DIRECTIONS: Please indicate with a check the category which expresses your thought concerning the following opinions.

	agree	disagree	undecided	not qualified to answer
a. The EMR can be taught satisfactorily in physical education classes with "normal" students.	☐	☐	☐	☐
b. Physical education teachers with EMR students in their classes should have professional preparation for work with EMR.	☐	☐	☐	☐
c. Teachers of the EMR whose duties include teaching physical education should have some preparation in physical education.	☐	☐	☐	☐
d. The EMR should be taught physical education by the regular physical education teacher even if they have no preparation for the EMR.	☐	☐	☐	☐
e. All workers with the EMR should have a basic understanding of physical education.	☐	☐	☐	☐
f. Colleges should add special courses in physical education for work with the EMR.	☐	☐	☐	☐
g. Instruction in physical education can help social and mental development of the EMR.	☐	☐	☐	☐
h. EMR children referred to special classes have more uncorrected or permanent physical defects than EMR retained in regular classes.	☐	☐	☐	☐
i. EMR children referred to special classes are superior in social adjustment to EMR retained in regular classes.	☐	☐	☐	☐
j. "Normal children are significantly superior to the EMR in motor proficiency.	☐	☐	☐	☐
k. The purpose of physical education for the EMR is to develop the co-ordination and personality of the child without any expectation of developing intelligence.	☐	☐	☐	☐
l. The purpose of physical education for the EMR is to develop the total person including co-ordination, personality and intelligence.	☐	☐	☐	☐

Tests and Evaluation Procedures Used with the EMR

27. DIRECTIONS: Please indicate with a check each of those tests and evaluation procedures applicable to your school and teaching situation.

- ☐ a. Medical examinations are given annually.
- ☐ b. Medical examinations are given periodically, every 2 or 3 years.
- ☐ c. Medical examinations are given at entrance and when referred by teachers or a nurse.
- ☐ d. There are daily observations of health signs by teachers or nurses.
- ☐ e. Intelligence tests are given annually.
- ☐ f. Intelligence tests are given periodically, every 2 or 3 years.
- ☐ g. Intelligence tests are given at entrance and when referred by teachers or a nurse.
- ☐ h. Physical fitness tests are used (such as AAHPER Youth Fitness Test).
- ☐ i. Grades on achievement in physical education are given at regular intervals.
- ☐ j. Height and weight are recorded at regular intervals.
- ☐ k. There is a plan for self-evaluation leading to an improvement in growth and development.
- ☐ l. There is a plan for evaluating social and emotional development.

28. WHAT CHANGES IN YOUR SCHOOL WOULD IMPROVE INSTRUCTION IN PHYSICAL EDUCATION FOR THE EMR.

DIRECTIONS: Please indicate with a check those changes which would improve instruction in physical education for the EMR.

- ☐ a. A special teacher of physical education
- ☐ b. More facilities and equipment (specify) _____

_____

_____

- ☐ c. More time should be allowed for physical education (specify how much more time per day and/or week) _____
- ☐ d. An imporved understanding of the EMR within: ☐ faculty ☐ administration ☐ community
- ☐ e. Better grouping by chronological age
- ☐ f. More adequate college preparation in physical education for teachers of the EMR.
- ☐ g. Others (specify) _____

_____

_____

29. Do you desire a summary of the results of this survey?

☐ yes ☐ no

RETURN ADDRESS:

Richard Studsrud
1910 10th Avenue North
Grand Forks, North Dakota 58201

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BIBLIOGRAPHY

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