

A PROGRAM OF PHYSICAL ACTIVITIES FOR EDUCABLE MENTALLY  
RETARDED GIRLS ON THE JUNIOR HIGH SCHOOL LEVEL

by 4589

LULA HALL BOUNDS

B.S., Tennessee Agriculture and Industrial  
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Major Professor

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## CHAPTER I

### INTRODUCTION

[Mentally retarded students] have for many years now been second class citizens. In our affluent society you either conform to the established standards and norms, or you don't participate. This has been the case with . . . [retarded] children in the public schools.<sup>1</sup>

Today's literature points out that most children who are mentally retarded may be helped to improve and advance. A few will have to be completely taken care of all their lives, but many can be trained to take care of their own personal needs. With special help, many may be taught to read and write. Another large majority may be prepared for useful work as adults. Many have the opportunity to become self-sufficient enough to make their own way in life.

Interest in the problem of the mentally retarded has

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<sup>1</sup>John A. Ogden, "The Team Approach in Programing," Programing for the Mentally Retarded: Report of a National Conference October 31 - November 2, 1966 [hereinafter cited as Programing for the Mentally Retarded, Sponsored by the Project on Recreation and Fitness for the Mentally Retarded (Washington: American Association for Health, Physical Education, and Recreation, a Department of the National Education Association, 1968), p. 30.

grown rapidly since 1950. During the past decade increased activities have been stimulated by a few foundations and by demands on the part of parents, interested professional groups, and members of legislative bodies who have been convinced of the urgent need for programs in the field.<sup>2</sup>

Mental retardation is a serious problem that affects many aspects of society. The problem is complex and cannot be attacked in any one area since the concerns are biological, psychological, educational, vocational, economic, and social. The need for an upgraded curriculum is apparent in today's society. Local school systems can meet the challenge by setting up sequential programs for the educable mentally retarded.<sup>3</sup>

#### STATEMENT OF THE PROBLEM

In the belief that all children are entitled to an opportunity for maximum physical, mental, emotional, and social development of their potentials, the purpose of this report was:

1. To provide a helpful program of physical activities

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<sup>2</sup>U.S. Department of Health, Education, and Welfare, Mental Retardation: Activities of the U.S. Department of Health, Education, and Welfare (Washington: Government Printing Office, July 1963), p. 8.

<sup>3</sup>Ibid.

for physical education teachers who are uninformed regarding the techniques of working with the educable mentally retarded yet, through their instructional programs, are striving to help educable mentally retarded girls attain their optimum of happiness, independence, and responsibility.

2. To help educators acquire knowledge and understanding about curricular content, methods, techniques, policies, procedures, and adaptations needed for a program of physical activities that will help create successful situations by eliminating feelings of frustration and failure through participation in physical activities.

The information in this report is by no means all-inclusive. While it touches on the important facets, it does not cover each in all its details. An excellent bibliography, however, is presented as Appendix for those who wish to study further the subject areas opened up by the material in this report.

#### IMPORTANCE OF THE STUDY

For many years educators have been concerned about the many learning and adjustment problems that mentally retarded children must face in America's public schools. This concern has contributed to the development of special education programs

and the preparation of special education teachers. Experience over the years has also demonstrated that educable mentally retarded children have potentiality for adjustment in simple walks of life and for contributing in some degree to the work of the world if they are properly guided and educated. Like other children, they are anxious to learn, to grow up, and to find eventually a role in life. To this end, more consideration may be given to the educable mentally retarded students who will not go to college but are looking toward education in preparation for living.

If the ultimate goal of public schools is to accept responsibility for developing each pupil to the maximum of his abilities, educators may understand his needs and provide a different program than is generally presented to the educable child. A greater responsibility rests with the school, however, to provide the mentally retarded with knowledge and skills necessary for independent function within the community in which he lives. This may be done through organized adapted programs in all areas of the total school curriculum. Physical education is one facet of these areas. It is a part of, not apart from, the total educational process.

The Project on Recreation and Fitness for the Mentally Retarded, a department of the American Association for Health,

Physical Education, and Recreation (AAHPER),

initiated on July 1, 1965, in an effort to stimulate the development of programs of recreation and physical activity for the mentally retarded, is conducted in cooperation with the Joseph P. Kennedy Jr. Foundation which made a grant for its operation to AAHPER.<sup>4</sup>

Ideas of different disciplines on programing for the mentally retarded are best expressed in the words of the Coordinator, Unit on Education of the Mentally Retarded Handicapped Children and Youth Program, Office of Education:

Physical education for the mentally retarded is an unquestioned part of the "total" education program, which should more fully meet the needs of the mentally retarded--and in many cases this is being attempted today. There is evidence to support the theory that improved physical fitness can increase the retarded child's ability to learn. However, there can be other, perhaps even more far-reaching goals of physical education programs for the mentally retarded. Through the emphasis given to such objectives as the development of coordinative abilities, sportsmanlike attitudes, and learnings which relate to grooming and personal hygiene (to cite only a few) physical education may soon be perceived as a primary, prevocational area of learning for the retarded. Many special educators agree that prevocational training should begin as soon as the child enters school. What better way to implement both the goals of special education and those of physical education than through concrete, sequentially developed programs of physical education for the mentally retarded?

Important common elements exist in the goals of physical education instructors and those of teachers of the mentally retarded. Both groups concern themselves with the problems of the "whole child"--his environment, his personality, and all those things which go into making him what he is.

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<sup>4</sup>Programing for the Mentally Retarded, foreword.



Further, both of these groups of professionals have as their job the responsibility of meeting the needs of the child, and at a level on which these needs should be met.

An additional implication of the development of sound programs of physical education for the mentally retarded is that they have tremendous potential for providing success experiences for the retardate. . . .<sup>5</sup>

"Current literature and reports of interested leaders at conferences and conventions stress" the real need for programs of physical activities for all retarded students. In this connection there is a "need to unify the efforts of all recreation leaders, all organizations and agencies, public and private, in coordinating the existing recreation activities for the handicapped and to establish new programs."<sup>6</sup> As can be readily seen,

this is no small concern, when you consider that failure is the rule rather than the exception for these children, and where success experiences provided early enough and frequently enough can mean the difference between an ill-prepared school drop-out and a young adult who is prepared, to the level of his capabilities, to become a functioning and contributing member of his society.

Implicit in any discussion of mental retardation is the

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<sup>5</sup>Charles Meisgeier, "Physical Education Programs for the Mentally Retarded," Programing for the Mentally Retarded, p. 56.

<sup>6</sup>Council for Exceptional Children and American Association for Health, Physical Education, and Recreation, Recreation and Physical Activity for the Mentally Retarded (Washington: American Association for Health, Physical Education, and Recreation, 1966), pp. 7-8.

problem of a definition of terms or, more accurately, the lack of a single, encompassing definition. Because of the gradations of retardation, the multiplicity of causes, and the profusion of multiple-handicapping conditions which serve to confound the situation further, there is a growing need for physical education teachers who are cognizant of causation and the degrees of mental retardation--as well as their implications in terms of developing a "physical-educational" framework within which they can work--in order to implement their programs most effectively. Such variables as intelligence, social-emotional behavior, physical development, and socioeconomics must also be considered when one attempts to plan and integrate programs of physical education for the mentally retarded.

In recent years, we have witnessed the passage of much significant legislation for the handicapped. As one would expect, a great deal of this legislation is currently administered through programs in the U.S. Office of Education. However, there is a proliferation of federal programs of potential benefit to the handicapped through such agencies as the Public Health Service, Vocational Rehabilitation Administration, NIMH [National Institute of Mental Health], and the Office of Economic Opportunity--to name only a few.

. . . . .

The Elementary and Secondary Education Act [ESEA], which has just recently received renewed Congressional attention and support, has several possibilities for funding programs which relate to physical education for the handicapped, including the mentally retarded. The focus of Title I of ESEA is directed at low income areas . . . [and has done much] to extend special education services . . . in the following areas: personnel, program development and expansion, ancillary services, materials (instructional), and physical plant of the learning facility.<sup>7</sup>

Those of us in physical education have been prepared to educate the individual by means of physical activities and develop him in the social, physical, emotional, and

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<sup>7</sup>Meisgeier, "Physical Education Programs," pp. 56-57.

intellectual areas. . . .

. . . . .  
 . . . We all have a basic understanding of the contributions that physical activity can make in the development of the individual. It is particularly important for the mentally retarded child, since he may have secondary physical handicaps and because he may not have the background experiences in neighborhood and community play.<sup>8</sup>

Physical activities may serve as the core to educating and training the retarded. Practical, meaningful, and enjoyable experiences from active participation in a program of physical activities will likely become the stimuli--the motivation, the trigger--that provide the impetus for broader understanding and greater learning in academic areas and in complex situations. It falls to those responsible for programs to plan, organize, and conduct programs so as to provide opportunities for educable retarded students to develop skill, competency, and knowledge. In this way every individual may live as independently in America's society as his capabilities will allow.

#### DEFINITIONS OF TERMS USED

As with so many words and terms, a large difference of

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<sup>8</sup>Dolores Geddes, "The Physical Educator as a Member of the Special Physical Education Team," Programing for the Mentally Retarded, pp. 27-28.

opinion exists regarding definitions of mental retardation and those terms commonly associated with it. Because Heber prepared terminology and classification in mental retardation for the American Association on Mental Deficiency, the context of his definitions was selected for use in this report. The definitions are extracted below without benefit of ellipses.

Mental retardation refers to subaverage general intellectual functioning which originates during the developmental period and is associated with impairment in adaptive behavior. [It] incorporates all meanings ascribed historically to such concepts as amentia, feeble-mindedness, mental deficiency, mental subnormality, idiocy, imbecility, and moronity, etc. Though mental and retardation have meanings not always consonant with those of their present context, mental retardation will prove adequate if utilize[d] according to criteria set forth.

Subaverage: performance greater than one Standard Deviation below the population mean of the age group involved on measures of general intellectual functioning.

General intellectual functioning: may be assessed by performance on one or more of various objective tests developed for that purpose.

Developmental period: upper age limit cannot be precisely specified [but] may be regarded, for practical purposes, as being at approximately sixteen years.

Impairment in adaptive behavior: refers primarily to effectiveness of the individual in adapting to natural and social demands of his environment. May be reflected in maturation, learning, and/or social adjustment. These three aspects of adaptation are of different importance as qualifying conditions of mental retardation for different age groups.

Maturation: refers to rate of sequential development of self-help skills of infancy and early childhood such as sitting, crawling, standing, walking, talking, habit

training, and interaction with age peers. Delay in acquisition of early developmental skills is of prime importance as a criterion of mental retardation during pre-school years.

Learning ability: facility with which knowledge is acquired as a function of experience. Impaired learning ability is particularly important as a qualifying condition of mental retardation during school years.

Social adjustment: particularly important as a qualifying condition of mental retardation at adult level, where it is assessed in terms of degree to which the individual is able to maintain himself independently in the community and in gainful employment as well by his ability to meet and conform to other personal and social responsibilities and standards set by the community.

Educable: refer[s] to mentally retarded persons capable of some degree of achievement in traditional academic subjects such as reading and arithmetic. Also refer[s] to those mentally retarded children who may be expected to maintain themselves independently in the community as adults, or to that group of mentally retarded obtaining IQ scores between 50 and 70, 75 or 80.<sup>9</sup>

Two other terms of importance in this report are:

Junior high school: an educational program designed particularly to meet the needs, interest, and abilities of boys and girls during early adolescence. Many different plans are used, but the most commonly accepted incorporates seventh, eighth, and ninth grades.

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<sup>9</sup>Rick Heber, A Manual on Terminology and Classification in Mental Retardation, Monograph supplement to American Journal of Mental Deficiency (2d ed.; Columbus, Ohio: American Association on Mental Deficiency, Project on Technical Planning, 1961), pp. 3-4 & 69.

Physical activities: a program of developmental activities that contribute to the individual's social, emotional, and intellectual development as well as helping meet his physical needs.

#### LIMITATION OF THE STUDY

The data in this report are limited to a program of physical activities for educable mentally retarded girls on the junior high school level.

## CHAPTER II

### REVIEW OF LITERATURE

Thirty years ago, or even three years ago [1961], if anyone had asked what was being done about mental retardation, the answer would have been a shrug of the shoulder. . . . Our answer and our attitude are changing. We are answering with our hearts and our heads, not with shrugs and silence. . . .<sup>1</sup>

A survey of the literature is summarized in the areas of statistics, past trends, new trends, new hope for the mentally retarded, and motor functions of the mentally retarded.

### STATISTICS

. . . On most tests standardized nationally, experience has shown that virtually all persons with I.Q.'s below about 70 have significant difficulties in adapting to their environment. About 3 percent of the population score below this level.

Based on this figure of 3 percent, it is estimated that, of the 4.2 million children born each year, 126,000 are, or will be, classed as mentally retarded.

Of the 126,000, some 4,200 (0.1 percent of all births)

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<sup>1</sup>Secretary's Committee on Mental Retardation, An Introduction to Mental Retardation: Problems, Plans and Programs (Washington: U.S. Department of Health, Education, and Welfare, June 1965), p. 12, citing President Johnson, June 15, 1964.



will be retarded so profoundly or severely that they will be unable to care even for their own creature needs. About 12,600 (0.3 percent of all births) will suffer from "moderate" retardation--they will remain below the 7-year intellectual level. The remaining 110,000 (2.6 percent of births) are those with mild retardation and represent those who can, with special training and assistance, acquire limited job skills and achieve almost complete independence in community living.

Applying these same percentages to the total population it is estimated that there are approximately 5.4 million mentally retarded persons in the population. Of this number:

60,000 to 90,000 are persons, mostly children and adolescents, so profoundly or severely retarded that they cannot survive unless constantly cared for and sheltered.

300,000 to 350,000 are moderately retarded children, adolescents, and adults who can assist in their own care and can even undertake semi-productive endeavors in a protected environment. . . .

Some 5,000,000 are mildly retarded children, adolescents, and adults who are able to perform more adequately, adjust in a limited way to the demands of society, . . .<sup>2</sup>

The proportions of the total population of mentally retarded persons falling into each of the four levels of adaptive behavior vary radically . . . [see Table 1], which is intended to be illustrative rather than suggestive of precise figures, points out the need for considering program planning in relation to the various levels and subcategories of the mentally retarded, rather than in relation to an overall prevalence figure such as 3 percent.<sup>3</sup>

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<sup>2</sup>U.S. Department of Health, Education, and Welfare, Mental Retardation: Activities of the U.S. Department of Health, Education, and Welfare (Washington: Government Printing Office, July 1963), pp. 6-7.

<sup>3</sup>Secretary's Committee on Mental Retardation, p. 11.



Table 1

Estimated Distribution of Retardates in the United States  
by Age and Degree of Retardation\*

Degree of Retardation	All Ages		Age by Years	
	Number	Percent	Under 20	20 & Over
Mild (IQ 52-67)	5,000,000	89.0	2,000,000	3,000,000
Moderate (IQ 36-51)	350,000	6.0	150,000	200,000
Severe (IQ 20-35)	200,000	3.5	100,000	100,000
Profound (IQ - 20)	85,000	1.5	50,000	35,000
Total:	5,635,000	100.0	2,300,000	3,335,000

\*Source: Secretary's Committee on Mental Retardation, An Introduction to Mental Retardation: Problems, Plans and Programs (Washington: U.S. Department of Health, Education, and Welfare, June 1965), p. 11, adapted from Facts on Mental Retardation (New York: National Association for Retarded Children, Inc., 1963), p. 15.

The level or degree of retardation and the level of development of the institutionalized and of those found in public education are quite different and give rise to different problems and approaches in meeting these problems.

Dybwad<sup>4</sup> believed that "discrepancies" in the estimate of numbers of retardates are based on the number of points of delineation at which the upper limits of mental retardation are established.

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<sup>4</sup>Gunnar Dybwad, Challenges in Mental Retardation (New York: Columbia University Press, 1964).

Weber<sup>5</sup> stated that the educable mentally retarded person can become a contributing member in society because he has enough intelligence to make satisfactory social and personal adjustment. The United States Office of Education estimated a few years ago that 83 percent of the retarded are educable, another 12 percent are trainable, and the remaining 5 percent are capable of performing at higher levels than were imagined five years previously. The research suggested that the mentally retarded are slightly below normal in motor skills.<sup>6</sup>

#### PAST TRENDS

Historically, mental retardation has been viewed for the most part as a static, unchanging, incurable condition. Although there were some brilliant thinkers and gifted practitioners who envisioned the potentials of training and treatment for the retarded, the idea "once retarded, always retarded," led over the years. . . .

Indeed, the concept had so strongly crystallized that, in 1916, Terman described the mentally retarded as follows: "They will make a little progress in a well-managed special class, but with the approach of adolescence, at latest, the state should take them into custodial care for its own protection." Terman held that mental retardation was

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<sup>5</sup>Elmer W. Weber, Educable and Trainable Mentally Retarded Children (Springfield, Illinois: Charles C. Thomas, Publisher, 1962), p. 487.

<sup>6</sup>John Throne, "Everybody's Problem," Journal of Health, Physical Education, and Recreation, XXXVII, No. 4 (April, 1966), 25.

inherited--that mental deficiency and moral deficiency were synonymous, that mental growth stopped in adolescence and that, since intelligence was a general problem-solving behavior, then, if one was retarded at all, one was retarded in each specific area of human functioning. With this type of concept, it is small wonder that little effort was made to try and improve the performance of the mentally retarded.<sup>7</sup>

Teaching the retarded started in Europe. There, in some countries, the retarded child was considered as something to be destroyed, abandoned, treated as insane, and laughed at.<sup>8</sup> Research was mainly concerned with the physiological aspect of growth and development in the retarded rather than physical fitness and motor performance. Literature points out the fact that this devastating myth hindered much of the progress in the development of physical education for the mentally handicapped.

#### NEW TRENDS

The public's view on mental retardation has changed rapidly. Part of this might be due to more attention being given to it and more parents wanting their children to be given

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<sup>7</sup>Gunnar Dybwad, The Dynamics of Mental Retardation: An Overview ([Washington]: Government Printing Office, 1965), p. [1], quoting and citing Lewis Terman, The Measurement of Intelligence (New York: Houghton Mifflin Co., 1916), p. 87.

<sup>8</sup>Malinda Dean Garton, Teaching the Educable Mentally Retarded (Springfield, Illinois: Charles C. Thomas, Publisher, 1964), pp. 11-26.

equal opportunities in the community and schools. Generally speaking, society has become more conscious of the mentally retarded child and has worked in the community to give him more opportunity and better educational and recreational facilities.

Today, there appears to be a general awareness of the needs of the mentally retarded more so than at any other time. More thought is being given to the education and training of these individuals. This might have been brought about by local, state, and national organizations. More stress seems to be placed on trying to identify, classify, test, and properly place the mentally retarded child in a program where he may be capable of succeeding and working.

More special education programs for the trainable and educable mentally retarded are beginning in the elementary schools and continuing through high school. This has happened in many school systems. Pre-school programs are being started in many communities.

There has been increased attention to the needs of mentally retarded children on the part of the various state legislators. This may be evident by appropriations made by them for training and health care programs. It appears that in most states trained qualified leaders are responsible for upgrading the program throughout the states and providing services to the

local communities.

Increased psychological services are being provided to aid medical and educational personnel in correctly identifying, classifying, placing, and providing developmental programs for the educable mentally retarded. There seems to be a growing tendency for administrators to become more selective in their testing programs and to interpret their results. Only qualified and trained personnel are interpreting these results, a procedure that goes a long way toward eliminating misunderstanding between the school and parents.

Another important trend was to place children in groups according to their chronological age and IQ. This has been done so as to establish a program with integrated and sequential steps throughout the student's life.

Each year more communities are offering a school work experience program whereby the mentally retarded attend school one-half day and work one-half day. In some communities these students receive pay for their work and others do not. Many service organizations take the school work experience program as their project and work with it through the school and the chamber of commerce. Lansing, Michigan, has such a program. More vocational materials are available for the teacher of the mentally retarded so that he might have a well-rounded program.

The federal government has been aware of the problem of the mentally retarded child. Within the past five years many laws pertinent to mental retardation have been passed and have proved to be very valuable.

Programs for the education of mentally retarded children, new curriculum, better financial help, and new state and federal legislation have advanced so rapidly in the past few years that it is difficult to evaluate and appraise the happenings that have taken place.

. . . The focus of Title I of ESEA [Elementary and Secondary Education Act] is directed at low income areas where there are substantial numbers of educationally disadvantaged children . . . and where socioeconomics are such that upward growth is unlikely under existing educational conditions. The financial focus of this program is the local educational agency, or a coordinated effort between agencies if it is determined that such coordination will (1) promote greater flexibility of the program and (2) carry out needed educational change.

. . . . .

An amendment to Title I, Public Law 89-313, gives specific emphasis to the handicapped [to include the mentally retarded]. The focus of this law is twofold: (1) to provide education on a non-school-district basis . . . and (2) to benefit children in state operated or supported schools . . . which provide free public education on a non-school-district basis. . . .

. . . . .

The focus of Title III of ESEA is such that it provides for two types of projects: (1) the development of educational services which are not presently available either in sufficient quality or quantity to do the job required and

(2) the establishment of exemplary and innovative programs to serve as models for other elementary and secondary school programs. . . .

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Public Law 85-926, as amended, the "Program for the Preparation of Professional Personnel in the Education of Handicapped Children" (P.L. 88-164), was signed into law by President Kennedy on October 31, 1963. This law extended the provisions of P.L. 85-926 to include the training of professional personnel to work in the following areas: . . . as well as the [area of the] mentally retarded. . . .

Under Section 302 of P.L. 88-164, research and demonstration projects are funded. . . .

A significant innovative accomplishment within the past two years has been the establishment of fourteen curriculum materials centers throughout the country.<sup>9</sup>

There has been a marked change in the attitude of the school and community toward the mentally retarded child. He will likely be considered a positive national asset with potentials that may be mobilized rather than a liability that might be tolerated for sentimental reasons.

The attitude of the medical profession toward educators has become favorable recently. Today, medical authorities are

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<sup>9</sup>Charles Meisgeier, "Physical Education Programs for the Mentally Retarded," Programing for the Mentally Retarded: Report of a National Conference October 31 - November 2, 1966, Sponsored by the Project on Recreation and Fitness for the Mentally Retarded (Washington: American Association for Health, Physical Education, and Recreation, a Department of the National Education Association, 1968), pp. 57-59.



asserting leadership in many ways. Extensive research programs are being carried out on retardation and are helping to educate parents and community groups. They are striving to orientate teachers, social workers, school and public health nurses, psychiatrists, psychologists, and members of their own profession to this important and complex problem.

Emphasis has been focused on prevention, early detection, treatment, and education. A great deal of concern may be placed on occupational training and placement in work experience for the adolescent mentally retarded individual. In the coming decade, as new programs demonstrate potentials and abilities in various groups of the retarded, extended additional services will be needed. There appears to be a new dawning characterized mainly by efforts to make a place for the retarded in open community life.

#### NEW HOPE

The President's Committee on Mental Retardation has stated that new hope for the mentally retarded and their families has begun to appear. The Committee discussed six resolutions which are now underway, four of which are pertinent to this study--revolutions in understanding, research, education, and recreation.



Revolution in Understanding. Traditionally the biggest enemy of the retarded has been ignorance, the kind of ignorance which, for example, passed judgment that mental retardation was a curse on the household where it existed.

Early efforts to dispel this ignorance were hampered by complicated definitions and clumsy efforts to set up neat categories into which all of the retarded would fit.

.....

But as the revolution in understanding progresses, we have been learning encouraging things about the retarded. We have learned, for example, that:

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. . . The great majority of mentally retarded persons are neither physically deformed nor socially unacceptable.

. . . The great majority of them can be educated and trained to support themselves and live useful lives.

. . . What all of them need most is a helping hand.<sup>10</sup>

Revolution in Research. A great deal has been learned about the causes of mental retardation. Some preventions have occurred. Immunization has helped. Progress has been made in identifying specific conditions and diseases and in establishing basic problems of behavior and learning. Research is still needed in the field of physical education and recreation. Thus far, however, there has been adequate understanding of the

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<sup>10</sup> [President's Committee on Mental Retardation], The Mentally Retarded . . . Their New Hope ([Washington: U.S. Department of Health, Education, and Welfare, 1969]), pp. [2-3].

pathological, genetic, psychological, environmental, and other aspects of mental retardation.

Revolution in Education. The general level of education is rising in the nation as the educational standards and achievements continue to rise. Consequently, a greater number of individuals who cannot keep up or achieve national levels will be discovered and will demand attention.

Revolution in Recreation. Recreation, including physical education and games, is another area where a major revolution has taken place in mental retardation.

. . . . .

There are many sports and recreation activities which the retarded can learn successfully. . . .<sup>11</sup>

There is evidence that physical fitness increases the retarded child's ability to learn. Programs are being developed through local chapters of the National Association for Retarded Children and other groups which make special provision for recreation for retarded children.

#### MOTOR FUNCTIONS

For the past 40 years workers in physical education have attempted to build motor capacity tests that measure general

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<sup>11</sup>Ibid., pp. [11-12].

motor performance comparable to the way intelligence tests purport to measure mental ability. Several scales have been developed but they have not been successful in giving an accurate over-all appraisal, seemingly because the same person may perform well in one motor skill and very poorly in another. Motor abilities seem to be fairly specific and discrete.<sup>12</sup>

Francis and Rarick indicated that in retardates age trends in strength for each sex followed about the same patterns as those in normal children, although at a lower level at every age.<sup>13</sup>

Howe found normal boys significantly superior in all 11 motor tasks included in his study; normal girls were significantly superior in 9 of the 11 tasks. A wide range of scores was noted in both groups with no definitive pattern being established, and a great deal of overlap found between normal and retardate achievement. This study was carefully designed and controlled to minimize potential contamination of the results through differences in opportunities and socioeconomic backgrounds.<sup>14</sup>

. . . Howe's study provided 10 days' instruction and practice for both normal and retarded groups in three motor skill tasks. Both groups showed similar improvement, with

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<sup>12</sup> Julian U. Stein, "Motor Function and Physical Fitness of the Mentally Retarded: A Critical Review," Rehabilitation Literature, XXIV, No. 8 (August, 1963), 232, citing C. Howe, "Compensation or Correlation?," Education, LXXX, No. 6 (February, 1960), 341-43.

<sup>13</sup> Ibid., p. 233, citing R. J. Francis and G. L. Rarick, Motor Characteristics of the Mentally Retarded, U.S. Office of Education Cooperative Research Project No. 152 (Madison: University of Wisconsin, 1960).

<sup>14</sup> Ibid., p. 234, citing C. Howe, "A Comparison of Motor Skills of Mentally Retarded and Normal Children," Exceptional Children, XXV, No. 8 (April, 1959), 352-54; and C. Howe, "Motor Characteristics of Mentally Retarded Children" (doctoral dissertation, State University of Iowa, 1957).

significant improvement in Burpee squat thrusts, a relatively complex activity, while only modest gains were shown on the other two skills, throwing a ball at a target and simple maze tracing. . . .<sup>15</sup>

Brace investigated the physical fitness of a group of mentally retarded boys relative to national age scales for boys of the same chronological age in terms of bodily activity. He used the Youth Fitness Test and found that mentally retarded boys scored on the average materially below the national age norms with 80 percent of all scores falling below the median of the national scales. The percentage of scores of the mentally retarded boys that fell in the normally expected quartiles of the age scales were best in the sit-ups and poorest in the pull-ups, jumping, and running events. Brace concluded that mentally retarded boys could evidently profit by much more vigorous activity.<sup>16</sup>

In a study of 30 mentally defective girls, Fallers found that none of her subjects attained a rating of normal on the original Lincoln-Oseretsky Scale. Sixty percent of her subjects were classified as "motor idiots"; 17 percent were found to have marked motor retardation, and 13 percent were reported to have moderate motor retardation. She concluded that there was some relationship between motor and mental development since the lower IQ range, 45 to 52, accounted for the majority of the motor idiots while the upper IQ range, 61 to 69, had the greatest variability in scores and the fewest in the bottom category.<sup>17</sup>

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<sup>15</sup>Ibid., p. 240, citing Howe, "Comparison of Motor Skills" and "Motor Characteristics."

<sup>16</sup>Ibid., p. 235, citing D. K. Brace, "Motor Fitness of Mentally Retarded Boys Relative to National Age Norms" (paper read at the Research Section, American Association for Health, Physical Education, and Recreation Convention, March 18, 1961, Atlantic City, New Jersey), who referred to Youth Fitness Test Manual (rev. ed.; Washington: American Association for Health, Physical Education, and Recreation, 1961).

<sup>17</sup>Ibid., p. 236, citing J. Fallers, "An Investigation of the Motor Ability of Thirty High Grade Mentally Defective Girls

Ellis and Sloan found that all correlations of mental age and reaction time of 79 male and female mental defectives were highly significant. The effects of chronological age upon reaction time were negligible. They also found that subjects with low mental ages tended to be more variable in speed of reaction than those with higher mental ages. The mean response time for the defective was considerably slower than that of normal subjects.<sup>18</sup>

. . . Ideally, such studies should be carried out over a period of three years with one school year considered minimum. Some thought should be given to longitudinal studies where the same groups of individuals are followed through a large segment of their lives.<sup>19</sup>

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with the Oseretsky Tests of Motor Proficiency" (unpublished master's thesis, MacMurray College for Women, 1948).

<sup>18</sup>Ibid., p. 237, citing N. R. Ellis and W. Sloan, "Relationship between Intelligence and Simple Reaction Time in Mental Defectives," Perceptual and Motor Skills, VII (June, 1957), 65-67.

<sup>19</sup>Ibid., p. 240.

## CHAPTER III

### DISCUSSION

#### DEVELOPMENTAL CHARACTERISTICS AND NEEDS OF EDUCABLE MENTALLY RETARDED GIRLS

##### Developmental Characteristics

The literature revealed that the degree of mental retardation varies greatly among individuals. This retardation can be so severe that afflicted persons must have protective care throughout their lives. In other individuals the retardation is so mild that many tasks can be learned and a measure of independence in everyday life can be achieved. In a substantial number of cases the afflicted persons can adjust in a limited way to the demands of society and in many instances, with help, can become productive members in the community in which they live.

Since the literature points out that there is no fully satisfactory way of characterizing the degrees of retardation, the developmental characteristics, potentials for education and training, and social adequacy of the school child (6 through 21) are discussed according to the classification proposed by the American Association on Mental Deficiency.

The school age child can profit from training in social and occupational skills and will likely progress beyond the second grade level in academic subjects. The educable retarded child can learn academic skills to approximately sixth grade level by his late teens. He will need special education, particularly at the secondary levels.

Physical activity has an important role in the education of educable mentally retarded students. Certainly evidence is becoming increasingly clear that physical activity in and of itself is important for all students, regardless of age, sex, or level of intellect. Everyone knows that the drive for activity is especially strong in youths.

Last and perhaps most significant is the plain joy of being physically active. Every student ought to have the right to live out his adolescent years. But, how can one do this without effective skills that permit effective interaction with peers? This, of course, becomes the task of the teacher. Therefore, a wholesome program of physical activities during the junior high school is important because motor development plays an important role in the social, intellectual, and emotional development of educable mentally retarded girls. Motor development may enable the individual to be a leader, an organizer, or a hero among his associates, while lack of motor ability may

cause unhappiness, fears, or lack of confidence.

When determining directions for planning a program of physical activities, more than likely the emphasis will be placed on the developmental needs of the individual participants. While the specific goals and outcomes for individuals participating in different activities might differ, the basic aim of the overall program may be to cultivate varied capacities so that the individual may progress toward greater degrees of social independence, physical well-being, emotional stability, and intellectual advancement.

Because the educable mentally retarded individual needs concreteness and applicability to the present and the practical, divergence may be greater than in dealing with the normal population. It may prove useful for the instructor to make an attempt to understand the interests, abilities, and feelings of the educable mentally retarded students and to try to avoid the common pitfall of evaluating activities according to his own interests, needs, abilities, and feelings. The special considerations below are important in formal recreational programming for those mentally retarded who cannot adjust in normal groups.

### Needs

The retarded child needs a functional structured environment. . . . "Structured environment" means that the



situation is so arranged by the . . . [physical educator] that he knows at all times how much each child in the group is comprehending and participating.<sup>1</sup>

Educators agree that in the initial planning for mentally retarded children there should be no "free play." The entire period should be carefully planned by the instructor. Only when he is confident the child is capable of making a choice should a choice of activity be given.

The child's comprehension of abstract cues and concepts is deficient. The recognition of this one fact has several important meanings for the program.

Playground behavior differs from classroom behavior or home behavior. This difference should be made known to the child from the very beginning of the program. It can be simply and effectively done by having the child wear some piece or pieces of clothing specifically for his physical activity, for example, . . . [white shorts, white blouse, and sneakers. Participation] at any time in sport activities without wearing the . . . [proper attire should not be permitted]. The purpose of this is to permit the leader to construct a system of behaviors which are desirable in . . . [a program of physical activities] but may not be desirable in other facets of the child's life.

. . . . .

The child should be motivated toward activity. It is usually advisable to start each recreational period with the same activity, regardless of how activities may vary from session to session. . . .

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<sup>1</sup>Council for Exceptional Children and American Association for Health, Physical Education, and Recreation, Recreation and Physical Activity for the Mentally Retarded (Washington: American Association for Health, Physical Education, and Recreation, 1966), p. 34.

The retarded child should have a "buddy." One of the main purposes of . . . [physical activities] for any child is to give him experience in submerging his own needs and desires in those of the group as a whole. For the retarded . . . [student, physical activities] may afford the only milieu in which he can learn such behavior. From the very beginning of his participation in . . . [physical activity, he needs] a partner with whom he shares both successes and responsibility. In those . . . [physical] activities where there are some elements of risk, such as swimming, . . . and simple gymnastic activities, the mutual responsibility of one partner for the other should be taught from the first introduction of participation in the activity.

. . . . .

The retarded child may have his own standards of what is pleasurable. Everyone is unique in his life experiences, and his particular environment has trained him to interpret these experiences. Despite these differences, however, most of us share common ideas about pleasure--about what is enjoyable and what is not enjoyable. The life experience of the [educable mentally] retarded . . . [student], however, may differ so vastly from the range of "average experience" that he does not formulate these same concepts of "fun." For example, the comments of normal children about his clumsiness may be interpreted by the retarded child as friendly acceptance into the group; on the other hand, the most innocuous jest may be perceived as an unfriendly insult. Lack of understanding of this one aspect of the effects of mental retardation upon social living has led to much disappointment and failure. . . .

The retarded child may interpret failure as "rejection." What failure means to the . . . [educable] is probably more closely akin to lack of acceptance by the adult or his peers than to the commission of error. The . . . [educable student], like all other human beings, needs love and acceptance, but his need is satisfied only by concrete demonstrations. He does not generally comprehend subtlety. He therefore tends to generalize correction of errors into overall lack of acceptance as an individual of worth. Thus "fear of failure" is more probably a fear of rejection. The child values praise, provided he feels that he has earned it. The . . . [physical educator] therefore must do two

things. First, in his relationships with the child he must be sure that he clearly separates his correction of performance from his overall acceptance of the child as an individual; he must make certain that the child comprehends that it is the behavior or performance which is being corrected, and that the . . . [instructor] is not withdrawing his acceptance or support of the child himself. Second, within the framework of each day's schedule, the . . . [instructor] should provide at least one activity at which the child can succeed, and whenever the child performs well, or improves upon a previous performance, he should praise him openly.

The retarded child generally tends to lack aggressiveness. . . . An aggressive [educable mentally] retarded . . . [student] is difficult to rear, and parents tend to punish for aggressiveness sooner than for any other misbehavior. Thus, the retarded child, whose principal motivation is found in a need for approval, soon learns to withdraw rather than to stand his ground. Even the child who habitually reacts physically when pushed beyond his endurance usually will become submissive and withdrawn upon the first sign of retaliation. This fact is important to keep in mind in programing activities for the [educable mentally] retarded, and it also raises some question on goal-directed activities in such programs. Many . . . [educable mentally retarded individuals] would function better in our society and be happier individuals if they were more aggressive. . . .<sup>2</sup>

#### METHODS AND TECHNIQUES AND PROCEDURES IN A PROGRAM OF PHYSICAL ACTIVITIES FOR EDUCABLE MENTALLY RETARDED GIRLS

Planning and organization based on complete identification and careful analysis of many organizational and administrative problems and details are necessary if a program of physical activities for the mentally retarded is to be successful. Many

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<sup>2</sup>Ibid., pp. 34-38.

factors may determine the selection of activities to be included in a program. It is logical to assume that all activities discussed in this report may not be provided for each pupil every year he participates in the program. Factors which might determine the program of activities are breadth of competency of the teaching staff, mores of the community, financial support of the board of education, school, and community, adequacy of facilities and equipment in the school and community, daily class schedule for students, number of grades represented in any one class period, and sympathetic understanding and assistance by school administrators. Enthusiasm, initiative, imagination, empathy, dedication, and patience on the instructor's part are also important factors if success is to be achieved in an instructional program of physical activities for the educable mentally retarded.

In the writer's experience the methods and the techniques and procedures in physical education listed below have been helpful in teaching physical activities to normal girls enrolled in physical education classes. These same methods, techniques, and procedures, with modifications if necessary, may be used in teaching educable mentally retarded girls.

## Methods

Organization for Roll Call and Class Instruction. Definite working policies and procedures set up by the teacher for roll call and class instruction are beneficial to both teacher and students if there are to be skill improvement, positive attitude changes, broadened understandings, classroom control, and deep and lasting appreciation for physical activities. Physical activities may be learned and demonstrated most easily in small groups, usually called squads. The composition of the squad and the method of selecting squad leaders may enhance or detract from the effectiveness of such organization for instruction.

Realizing there is no superior method that will assure triumphant success, the best teaching method, provided it is a socially approved procedure, is the one which gets the desired job done. However, accuracy and speed appear to be essential with any method used.

The physical education teacher may use the method for selecting squads that best fits the situation in her particular course unit. Some specific suggestions based on this writer's experience are:

1. Assign students to squads that have equal numbers of highly skilled, average, and poor students on each.

2. Arrange squads in some sort of alphabetical sequence of students' surnames. With this method the poorer performers, even among the retarded, are spared the depressing effect of being chosen last.

3. Select squads on the basis of cumulative records. (Brief observations by the instructor may be substituted for the cumulative records.)

4. Select squads outside of class time in order to have the opportunity to select with care squads that are balanced in skills as well as friendships.

5. Select squads on the basis of results of sociometric and specific skill achievement tests.

Effective functioning of a squad, either as a team or as a group learning particular techniques, often depends greatly on the squad leader. Wise and careful consideration is advisable in securing squad leaders, which may be done in several ways. The instructor chooses the procedure that is best for her. Serving as a squad leader is an opportunity to practice leadership that may be shared by many girls. The instructor may:

1. Appoint leaders to serve at the beginning of the year or first grading period or semester until the class members and the instructor have had an opportunity to learn names and know each other. This selection may be done on the basis of

general appearance, apparent confidence, extrovertive tendencies, and intuitive ability. Each subsequent grading period from then on, new leaders may be elected or the same ones retained if so desired by the majority.

2. Permit outgoing squad leaders to elect new squad leaders.

3. Hold class elections after nominations have been made.

4. Ask for volunteers.

The squad leader and her duties may vary according to the purpose and function of the squad. However, class leaders usually assist with instruction, act as officials, check attendance, obtain necessary supplies and equipment, act as team captains, and promote and encourage team punctuality on the field, court, and floor or in the pool.

Costume for Physical Activities. Efficiency is more likely to be accomplished if classroom policies and procedures governing proper dress for physical activities are set up by the local school system. The physical education supervisor and instructors usually participate in the selecting of uniforms that are comfortable, washable, and attractive.

The Kansas City, Missouri, school system, one of many



systems that do have requirements concerning proper dress for physical activities, requires that all girls enrolled in physical education have the white regulation gym suit (one piece), white ankle length socks (knee length unacceptable), and white oxford type gym shoes. Optional equipment consists of white sweatshirt for cold days outside, gym bag (any color), shower cap, swimming cap, and personal items. Other colors may be used depending on the taste of the physical education instructors and the physical education supervisor.

The above practices help to maintain good morals and to minimize social status differences when all students are dressed alike. Also, definite rules governing the cleaning of uniforms should be imposed. For example: taking suits, shoes, and socks home every Friday to be returned on Monday morning after laundering and pressing. Because of health reasons the borrowing or lending of uniforms, shoes, socks, and the like is not recommended. Another issue that the physical educator may be concerned with is the marking of uniforms to insure uniformity and non-loss of uniforms. The physical education supervisor and physical education teachers may decide on this issue.

Shower Procedures. Many authorities recommend that all students take a shower following vigorous activities. Towels



and soap should be provided by the school district to insure good health teaching habits. Individual showers may be provided or made available for girls who object to the gang shower. Special safety measures may be set up regarding shower procedures.

Locker Assignment. Locks and locker room supervision might be fully discussed among administrators and teachers to allow pupils ample room for dress and moving around which precipitate efficiency in maintaining a pleasant and clean atmosphere. It may be a good idea to simplify the location of lockers with least amount of confusion. Because of variations in facilities, many school systems will have different methods of locker assignments.

A record of the individual to whom the locker is assigned may be kept by the instructor. In those situations where the facilities are not adequate, but there is space for a limited program, equipment for this program should also be provided.

Class Time Allotment. Time allotment for the various aspects listed below may vary according to the newness of the activity, purpose of the activity, and progress of the students achieving essential skills.

<u>Activities</u>	<u>Percent</u>
Administrative . . . . .	7
Conditioning and Combative . . . . .	8
Recreational, Individual, and Dual Sports	20
Rhythmical . . . . .	20
Stunts, Tumbling, and Self-Testing . . . .	10
Team Sports . . . . .	<u>25</u>
Total:	100

Size of classes, teacher load, and the scheduling of students in physical activities will probably be determined by school policy. Definite guidelines for class size may be established before the schedule of classes has been determined. In determining class size, the factors involved in a good learning situation are the availability of particular facilities, special individual problems, achievement level of students, and adequacy of teaching.

Effective use of the class period is essential and is the responsibility of the teacher. A suggested daily class time allotment for a 55-minute class period is:

<u>Item</u>	<u>No. of Minutes</u>
Dressing . . . . .	5 to 7
Roll Call . . . . .	2
Conditioning Activities . . . . .	4 to 6
Fundamental Skill . . . . .	15
Game or Activity . . . . .	20
Showers and Dressing . . . . .	10

Reporting Accidents. The physical education instructor is required to know and follow the school procedures in reporting accidents and in the treatment of injuries.

Excuses from Physical Activities. A thorough understanding of policies for excusing students from physical activities may prove beneficial if understood by teachers, students, school and family medical advisors, administrators, parents, and members of the school board. Specific procedures may be set up by the school board to carry out policies agreed on.

#### Techniques and Procedures

Regardless of the ability levels of those with whom one is working, there are basic considerations that may result in more effective instruction of sport activities. The Joint Committee of the Lifetime Sports Education Project and the Project on Recreation and Fitness for the mentally retarded lists suggested teaching methods for teaching physical activities for the mentally retarded.<sup>3</sup> They recognize that their list of suggested teaching techniques is not complete; however, sound instruction of physical education employs the same sound

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<sup>3</sup>Physical Activities for the Mentally Retarded: Ideas for Instruction (Washington: American Association for Health, Physical Education, and Recreation, 1968), pp. 25-27.

teaching methods generally accepted in all areas of education. The listing below includes those techniques which, in most cases, are particularly relevant to effective instruction of physical education and may or may not relate to subjects of an academic or cultural nature. These suggestions are concerned with motivational factors, effective program planning, and class organization.

1. Educational principles of effective teaching and learning are applicable to the retarded and may be utilized, for instance, from the known to unknown and from the simple to complex. Both conceptual understandings and skills might be considered. Motor development will probably proceed from gross to fine movement and from trunk movement to movement of the extremities. Methods of motivation may be basic to any activity program: conventional methods of verbal praise and acceptance praise, based on improved performance and operant conditioning. The instructor's enthusiasm and participation appear to be the key to pupil enthusiasm and participation.

2. A maximum number of stimuli may be apparent in teaching a basic movement skill. It might be doubtful that the entire range of stimuli would be practical, but those which can contribute successfully to understanding and performance on a given level are:

a. Kinesthetic: The guiding of body parts through desired movement to result, hopefully, in a proper response.

b. Tactile: The use of touch to relate more effectively to the child what part of the body is to be used. This may be an effective means of reinforcing other stimuli.

c. Visual and verbal instruction: An awareness of the language understanding level of the child is necessary. Sometimes a concept is understood but is eclipsed by unfamiliar terminology. For instance, a child may not comprehend the term "every other" but may comprehend the synonymous phrase "every second."

d. Abstract: The use of signals, signs, and words which must be received and interpreted prior to reaction by the student.

3. Games and activities may be selected on the basis of their recreative value as well as physical, social, or mental values.

4. Select games which involve a maximum of activity for players simultaneously. Relay games may have fewer numbers (4-8). Children lose interest if they wait too long for a turn.

5. If discipline becomes a problem, it may be that the game is too difficult to understand or that it requires too much skill, too many rules, and/or too many verbal instructions.

6. If there is no interest in the activity, do not insist that it be played.

7. Change the activity when the interest is at its peak.

8. Attempt to select games which are within the skill range of the students.

9. Practice giving only a few rules to start the game, introducing new rules in the actual playing situation.

10. Teach rules that may be modified, but not changed.

11. In teaching games, the instructor should stand so that she will always be in the view of all students.

12. Do not insult the student's chronological age.

13. A few simple and positive signals or commands will likely be beneficial for all students (clapping hands, the whistle, etc.).

14. Be attuned to laughter and excitement. These are very good measurements of enjoyment.

15. Be aware that problems are not always what they most obviously seem. A student's inability to catch a ball may be due to visual problems rather than to lack of coordination or fear of being hit.

16. Allow students to choose activities occasionally.

17. In programing, the instructor must remember not to

plan activities based on his own interest and abilities or the interest and abilities of normal students of comparable age.

18. A variety of activities should be planned for vigorous physical activity daily.

19. The instructor might guard against working on more than one aspect of a skill at a time, which, in turn, will permit the student to place all of his mental efforts on performing that one act. He will be more apt to experience success and less likely to become confused and fail.

20. The instructor must select activities on the basis of student ability, level of proficiency, personal needs, mental age, background, and previous experience. This may help give valuable clues and provide greater challenge than had been expected.

21. It is important that the instructor have an accurate and visual image of the desired skill. This might be transmitted to the learner through demonstration and appropriate audio-visual aids, bringing into play as many senses as possible.

It may be wise for the physical educator not to be reluctant to "learn from the pupil" and to adjust his or her teaching techniques to those methods which seem best to get the desired job done under the circumstances.

## THE JUNIOR HIGH SCHOOL

Overview

Physical activities at the junior high school level may be a part of an orderly arranged sequence of teaching which will assist girls coming from the elementary program in physical activities to a more departmentalized teaching. The program at this level probably should have a broad base if it is to contribute to the developmental tasks of these young people. One would likely build on the skills learned at the elementary level by providing opportunities for more highly organized activities. It would be good for girls to experience membership on class teams.

Many opportunities may be provided for participation in team and individual sports. Students are given the opportunity to learn more difficult skills in dancing, sports, and physical fitness activities. These activities may provide opportunity in leadership experience. Participation in physical activities geared to the needs and interests of the junior high girl may provide her with experience needed to help bring about wholesome insight concerning the growth and development of the body, as well as establishing and promoting good personal habits of cleanliness and grooming.



The physical educator has the opportunity to give guidance to educable mentally retarded girls on daily problems in social adjustment, health, and safety because of the closeness that is brought about through the many physical activities. Many opportunities at the junior high level may arise for the physical educator to observe the mentally retarded as they interact with one another in the locker room and on the playing field because learning to live harmoniously with others is an important aspect of everyday living.

It appears that in this period in life all girls seem to become more aware of and interested in the opposite sex. Many activities are provided for co-educational participation in sports and dancing. The junior high school period is looked on as one of exploring, creating new ideas and interests, developing skills, and having the opportunity to try new things. Participation in physical activities contributes to this learning.

#### General Objectives

General objectives of physical activities for educable mentally retarded girls in the junior high school are:

1. To provide a multitude of experiences for all kinds of emotional outlets and dramatic interest.

2. To offer group and leadership opportunities.
3. To develop habits of fair play and good sportsmanship.
4. To develop creative individuals who can express their ideas through creative body movements.
5. To develop physical skills of balance and body coordination.
6. To develop interest and enjoyment in fundamental skills used in team and individual sports.
7. To learn to play safely, thereby developing health precautions and health habits.
8. To foster satisfactory progress toward achievement of specific skills appropriate to the age group.
9. To broaden interest in physical activities by teaching a variety of games, dances, and stunts.
10. To assist in the socialization process.

#### Characteristics, Needs, and Program Implications

The period of adolescence is generally considered to extend from about the twelfth to the twentieth year and is characterized by continuous and gradual physical, social, emotional, mental, and learning changes. A wise selection of activities, instructional materials, and professional leadership

will assure desirable outcomes when the child remains the central point of reference. This proviso demands that the instructor recognize the physical, mental, social, and emotional signs of growth and development in girls.

Significant characteristics may be reflected by each pupil's appearance (physical), feelings (emotional), and actions (social). Information concerning these characteristics and mental characteristics for age groups 12 through 15 is outlined in Table 2.

Table 2

Characteristics, Needs, and Program Implications of  
Educable Mentally Retarded Girls  
on Junior High Level

Characteristic	Need	Program Implication
<u>Physical</u>		
Usually rapid rate of growth. Lateral type matures earlier than linear type.	Careful supervision so students may choose activities proportionate to their strength and appropriate to their development.	Participation in vigorous activities in games, rhythms, self-testing, and aquatic experiences.
Usually strong individuals who differ widely in physical maturity and temperament.	Skill essential for successful participation. Guidance to gain proficiency in skills.	Conditioning activities in running and self-testing.

Table 2 (continued)

Characteristic	Need	Program Implication
<p>Lateral type child may display overweight; usually has slow movement and placidity.</p> <p>Linear type student may display drooping posture, fatigue, and alternating alertness and disinterest.</p>	<p>Preparation for students reaching literate capacity who may be able to gain chief satisfactions from muscular activities.</p>	<p>Conditioning exercises at beginning or conclusion of instructional period.</p>
<p>Rapid muscular growth. May have poor control of body framework and muscular development out of proportion to rate of growth.</p>	<p>To develop body grace and better posture.</p>	<p>Wide variety of vigorous activities that stress efficient body use and care.</p>
<p>Keen competition. Respect for good sportsmanship. Self-consciousness in unskilled child about undertaking new activities.</p>	<p>Games of increased organization (softball, kickball, etc.).</p>	<p>Activities that include both gross and refined movements.</p>
<p>Improving posture. Students who have participated in rhythmic activities display better grace and control.</p>	<p>To develop ability to move from gross to refined movement; to develop success in coordinated movement.</p>	<p>Activities that include refined and gross movements.</p>
<p>Awkward age ending.</p>	<p>Practice to improve coordinated movements.</p>	<p>Activities that emphasize basic movement pattern and fundamental motor skills.</p>

Table 2 (continued)

Characteristic	Need	Program Implication
Immaturity of skeleton continues.	To develop strength.	Posture exercises.
<u>Social and Emotional</u>		
Prestige more important than adult approval.	Mature programs; more opportunities for many types of social contact.	Activities that have high social and carry-over values.
Consciousness of opposite sex.	Social dancing.	Co-educational activities.
Appreciation of personal appearance.	Opportunity to improve personal appearance, which, in turn, will help to remedy habitual postural defects.	Activities that emphasize body mechanics and physical fitness; opportunity for selecting activities.
<u>Mental</u>		
Lack of ability to concentrate and retain.	Specific skills broken down into small, sequential steps.	Readiness activities (to help retardates develop background, experience, and foundation needed to participate in sports).
Difficulty in following directions.	Simple and easy-to-understand rules; uncomplicated scoring procedures; only those rules essential to game and safety.	
Varying interest span.	Very active game followed by quiet game (to bring physiological and emotional functions back to normal).	Skill instruction in a variety of regular and modified sport activities so that all students will participate.

Table 2 (continued)

Characteristic	Need	Program Implication
Tendency to lose interest in remote goals.	Variety of activities geared to short attention span and interest.	Extensive use of relays, drills, games of low organization, and lead-up activities; appropriate modification of actual sports and games to assist in development of specific sport skills.
Greater response to concrete and practical as opposed to abstract.	Activities geared to obtain specific results.	
Lack of understanding of team play.	Much time devoted to skill drills of selected activities.	Many lead-up games; fundamental aspects of team games.
Lack of initiative.		
Inability to experiment and innovate with activities.		

Adapted from Frank J. Hayden, Physical Fitness for the Mentally Retarded (Toronto, Canada: Metropolitan Toronto Association for Retarded Children, 1964), pp. 43-45.

It must be thoroughly understood that growth and change are continuous, with a great deal of overlapping in both growth gradients and behavior characteristics. Fortunately, within a general framework it is possible to predict characteristics and needs and to offer possible solutions for meeting needs. Thus Table 2 may be of great value to the teacher who uses it as a point of reference in program planning the physical activities for educable mentally retarded girls on the junior high level.

### Scope and Sequence

The literature points out that skills from virtually all sports--team, dual, and individual--have been taught with some degree of success to the retarded, some of whom have reached a high level of proficiency in a number of sports. There are rhythmic and dance activities that may be challenging, satisfying, and enjoyable for mentally retarded girls of all ages and at all levels of functional ability. Participation in square dancing or social dancing may give many retarded girls a feeling of normality that may not be enjoyed in other situations or through other activities.

The instructor must make the necessary adaptations to meet the needs of individual students. Therefore, programs of physical activities in the junior high grades (seventh through ninth) should be broad and varied (see Table 2, pages 48-51). Activities included in this report were focused on:

1. Basic movement patterns, fundamental motor skills, development of self-awareness, body concept, and self-image.
2. Activities in which patterns, movements, and skills developed earlier in life are applied to increasingly complex situations.
3. Adapted and lead-up activities with patterns, movements, and skills that are used to prepare girls for

participation in sports, games, and higher organized activities.

4. Team and individual sports and recreational activities.

5. Dancing, rhythms, and self-testing.

Since the idea of progression seems to be an important factor in modern programs of physical activities, a sample scope and sequence table by grades based upon the maturity of the learner and the level of experience is included on the basic fundamentals of major sports, dance, rhythms, and self-testing activities (Table 3). A glossary for the various sports, rhythms, and dances is presented in Appendix B for reference.

Table 3

Scope and Sequence of Suggested Physical Activities for Educable Mentally Retarded Girls on Junior High Level

Activity	Grade			Activity	Grade		
	7	8	9		7	8	9
Aerial Darts							
Advanced skills (smash; drop)		X		Serves (fore- & backhand)	X		
Grip	X			Stance	X		
Review of 7th grade skills		X		Strokes	X		
Badminton							
Equipment			X	Drives (fore- & backhand)			X
General techniques (fore- & backhand grips; wrist action			X	Net shot			X
				The game			X



Table 3 (continued)

Activity	Grade			Activity	Grade		
	7	8	9		7	8	9
Basketball							
Blocking			X	One-hand bounce	X	X	
Catching and passing	X	X		One-hand underhand	X	X	
Charging	X	X	X	Personal contact	X	X	X
Chest pass	X	X		Rear pivot			X
Dribbling with two-step stop	X	X		Rebounds	X	X	X
Feint			X	Referee signals			X
Foul shooting (free throw)	X	X		Review of 7th & 8th grade skills			X
Fouls (recognizing)	X	X		Rules of game	X	X	X
Front pivot	X	X	X	Scoring			X
Guarding opponent:				Tie-ball	X	X	
with ball	X	X		Two-hand bounce	X	X	
without ball	X	X		Two-hand overhead	X	X	
Jump ball	X	X		Two-hand underhand	X	X	
Lay-up shots	X	X		Violations	X	X	
Officiating			X	Zone			X
Folk Rhythms							
Ace of Diamonds	X			Jesse Polka	X	X	
Basic Schottische Step;				La Cucaracha			X
Step-Hop Polka; Two-Step	X	X		Lady of the Lake			X
Bleking		X		Linsthu		X	
Chimes of Dunkirk	X			Norwegian Mountain March		X	
Come, Let Us Be Joyful	X			Patticake Polka	X	X	
Crested Hen	X			Paw Paw Patch	X		
English Country Dance	X			Ribbon Dance	X		
Fireman's Dance	X			Rifleman		X	
Glow-Worm			X	Seven Steps	X		
Green Sleeves	X			Sher			X
Gustaf's Skoal	X			Sicilian Tarantella		X	
Horrah		X		Ten Pretty Girls	X		
Irish Lilt			X	3-Man Schottische		X	X
Irish Washerwoman			X	Virginia Reel	X		
Italian Quadrille			X	Windmueller			X

Table 3 (continued)

Activity	Grade			Activity	Grade		
	7	8	9		7	8	9
Gymnastics							
Rhythmic exercises with:				Balance beam	X	X	X
balls		X	X	Beginners balance-beam			
hand apparatus	X	X	X	routine			X
hoops		X		Floor exercises	X	X	X
ropes	X	X					
Hockey							
Bully			X	Push pass			X
Dribble and speed			X	Roll-in			X
Dribbling			X	Stick carrying position			X
Drive			X	Stick stop			X
Free hit			X	Straight line for accu-			
Goal keeping			X	racy and speed			X
Grip			X	Straight tackle			X
Modern Dances							
Axial movements (swings; sustained; percussive)			X	Observation of others			X
Combinations			X	Posture exercises			X
Creative exercises and opportunity to create			X	Social dances:			
Expression through move- ment, walk, run, leap, jump, skip, hop, slide, and gallop			X	Cha Cha	X	X	
				Congo	X	X	
				Rhumba			X
				Samba			X
				Tango	X	X	
			X	Waltz	X	X	
Movement experience through bounce			X	Themes (famous movies, song hits, etc.)			X
New events			X	Walk, Turns, Falls			X

Table 3 (continued)

Activity	Grade			Activity	Grade		
	7	8	9		7	8	9
Self-Testing							
Airplane rock	X			Elephant walk	X	X	
Alligators	X	X		Forearm walk	X	X	
Back bend	X	X	X	Forward roll	X	X	X
Back rocker	X	X		Front walk over	X	X	X
Back roll with snapdown	X			Head stand	X	X	X
Back walk over	X	X	X	Inch worm	X	X	
Backward roll	X	X	X	Kangaroos	X	X	
Bear walk	X			Knee walk	X	X	
Beginning hand stand	X	X		Leap frog	X	X	
Bicycle	X	X	X	Pyramids	X	X	X
Calisthenics	X	X	X	Shoulder walk			X
Cartwheel	X	X	X	Thigh stand	X	X	X
Centipede	X	X		Tip up	X	X	X
Crab walk	X	X		Turk stand	X	X	X
Cross leg sit	X	X	X	Walrus walk	X	X	X
Double forward roll	X	X		Wheelbarrow	X	X	
Double rocker	X	X	X				
Softball							
Backing up and covering		X		Review of 7th & 8th grade			
Base running		X	X	skills			X
Base running and lead-off			X	Sacrifices (bunts; flies)			X
Batting	X	X	X	Scoring			X
Batting order		X	X	Simple umpire techniques		X	
Elementary base run	X			Team play			X
Fielding	X	X	X	Throwing to bases	X	X	X
Pitching	X	X	X	Umpire techniques			X
Position play		X	X	Use of various skills			X

Table 3 (continued)

Activity	Grade			Activity	Grade		
	7	8	9		7	8	9
Square Dances							
Around the Outside		X		Honolulu Baby	X		
Do-Si-Do and Swing	X			Little Brown Jug		X	
Duck for the Oyster		X		Oh, Suzanna	X		
Five-Foot-Two Mixer	X	X		Rochester Schottische		X	X
Forward Up 4, 6, and 8		X		Two-Head Ladies Cross			
Grand Square	X	X	X	Over		X	
Heads and Sides	X			Yankee Doodle		X	
Volleyball							
Blocking			X	Receiving & passing ball to teammate			X
Elementary scoring	X			Rotation of 8 players	X		
Official scoring		X	X	Rotation of 6 players		X	X
One hit		X	X	Set up for teams		X	X
Overhand serve		X	X	Set up to self	X		
Overhead pass to forward			X	Two-hand hits over net	X		
Position of defensive player			X	Under- & overhand volley	X	X	X
Positioning			X	Underhand serve	X		

## SPORTS AND DANCES OR RHYTHMS

Team Sports

. . . all team sports, with appropriate modifications and adaptations, have been used with some degree of success with the retarded. . . . [Examples are]: basketball, hockey (field, plastic), lacrosse,<sup>4</sup> line games, soccer, softball, speedball, and volleyball.<sup>4</sup>

<sup>4</sup>Council for Exceptional Children and American Association for Health, Physical Education, and Recreation, Recreation

### Dual Sports

A great many . . . activities in which two participants engage can be classified as carry-over activities. The individual can participate in dual activities as lifelong leisure-time pursuits. . . . [Examples are:] aerial tennis, badminton (singles, doubles), box hockey, deck tennis, horseshoes, paddle handball, paddle tennis, shuffleboard, table tennis, and tennis.<sup>5</sup>

### Individual Sports

There are some activities in which the individual may participate by himself or with others. These activities are usually quite adaptable, and they have carry-over value as lifetime pursuits. [Examples are:] archery, baton twirling, field activities, horseback riding, ice skating, swimming, track and field events, and walking.<sup>6</sup>

### Dances or Rhythms

[Examples of] rhythmic and dance activities are:

Basic (fundamental) rhythms	Marching
Children's dance	Mimetics
Creative rhythms and movement	Modern dance
Costume dance	Rhythmical games
Eurhythmics	Rope jumping
Folk dance	Singing games
Grand marches	Social dance
Gymnastic dance	Square dance <sup>7</sup>

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and Physical Activity for the Mentally Retarded (Washington: American Association for Health, Physical Education, and Recreation, 1966), p. 58.

<sup>5</sup>Ibid., p. 58.

<sup>6</sup>Ibid., p. 59.

<sup>7</sup>Ibid., p. 54.

### Stunts and Tumbling

Because their individual nature offers a challenge to every individual, stunts, tumbling, and apparatus activities can be quite effective with the retarded. General types . . . appropriate . . . include [for example]:

Activities with improvised apparatus	Parallel bar, even and uneven
Balance beam, high and low	Pyramids
Balance board activities	Rope climbing, single rope and multiple
Balances, individual & dual	Self-testing activities
Barrel activities	Side horse
Free exercise	Springboard
Hoop activities	Stall bars
Horizontal bar, high and low	Stick activities
Horizontal ladder	Still rings
Isometric activities	Stunts, single and dual
Jump rope (Chinese; singles; dual; long)	Tire activities
Jungle gym	Trampoline
Medicine ball activities	Tumbling, singles & dual
Mini-tramp	Turning bar
Obstacle course (indoor; outdoor; improvised)	Vaulting box <sup>8</sup>

### Track and Field

Track and field activities appropriate for educable mentally retarded girls on the junior high level are:

Running Events: Dash (50, 75, and 100 yards)  
Distance (100 yards and 220 pursuit)  
Relays

Field Events: Broad jump  
Softball throw for distance<sup>9</sup>

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<sup>8</sup>Ibid., p. 56.

<sup>9</sup>Division for Girls and Women's Sports, Track and Field

### Conditioning Exercises

To help develop poise and good posture and to maintain good body mechanics, the following exercises are recommended:

Arm circling (extended; passive; circumduction)	Push-ups with knees: extended
Bicycling	flexed
Bouncing	Relaxed fall and roll
Deep knee bend with: leg stretching	Running
toe touching	Scissors kick
Flexion and extension of: ankles	Single arm fling on hand and knees
neck	Sit-ups with: partners
spine (sitting on heels)	trunk twist
Flutter kick	Skipping sequence
Folding and unfolding	Squat thrust
Foot circling	Sustained deep knee bend
Hip:	Swan with knees: extended
bouncing	flexed
rocking (knees touching)	Toe touching
rolling	Trunk: bouncing from hips
Jumping Jack	stretching with toe touching
Leg lifting and lowering: alternating	twisting with knee touching to side
double	Twist and stretch
single	Walking <sup>10</sup>
Neck flexibility with rota- tion of head	
Pedaling	

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Guide, January 1968 - January 1970 (Washington: American Association for Health, Physical Education, and Recreation, 1968), pp. 111 & 113.

<sup>10</sup> Anne Schley Duggan, Mary Ella Montague, and Abbie Rutledge, Conditioning Exercises for Girls and Women (New York: A. S. Barnes and Company, 1945), pp. 24-73.

## EVALUATION

Evaluation in physical activities involves both objectives and achievement--expectation and performance. If the function of physical activities is to prepare each student to meet the usual problems of living with a degree of success equal to ability rather than to encourage skill development superior to that of others, evaluation must be made on an individual basis. The instructor may consider objectives for each student in terms of what that student can attain, and achievement may be appraised in relation to those specific objectives.

A student's achievement in physical activities may be expressed by the knowledge displayed, the skills with which performed, or the attitudes expressed. Each of these may be measured with reasonable accuracy in a number of different ways. Knowledge of how to play a game may be measured by an oral or written test, by observing performance in the game, and by observing what the educable mentally retarded girl says as she participates in a discussion of the game. Attitude about the game and every phase of her behavior as a player, official, or spectator are indications of knowledge and understanding of the game. All of these facets are important to the teacher who is doing all she can to make participation in physical activities



as profitable as possible for each student.

Performance tests, information tests, checklists, and rating sheets may be used in measuring student achievement. Standards by which test results will be interpreted may be presented as a scale that ranges from acceptable performance to a point sufficiently high to include the most outstanding performance likely to be measured. In setting the standards, the teacher should be certain each standard is within the ability of all students to attain in some measure.

The instructor evaluating student achievement may:

1. List knowledge, skills, and attitudes essential to attainment of each objective of physical activities.
2. Explain in detail each type of performance to be displayed as the enumerated knowledge, skills, and attitudes are acquired.
3. Discuss with each educable mentally retarded girl her health status, motor ability, and needs.
4. Discuss with each student the objectives she is most capable of attaining and has the greatest need to attain.
5. Adjust objectives so they will have realistic meaning for the students.
6. Find ways to evaluate each student's achievement in relation to objectives set for that student.

7. Choose individual tests, checklists, and rating scales for measuring performance that indicate a student is attaining an objective.

8. Work out ways of informing each educable mentally retarded of her achievement and of helping her to determine how she may successfully attain the objectives with greatest ease.

A student's proficiency in using skills involved in participating in particular physical education activities may be measured in various ways. In selecting a test to measure proficiency, care should be taken to make certain the test chosen is designed to measure student ability to use the particular skill under consideration. Administering the test at both beginning and end of the course is an excellent means of determining class progression and provides a basis for evaluating individual skill. Skill tests for use in a program of physical activities for educable mentally retarded girls should be reliable, objective, valid, and not overly time-consuming. Reliance on rating sheets and subjective opinion may often be better than the use of long and tedious skill tests.

Students might be helped to appraise their growth in self-direction, ability to follow, attitudes toward daily tasks, getting along with classmates, leadership ability, and responsibility. The important procedure for this evaluation is the

analyzing of appropriate skills and techniques by both teacher and student before the teacher makes the appraisal. Evaluation is more likely to assume its role of redirection in the learning situation if all have an opportunity to share in the various steps involved.

Written true-false, multiple choice, completion, and essay tests may be needed to determine a student's understanding of principles, rules, and sociological and scientific background of physical activities. These tests may cover knowledge of rules, principles of movement, strategy, courtesy, safety, and officiating. The tests may be short, simple, and objective and should consume only a small portion of class time. It may prove beneficial if they are of such a nature that they can be corrected either in class or quickly by the teacher and discussed in class the following day.

Samples of physical education tests are presented in Appendix C.

## CHAPTER IV

### SUMMARY

A century ago Americans across the nation were eagerly engaged in building schools for the retarded. Educators at that time pointed out that the problem of mental retardation was mainly educational in character. Therefore, retarded children were brought to new schools for residence and training in the hope they would be equipped for return to their respective communities as self-sufficient persons. Notions about the training were quite specific and were simply oriented toward physical and sensory processes in consonance with ideas about the nature of intelligence held at that time. There was, for example, the idea that since the eyes are the "windows of the soul," to teach effectively the finer sensory discriminations would build the foundation for complex forms of discrimination and judgment. Unfortunately, the literature states that such ideas have proved to be faulty. Claims of leading advocates were exaggerated. Hopes and great movements were crushed by failure. The schools were turned into colonies for the permanent custody of the mentally retarded, and professionals in

virtually all fields deserted these individuals.

Now events have taken a turn. A revival of interest and a sharp upswing in program development are in evidence. Renewal might have come earlier had it not been for the cataclysms depression, World War II, and Korean Conflict. However, exactly what accounts for the current favorable change is difficult to know. Physical education continues to be an unquestioned part of the "total" educational program for the mentally retarded. Many of today's school systems are attempting to do more in trying to meet the needs of retarded students. Physical educators believe physical activity has an important role in the education of mentally retarded individuals. Certainly the evidence is becoming increasingly clear that physical activities are important for all persons regardless of age, sex, or level of intellect.

The drive for activity is especially strong in the young and is felt by all youth throughout their growing years. This basic need is no different for those who are mentally retarded. They enjoy opportunities that make them socially acceptable in the home, at school, and in other groups in which they find themselves. It is especially important for retarded girls on the junior high level to experience success, to be loved, and to feel secure. The physical educator's program of activities has

much to offer through instruction which can be and, in fact, is related to all necessary social skills. If a child does not have skills sufficient to participate with others of the group on a satisfactory basis, he is likely to become a misfit and to develop social and emotional problems of a permanent nature. It is, therefore, the duty of physical education teachers to help prepare individuals to develop the basic fundamental skills in recreational activities of a physical nature. It appears to be highly important that the mastery of skills begin while the individual is quite young because the chances of optimum development diminish as a person progresses through elementary and secondary levels. Leaders need to understand that these children require more patience, guidance, help, and encouragement to achieve even the most limited skills than do normal children.

In adapting a physical activities program, "mental age" is a prime consideration. Therefore, while considering the types of activities girls on the junior high level enjoy, all steps must be simplified so they will be readily understood by the educable mentally retarded. Physical activities can bridge the gap in helping students find self-awareness. Through adapted learning experiences and a variety of teaching methods, experience has demonstrated that physical educators have an important role in teaching young people the art of living in

today's society. Through the various skills and learning experiences in physical activities, educable mentally retarded girls may be guided in seeing themselves as people of worth who have positive contributions to make to society.

Today, since this nation is in the midst of an educational revolution as well as an industrial, scientific, and technological revolution, there is presently much concern about the educational needs of the culturally and economically deprived youth as well as the educationally disadvantaged. Hopefully, there are many innovations in physical education that may have some promise for the teaching and learning of the educable mentally retarded.

It is hoped the measure of goodness in education is not in the amount of material covered but in how well the material will equip students to go on learning in the future. If the major role of American education, then, is that of providing healthy, self-supporting, socially conscious, morally upright, rationally behaving young men and women who, as productive citizens, can help to improve the American way of life, the physical educator, through programs of physical activities, can lead the way.

## APPENDIXES



## APPENDIX A: PROFESSIONAL BIBLIOGRAPHY

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## APPENDIX B: GLOSSARY

### BADMINTON

Alley--used in doubles play; strips 1-1/2 feet wide between 2 side boundary lines.

Backcourt--area of court near back boundary line.

Change ends--used in match play at beginning of each new game. In the third game of the match, players change ends when the leading score is 1 point beyond the half-way mark. Example: in a 15-point game, change ends at 8 points.

Clear--defensive stroke hit high and deep over opponent's head.

Doubles game--game played with 2 players on each side of net.

Drop shot--carefully hit stroke that falls into opponent's forecourt.

Fault--an illegal hit or serve or a shuttle that falls short, hits into the net, or lands out of bounds. A fault made by a player of the "in" side puts the server out; if made by the "out" side, it counts 1 point to the "in" side.

Foot fault--standing on or over the serve court boundary line by either the server or the receiver.

Forecourt--area of court close to net.

Hairpin stroke--a shuttle just barely crossing over net and falling close to other side.

"In" side--side which is serving.

Inning--period in which both teams have had 1 complete turn at serving.



Let--term used to denote a game stopped for legitimate reasons or to replay a point.

Long serve--high underhand serve to deep part of court.

Love all--game score at beginning of game and after "setting."

Net shot--stroke executed near net in which shuttle descends sharply as it crosses net.

"Out" side--side receiving the serve.

Ready position--ideal court spot for awaiting opponent's return; usually at mid-court near center line; player, knees bent, faces front and has racket ready in front of her.

Rough or smooth--the 2 sides of the racket. Rough side has knots on trimming strings; other side is smooth. Rough or smooth is usually for choice of side of court or service at beginning of match.

Singles game--game played with 1 player on each side of net.

Smash--offensive stroke hit sharply downward toward floor of opponent's court.

Wood shot--untrue hit in which bird hits frame of racket. It is legal and should be played.

## BASKETBALL

Air dribble--play in which player, having given impetus to ball once by throwing or tapping it, touches it again before it has touched floor or has been touched by another player.

Back court--that half of court containing opponent's basket.

Dead ball--ball temporarily out of play. (Time is not out unless so signaled by an official.)

Defaulted game--scheduled game is considered defaulted when:

- a. Team fails
  - (1) To appear.

- (2) To be ready to play within 15 minutes after time set to begin.
  - (3) To be ready for play within 1 minute at beginning of second half or after time-out has been taken for any reason.
  - (4) To play after being instructed to do so by official in charge of game.
  - (5) To have 6 players to start play and at least 5 to continue play.
- b. Coach or team follower refuses to leave gymnasium after being instructed to do so by an official.

Discontinued game--termination because of persistent unsportsmanlike conduct on part of spectators or unforeseen emergencies.

Double violation--violations called simultaneously on players of both teams.

Dribble--play in which player gives impetus to ball one or more times, causing it to rebound from floor, and touches or regains possession of it. First impetus may be given with either or both hands by throwing, batting, or fumbling; subsequent contacts must be given with only one hand. Dribble ends when player touches ball with both hands, permits ball to come to rest in one or both hands, or directs ball to another player.

Front court--that half of court containing team's own basket.

Goal--ball that passes through basket from above, impetus having been legally given by any player.

Jump ball--method of putting ball into play by tossing it up between 2 opponents in one of three restraining circles.

Offensive player--player whose team has possession of ball.

Roving player--player who crosses division line into opposite court to become her team's third or fourth player in that court.

Traveling--illegal progression in any direction while retaining possession of ball in bounds.

## FIELD HOCKEY

Bully--two opposing center forwards alternately touch ground and each other's stick 3 times before hitting ball.

Free hit--hit given a team when its opponents have committed a foul any place on field except within striking circles by defense.

Sticks--raising stick above shoulder level.

Lofting the ball--hitting ball and causing it to rise dangerously high into air.

Obstruction--run between or interject self between opponent and ball or use body to prevent opponent from playing the ball.

Offside--player ahead of ball in opponent's territory, with less than 3 opponents between player and goal.

Roll in--occurs when ball goes over side line on either side of field.

Corners--long corners and penalty corners are always given the offensive team and occur when defense:

- a. Deliberately hits ball over goal line, not between goal posts (penalty).
- b. Behind 25-yard line, accidentally hits ball over goal line, not between goal posts (long).
- c. Fouls inside striking circle (penalty).

## FOLK AND SQUARE DANCE

Allemande left--corners or opposites join left hands and turn in place.

Allemande right--same as allemande left, but with right hand joined with lady on right.

Cast off--in contras, movement in which active persons move down one place; or in which entire line follows head gent and head lady leading to the foot, head couple forming an arch

and all others returning to place.

Do pas so (Western form)--two couples circle to left; two ladies cross over, join left hands, turn  $3/4$  round; two gents move back-to-back, right shoulder leading, turn opposite ladies with right hands, return to partners, left shoulder leading, take left hands with partners and turn lady to place.

Do si do--two dancers pass each other, passing right shoulders, move back-to-back around each other, and move backward to place; if repeated, pass left shoulders.

Elbow swing--hook elbows with partner, turn in place.

Grand right and left--in circle, partners face each other, taking right hands; all progress around circle, taking right and left hands alternately until partners are met on opposite side.

Grapevine--step to side on left foot, step right foot behind left; step to side on left foot and step right foot in front of left foot.

Promenade--Southern Style/side-by-side with partner, lady's right hand in gent's right hand, which is on lady's right shoulder, left hands held in front (or, hands crossed in front); New England Style/side-by-side with partner, gent's right arm around lady's waist, holding her right hand at her hip, left hands in front.

Sashay--slide step (step and draw) in dance position with partner or alone.

Swing--take partner in dance position, turn in place; use walking or buzz step. Buzz step/partners keep right feet together, weight on right, pivot, pushing with left foot.

## SOC CER

Corner-Kick--awarded attacking team when ball passes over goal line except between goal posts and is last touched by a defender.

Dribbling--advancing the ball by a series of short kicks.

Free kick--awarded offended team for fouls occurring outside penalty area.

Goal kick--given defensive team if ball goes over goal line other than between goal posts and is last touched by offensive player.

Heading--allowing ball to come in contact with the head.

Kick-in--putting ball in play after it is out-of-bounds.

Passing--kicking ball to a teammate.

Penalty kick--awarded offended team at penalty kick mark if defensive player fouls in his own penalty area.

Roll-in--putting ball in play after a foul by both teams.

Tackling--taking ball from opponent by use of feet.

Trapping--stopping and controlling a moving ball.

Volleying--kicking ball while it is in air.

## SOFTBALL

Appeal play--play resulting from infringement of certain rules upon which umpire does not make a decision until requested to do so by a player.

Ball--legally pitched ball which is not in strike zone.

Blocked ball--thrown ball touched by a person not engaged in game or touched by any object not a part of official equipment or playing area.

Batting order--order in which a team must come to bat.

Bunt--method of hitting a pitched ball.

Dead ball--ball which is not in play.

Fair hit--batted ball that settles in fair territory in infield or first touches fair territory in outfield.

Fair territory--playing area within foul lines.

Fly ball--any ball batted into air.

Force out--an out made when a baserunner loses his right to the base he occupied because a batter becomes a baserunner.

Foul ball--batted ball that settles in foul territory in infield or first touches foul territory in outfield.

Foul tip--batted ball that goes directly into catcher's hands and is legally caught.

Infield--that portion of the field included within the diamond made by the base lines.

Outfield--that part of field outside diamond formed by base lines and within foul lines beyond first and third bases.

Overthrow--ball thrown from one fielder to another which goes into foul territory on a play at first, second, or third base that was intended to retire a runner who had not reached base (or, was off-base).

Strike zone--space over home plate that is between batter's armpits and top of her knees.

Walk--four balls to a batter that advance her to first base.

## VOLLEYBALL

Actual playing time--time which elapses from contact on service to point at which ball is dead; accumulation of 8 minutes of actual playing time constitutes a game.

Blocking--defensive play in which player(s) attempts to intercept ball close to net at position where opponent attempts to return ball across net.

Body foul--ball touches any part of player below waist.

Dead ball--ball temporarily out of play.

Defaulted game--occurs when a team has fewer than 6 players or when a team refuses to play after receiving instructions to do so; score of defaulted game is 2-0.

Foot fault--server steps on or over end line at moment she contacts ball.

Illegal hit--ball visibly comes to rest momentarily on any part of body above and including the waist.

Legal hit--ball given immediate impetus with any part of body above and including the waist.

Legal serve--putting ball into play over net into opponent's court by a player positioned within serving area.

Match--contest between two teams in which team first winning 2 games is declared winner.

Opponents' court--playing area occupied by a team's opponents.

Out of bounds--any surface of object outside the court except a player in the act of playing the ball.

Own court--playing area occupied by one's own team.

Point--scoring unit awarded serving team for infringement of a rule by receiving team.

Rotation--act of shifting positions in a clockwise direction in accordance with court diagram.

Serving order--sequence of service of a team's players which coincides with official method of rotation.

Side-Out--decision following infringement of a rule by the serving team, at which time service is awarded to opposing team.

Spiked ball--ball other than a served ball that is forcibly hit at a downward angle, from a height greater than top of net.

Term of service--server continues to serve until side-out is

called.

Time-Out--temporary suspension of play for rest, substitution,  
or injury.

Violation--infringement of rule(s) that is sometimes referred to  
as a foul.



## APPENDIX C: SAMPLES OF PHYSICAL EDUCATION TESTS

### PHYSICAL FITNESS TESTS

#### Flexed Arm Hang

##### Equipment

A horizontal bar approximately 1-1/2 inches in diameter is preferred. A doorway gym bar can be used. A stopwatch is needed.

##### Description

The height of the bar should be adjusted so it is approximately equal to the pupil's standing height. The pupil should use an overhand grasp. With the assistance of two spotters, one in front and one in back of pupil, the pupil raises his body off the floor to a position where the chin is above but not touching the bar, the elbows are flexed, and the chest is close to the bar. It may be necessary to use a low stool to place the pupil in the proper position. The pupil holds this position as long as possible. The pupil should be advised to pull the chest toward the bar and keep the elbows close to the sides.

The pupil should be given every opportunity to perform this item correctly. If necessary, he should be put into the correct position to obtain the "feel" of the movement.

##### Rules

1. The stopwatch is started as soon as the pupil takes the unassisted holding position.
2. The watch is stopped when (a) the pupil's chin touches the bar, (b) pupil's head tilts backwards to keep chin above the bar, or (c) pupil's chin falls below the level of the bar.

3. One trial only is given.

### Scoring

Record in seconds the length of time the subject holds the correct hanging position.

## Sit-Up

### Equipment

Gymnasium mat and watch.

### Description

The pupil lies on his back on the mat with legs extended and feet a comfortable distance apart. His hands are placed on the back of the head with the fingers interlaced and elbows wide apart. A partner holding the ankles keeps the heels in contact with the mat at all times. The pupil sits up, touching the elbow to the knee and returns to the starting position. The exercise is repeated as many times as possible in one minute.

### Rules

1. The fingers must remain in contact behind the neck throughout the exercise.
2. The knees should not be bent when sitting up but may be slightly bent when touching the elbow to the knees.
3. The back should be rounded and the head and elbows brought forward when sitting up as a "curl up."
4. When returning to the starting position, elbows should be held wide and the back must be flat on the mat before sitting up again.
5. One trial only is given.

### Scoring

One point is given for each complete movement of touching

elbow to knee. No score should be counted if the fingertips do not maintain contact behind the head, if knees are bent during the sit-up, or if the pupil pushes up off the floor from an elbow. The number of sit-ups the pupil can execute in one minute will constitute the score.

### Shuttle Run

#### Equipment

Blocks of wood (2 inches by 2 inches by 4 inches) and a stopwatch. Pupils should wear sneakers or run barefooted.

#### Description

Two parallel lines are marked on the floor 30 feet apart. Two blocks of wood are placed behind one of the lines. The pupil starts from behind the other line. On the signal "Ready? Go!" the pupil runs to the blocks, picks one up, runs back to the starting line, and places the block behind the line. He then runs back and picks up the second block, which he carries back across the starting line.

It is preferable to have two pupils running at the same time, but a stopwatch is needed for each and there must be two blocks of wood for each runner.

#### Rules

1. Allow two trials with some rest between.
2. The blocks must be placed behind the line, not dropped or thrown.

#### Scoring

The score is the elapsed time between the starting signal and the moment the pupil crosses the finish line. Record the time of the better of two trials to the nearest tenth of a second.

### Standing Broad Jump

#### Equipment

Mat, floor, or outdoor jumping pit and tape measure.

#### Description

Pupil stands with the feet several inches apart and the toes just behind the take-off line. Preparatory to jumping, the pupil swings the arms backward and bends the knees. The jump is accomplished by simultaneously extending the knees and swinging forward the arms.

#### Rules

1. Allow three trials.
2. Using a tape, measure from the take-off line to the back of the heel nearest the take-off line.
3. When the test is given indoors, it is convenient to tape measure to the floor at right angles to the take-off line and have the pupils jump along the tape. The scorer stands to the side and takes the measurement.

#### Scoring

Record the best of the three trials in feet and inches to the nearest inch.

### 50-Yard Dash

#### Equipment

A space appropriately marked for distance and a stopwatch.

#### Description

The pupil takes a position behind the starting line. The starter will use the signal "Ready? Go!" The word "go" will be accompanied by a downward sweep of the starter's arm to give a visual signal to the timer, who stands at the finish line. The pupil runs as fast as possible and crosses

the finish line. It is preferable to have two (or more) pupils run at the same time, each timed by a separate watch.

### Rules

1. One trial only is given.
2. The score is the elapsed time between the starter's signal and the instant the pupil crosses the finish line.

### Scoring

Record the elapsed time to the nearest tenth of a second.

## Softball Throw for Distance

### Equipment

Softball (12-inch), small metal or wooden stakes or other markers, and tape measure.

### Description

The test may be conducted on any large playing field (or in a large gymnasium). Two parallel lines are drawn six feet apart to form a restraining area. The pupil throws the ball from within this area (a few steps may be taken). The point where the ball lands is marked with one of the stakes. If his second or third throw is farther, move the stake accordingly so that, after three throws, the stake is set at the point of the pupil's best throw. The measurement is taken by tape from this point directly to the point of throw. If a long tape is not available, the field can be marked in concentric arcs and the measurement taken to the nearest arc, being careful that the measurement is directly in line with the landing point and the point of the throw.

### Rules

1. Only an overhand throw may be used.
2. Three throws are allowed.
3. The distance recorded is the distance measured from the

point of landing to the point of throwing.

### Scoring

Record the best of three trials to the nearest foot.

## 300-Yard Run-Walk

### Equipment

An area appropriately marked . . . and stopwatch.

### Description

Pupil uses a standing start. On the signal "Ready? Go!" the pupil starts the run. If necessary, the running may be interspersed with walking. It is preferable to have two (or more) pupils run at the same time, but a stopwatch is needed for each runner.

### Rules

1. Walking is permitted, but the object is to cover the distance in the shortest possible time.
2. The score is the elapsed time between the starting signal and the moment the pupil crosses the finish line.

### Scoring

Record the elapsed time in minutes and seconds.<sup>1</sup>

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<sup>1</sup>Special Fitness Test Manual for the Mentally Retarded  
(Washington: American Association for Health, Physical Education, and Recreation, 1968), pp. 12-24.

## SKILLS TESTS

Field Hockey

Field mark same as in a game, with the addition of a line in front of one of the goals. This line is 10 yards in front of the goal.

This is a test of running, dribbling, and passing accuracy.

The tester starts timing as soon as the student crosses the opposite goal line and stops timing as soon as the ball passes between the goal posts. The drive may be done on the line or behind the line nearest starting point. The students are allowed 3 times and the best one will be the score on the test.

Hockey: Dribble and Push Pass  
Test for Speed and Accuracy

Facilities and Equipment. A hockey goal, a striking circle marked in front of the goal, and a line drawn 25 yards in front of and parallel to the goal line. A line drawn 12 yards from the goal line and parallel to it that is also 3 yards inside the circle toward the goal. A stopwatch, a hockey ball, a hockey stick.

Test. The student places the ball on the 25-yard line at a point opposite the center of the goal and stands behind the ball. On a signal "go" she dribbles the ball into the striking circle. Before she passes the 12-yard mark she sends the ball over the goal line and between the goal posts with a push pass or flick stroke. The ball must be pushed or flicked for the goal from a point within 3 yards of the outer edge of the striking circle. The trial is not recorded if there is any back swing of the stick when the shot is made. Only the push pass or flick is allowed. Three trials are allowed. If, in a trial, the ball does not go between the goal posts or the ball is not push-passed or flicked within the specified 3-yard area, the time is not recorded.

Results Recorded. Record to the tenth of a second the shortest lapse of time from the signal "go" to the instant the ball crosses the goal line between the goal posts.

Soccer: Dribble for  
Speed and Accuracy

Equipment. Soccer ball, 5 Indian clubs, posts or bowling pins, stopwatch, whistle, tape measure.

Time. 30 seconds. Whistle is blown to start and at the end of 30 seconds.

Procedure. Ball is placed on the starting line. Clubs are placed 5 feet apart, starting at beginning point. At starting whistle the performer dribbles to the right of the first club, to the left of the second, and continues to weave between the clubs, going and coming. At the end of 30 seconds, whistle is blown and performer stops wherever he is.

Scoring. Maximum number of points is 10. Performer gets one point for each club he passes, going and coming, making a total of 10 if he crosses the finish (starting) line.

Soccer: Place Kick  
for Goal

Equipment. Regulation soccer ball, soccer goals.

Procedure. Ball is placed on a 3-foot starting line 36 feet from the goal (penalty-kick area). The performer runs and kicks. Each performer is given 3 trials and the score of the best trial is recorded.

Scoring. Maximum number of points is 10.

Soccer: Punt for  
Distance

Equipment. Soccer balls and measuring tape. Lime and marker.

Set Up. Starting line 3 feet long.

Procedure. Ball is held in performer's hand behind starting line. Performer takes 3 steps to start line and punts. Each performer is given 3 trials, and best score is recorded.



Scoring. Maximum number of points is 10.

Softball: Base Running

Facilities and Equipment. A softball diamond with distances of 60 feet between bases; a stopwatch.

Test. Student stands on home plate and faces first base. When instructor gives the signal "go" the student starts running the bases and is timed. Each student takes the test 2 times.

Results Recorded. Record the better of the times made to the nearest tenth of a second.

Softball: Throw for Distance

Facilities and Equipment. For each group of 10 students, 5 softballs; a restraining line and markers at intervals of 10 feet.

Test. Each of 5 pairs of throwers is provided with a ball. Each student must remain behind the restraining line when the throw is made, but a run of 15 feet is allowed before the throw is made. Measure each of 3 throws from the last line it passes.

Results Recorded. Record each throw, but count the best.

Volleyball: Net-Pass

Equipment. A number of properly inflated volleyballs, at least 1 for every 10 students; standard volleyball courts, 30' x 60' with taut nets 7-1/2' high at center; 2 standards, with a rope placed at height of 7-1/2'.

Markings. Chalk lines 10' from and parallel to side lines, dividing court into 3 equal strips. A chalk line 6' from and parallel to net. Each lengthwise strip may be used for test, hence 3 students could be tested simultaneously on 1 court. Standards are placed on intersection of chalk lines at side lines so that rope is 6' from and parallel to net. Opponents'

court is divided crosswise by a chalk line 15' from and parallel to net.

Test. Subject stands with his back to net in front half of 1 of the 10' wide strips (between rope and net). Tester, facing subject, stands in rear half of same strip and tosses ball over rope in such a manner that ball, if allowed to drop, would land in middle of 6' x 10' rectangle in which subject is standing. As ball is tossed over rope, subject brings his hands together, palms upward and little fingers adjacent, and bats ball back over his own head and over net so that ball will land in opponents' court.

Results Recorded. Record each of 3 net-passes, but count the best.

### Volleyball: Serving

Equipment. Regulation court, 30' x 60'; regulation net, 7-1/2' from floor; regulation balls, 10 make testing easier.

#### Special Markings:

- a. Chalk line across 5' inside and parallel to end line.
- b. Chalk line across court parallel to net, 12-1/2' from center line directly under net.
- c. Chalk line 5' inside and parallel to side lines, extending from line under net to line 5' inside end line.
- d. Chalk number in center of each of 7 resulting areas to indicate its value:
  - (1) Area 1 (nearest net in center court): value 1.
  - (2) Areas 2 (on either side of area 1): value 2.
  - (3) Area 3 (directly behind area 1): value 3.
  - (4) Areas 4 (directly behind areas 2 and on either side of area 3): value 4.
  - (5) Area 5 (entire area farthest from net): (value 5).

Test. Player stands behind end line in serving area and

gives 10 serves into target on court across net. Any legal serve is permitted. In conforming with new volleyball rules, no let serve is reserved.

### Scoring:

a. Area Score. Point value of area in which served ball lands. Ball landing on a line separating 2 areas is scored the higher value. Ball landing on side line or end line scores value of area the line bounds. Serve in which foot fault occurs scores a zero.

b. Trial Score. Sum of 10 area scores.

c. Test Score. The better of two trial scores.

### Volleyball: Set-Up

Equipment. A number of properly inflated volleyballs, at least 1 for every 10 students; standard volleyball courts, 30' x 60' with taut nets 7-1/2' high at center; 2 standards, with a rope placed at height of 7-1/2'.

Markings. Chalk lines 10' from and parallel to side lines, dividing court into 3 equal strips. A chalk line 6' from and parallel to net. Each lengthwise strip may be used for test, hence 3 students could be tested simultaneously on 1 court. Standards are placed on intersection of chalk lines at side lines so that rope is 6' from and parallel to net and testing area is 10' wide.

Test. Subject stands in rear half of a strip, facing net, rope and front half of strip between him and net. Tester stands in opponents' court, near net and rope. Subject must set up ball in such a manner that it goes over rope and lands in the 6' x 10' area between rope and net.

### Specific requirements for scoring on each trial:

a. Ball must be hit with both hands.

b. Thumbs must be adjacent when volleying ball; under-hand pass does not score.

- c. Ball cannot be held--must be clearly batted.
- d. Balls landing in designated area count 2 points.
- e. Balls touching rope or any line bounding scoring area count 1 point.
- f. Ten trials shall be allowed and scores for each trial recorded.

#### Volleyball: Volleying

Equipment. Balls; stopwatch; wall; and special court markings: (a) line 10' long marked on wall at net height, 7-1/2' from floor, and (b) line on floor, opposite wall marking, 10' long and 3' from wall.

Test. Player stands behind floor line and, with underhand movement, tosses ball to wall. When ball returns, player volleys it repeatedly against wall, above net, for 30 seconds. Ball may be set up or not, as desired; ball may be caught and restarted with a toss, as at beginning of test.

Score. Number of times ball is clearly batted (not tossed) from 3-foot line to wall above net line.

#### Basketball: Dribble, Pivot, Pass

A target 2' long and 1-1/2' wide is drawn on wall. Bottom line of target is approximately 3' from floor.

Subject, with her back to target, stands about 2' from wall and takes a limited dribble, a reverse pivot, and a chest pass to target. Ball touching lines of target is good. Five trials are given. One point is scored for each success. Maximum score is 5 points. Test is given twice, better score being recorded. If form of execution is faulty, no score is awarded.

#### Basketball: Foul Shooting

Subject takes 5 shots and scores 1 point for each shot

made. Maximum trial score is 5. Two trials are allowed, better score being recorded. If subject does not shoot in good form, no score is awarded.

Basketball: Lay Up Shot

Subject bounces ball and attempts lay up shot from positions right, center, and left of basket. If she makes all 3 goals, she scores 5 points. For making 2 shots, 3 points. For making one goal, she scores 1 point. Subject is allowed 2 trials, the better being recorded. Poor form earns no score.

Basketball: 30-Second Shooting

Examiner, on giving signal to begin shooting, starts stopwatch. Subject takes first shot from foul line and follows it and each subsequent shot to score as many goals as possible in 30 seconds. Form is not considered in scoring. After first throw, goal may be attempted from any spot on floor.

Subject is scored as follows: 5 or more goals, 5 points, 4 goals, 4 points; 3 goals, 3 points; 2 goals, 2 points; 1 goal, 1 point.

## WRITTEN TESTS

Badminton

Part I: True/False. Directions: Read each statement carefully. If the statement is entirely true, place + (plus sign) in the blank to the left. If any part of the statement is false, place 0 (zero) in the blank to the left.

- \_\_\_\_\_ 1. A defensive stroke hit high and deep over the opponent's head is known as the drop shot.
- \_\_\_\_\_ 2. The game score at the beginning of the game is called love-all.
- \_\_\_\_\_ 3. The side that is receiving the serve is known as the "in" side.

- \_\_\_ 4. The area of the court near the net is referred to as the backcourt.
- \_\_\_ 5. The first game of badminton was played in Cambridge, England, in 1873.
- \_\_\_ 6. The present game of badminton was developed in India and was known as Poona.
- \_\_\_ 7. The side which is serving is referred to as the "in" side.
- \_\_\_ 8. Any bird that lands on the line is good.
- \_\_\_ 9. The period in which both teams have had one complete turn of service is called an inning.
- \_\_\_ 10. A game played with two players on a side is known as a singles game.
- \_\_\_ 11. If the shuttle touches and passes over the net, it is a good hit and should continue to be played.
- \_\_\_ 12. It is legal for players to hit the "birdie" twice on a side before sending it back over the net.
- \_\_\_ 13. If a fault is made by the "in" side, it gives a point for the "out" side.
- \_\_\_ 14. A match is the best two out of three games.
- \_\_\_ 15. If the server contacts the shuttle with the head of the racket above her waist on the serve, it is a fault.

Part II: Multiple Choice. Directions: Circle the letter of the statement which correctly corresponds with the question.

Example: The school you go to is: a. Southwest b. South-east c. Shawnee Mission East d. None of these.

- 1. A shuttle just barely crossing over the net and falling close to the net is: a. net shot b. drop shot c. hairpin shot d. none of these.

2. A high underhand serve to the deep part of the court is a:  
a. long serve      b. underhand clear      c. smash  
d. drop shot.
3. The game of doubles is played to: a. 15 points  
b. 20 points      c. 21 points      d. a and c.
4. Love all is a score of: a. 3-3      b. 0-0      c. 1-0  
d. 4-4.
5. A term used to denote a game stopped for legitimate reasons is: a. forfeit      b. fault      c. let  
d. none of these.
6. An offensive stroke hit sharply downward toward the floor of the opponent's court is: a. overhead clear  
b. hairpin shot      c. drop shot      d. smash.
7. If a player serves out of turn or serves from the wrong service court or receives a serve in the wrong court and her side wins the rally, it is: a. point for serving team  
b. a let      c. side out      d. none of these.
8. An untrue hit in which the bird hits the frame of the racket is a: a. net shot      b. wood shot      c. fault  
d. b and c.
9. The women's single game is played to: a. 17 points  
b. 10 points      c. 11 points      d. 15 points.
10. In the first inning of the game, the first team serving must forfeit its serve after: a. fault      b. two faults  
c. three faults      d. four faults.
11. The term "rough or smooth" refers to:  
a. which side of the racket you play on  
b. choose between choice of court or service at beginning of match  
c. the knots on the trimming strings      d. both b and c.
12. It is illegal if the player on the serve contacts the bird:  
a. above her head      b. below her waist  
c. shoulder height      c. none of these.

13. The shuttle may be hit: a. twice on each side  
b. once on each side c. three on each side  
d. any number of times.
14. The first badminton club was formed in: a. Bath, England  
b. Oxford, England c. New York, New York  
d. London, England.
15. The game was brought to America and Canada in the:  
a. 1870's b. 1850's c. 1900's d. 1890's.

Part III: Fill-In. Directions: Using the terms on the sheet, fill in the blank to the left with the word that best describes each statement. (There may be more than one word for a blank.)

- \_\_\_\_\_ 1. The game score after "setting."
- \_\_\_\_\_ 2. If made by the "out" side, it counts a point to the "in" side.
- \_\_\_\_\_ 3. Just barely crossing over the net and falling close to the other side.
- \_\_\_\_\_ 4. An offensive stroke.
- \_\_\_\_\_ 5. Area used on doubles court.
- \_\_\_\_\_ 6. Defensive stroke.
- \_\_\_\_\_ 7. Used in match play at beginning of each new game.
- \_\_\_\_\_ 8. Ideal court spot for awaiting opponent's return.
- \_\_\_\_\_ 9. Standing on or over the serve court boundary line by the receiver.
- \_\_\_\_\_ 10. Game played by four players on court.
- \_\_\_\_\_ 11. Carefully hit stroke that lands in opponent's forecourt.
- \_\_\_\_\_ 12. Serve to the deep part of court.



- \_\_\_\_\_ 13. Period in which both teams have had one turn of service.
- \_\_\_\_\_ 14. Receiving serve.
- \_\_\_\_\_ 15. Area close to the net.
- \_\_\_\_\_ 16. Stroke executed near the net descending sharply as it crosses the net.
- \_\_\_\_\_ 17. An untrue hit which is legal.
- \_\_\_\_\_ 18. Game played with two players on court.
- \_\_\_\_\_ 19. Near the back boundary line.
- \_\_\_\_\_ 20. Original name of badminton.

### Basketball

#### Part I: Short Answer

1. How many players are on a basketball team?
2. Name all of the player positions.
3. How many points are scored when a player makes a goal?
4. How many points are scored when a player makes a free throw?
5. What is the penalty for a foul?
6. What is the penalty for fouling a player in the act of shooting who misses the goal?
7. What is the penalty for fouling a player in the act of shooting who makes the goal?
8. What is the penalty for a violation?
9. What is the penalty for knocking the ball out of bounds?

## Part II: True/False

10. Blocking is stopping the progress of a person with the ball.
11. The players should face toward their opponents' basket when jumping in the center restraining circle.
12. It is legal to hand the ball to another player.
13. On a jump ball, a player may tap the ball with both hands.
14. A player may hold the ball for 10 seconds on a free throw.
15. When trying to take the ball from an opponent, it is legal to touch the opponent's hands.
16. On a jump ball, a player may not tap the ball until it reaches its highest point.
17. A player may not roll the ball to a teammate.
18. If a teammate of a player taking a free throw steps over the lane line before the ball touches the ring, the throw is repeated.
19. Man-to-man defense means the guards follow the ball.
20. A player may hold the ball out of bounds for 3 seconds.

Field Hockey

## Part I: True/False

1. A goal is scored if the ball goes between the goal posts after being hit by the stick of an attacker inside the striking circle.
2. If the ball goes over the goal line, not between the goal posts, off the stick of an attacker, a bully is awarded to the defense.
3. If the roller-in does so without her stick in her hand, the opposing team is awarded a free hit.

4. If an attacker, on taking a long corner, makes sticks, the defending team is awarded a free hit.
5. A free hit is awarded to her opponent when a player hits the ball between her feet.
6. For a foul by the attacking team inside the striking circle, the defenders shall be awarded a free hit anywhere inside the striking circle.

#### Part II: Matching

- |                   |       |  |
|-------------------|-------|--|
| 1. sticks         | _____ | starts the game at each half and after goals.                                  |
| 2. roll-in        | _____ | when the defense fouls inside the circle.                                      |
| 3. goal           | _____ | less than 3 opponents between player and goal when player is without the ball. |
| 4. center bully   | _____ | dangerous hitting.   |
| 5. forwards       | _____ | stick raised above the shoulders.  |
| 6. penalty corner | _____ | placing self between opponent and the ball.                                    |
| 7. lofting        | _____ | using rounded side of stick.   |
| 8. foul           | _____ | taken when ball goes over side line.   |
| 9. offside        | _____ | do not play behind own 25-yard line.   |
| 10. obstruction   | _____ | one point.   |

#### Part III: Read all four questions before answering any of them.

1. Diagram a field hockey field and label the lines.
2. Place one team on the field as the players should be positioned at the start of a game.
3. Label the players by position.

4. Designate the areas of the field in which each group of players plays.

Part IV: Draw a hockey field and diagram the positions of all players on both teams when a long corner is taken. Indicate one team with X's and the other team with O's. Show the placement of the ball with the symbol Ø.

### Volleyball

Use Answer Sheet (do not write on this test).

Part I: True/False. Directions: Mark an X through the T if the statement is entirely true. Mark an X through the F if any part of the statement is not correct.

1. The serving team loses the serve when the ball hits the net on the serve, even though the ball goes on over the net in fair territory.
2. Points are awarded to either the serving or receiving side when the receiving side fails to return the ball legally.
3. The ball may be hit with any part of the body when the player is attempting to play it.
4. A player may not run out of bounds to play a ball which has been knocked out of her side of the court.
5. A ball played simultaneously by two players on the same side constitutes a play by each of them.
6. If the ball falls below the chest, the best method for playing the ball is an underhand method.
7. When the ball is played above the head, the little fingers are close together as the play is made.
8. The server is always in the right back position.
9. In official volleyball, the server, in the act of serving, must have both feet behind the end line.

10. A player may run out of the court to catch the ball and call it dead.
11. Serving the ball by throwing it into the air is legal.
12. A player may not play the ball out of the net on a serve.
13. A ball that hits a line is called a dead ball.
14. When the ball momentarily rests in the hands of a player it is called holding.
15. Touching the net when helping the ball over the net is illegal.
16. All players must stay within boundary lines except when serving or returning a ball.
17. The ball that lands on a boundary line is considered good.
18. The ball may be volleyed three times on a side and still be considered legal.
19. A point is scored if the serving team get the ball over the net and the receiving team does not hit the ball back.
20. An illegal serve is when the ball does not reach the net, hits a person, hits an object, or goes out of bounds.

Part II: Multiple Choice. Directions: Pick out the most nearly correct letter and place an X through that letter on the Answer Sheet.

1. A defensive play in which the player(s) attempts to intercept the ball close to the net is (a) spiking, (b) volleying, (c) blocking, (d) none of these.
2. The server stepping on or over the line at the moment she contacts the ball is a (a) foot fault, (b) legal serve, (c) violation, (d) dead ball.
3. A ball temporarily out of play is (a) side out, (b) dead ball, (c) time-out, (d) none of these.

4. If a mistake in serving order occurs and is not discovered until after the opponents have gained the ball for service, but before they have begun to serve, (a) side out shall be called, (b) the serving order shall be corrected on the first dead ball, (c) there shall be no loss of points, (d) the game shall be stopped and all points made by the improper server shall be cancelled.
5. The ball may be contacted (a) four times before sending it over the net, (b) two times before sending it over the net, (c) three times before returning it, (d) as many hits as are needed to return it.
6. At the beginning of each game, the ball shall be put in play by the player in the (a) center back position, (b) right back position, (c) left back position, (d) right front.
7. A game is completed when (a) 10 minutes have elapsed, (b) 8 minutes have elapsed, (c) 15 minutes have elapsed, (d) 8 minutes of playing time have elapsed.
8. A game is completed when one team scores a total of (a) 15 points, (b) 12 points, (c) 10 points, (d) 8 points.
9. A body foul would be called during play if the ball touched the (a) elbow, (b) shoulder, (c) knee, (d) waist.
10. The rest period between games of a match shall be (a) 2 minutes, (b) 3 minutes, (c) 5 minutes, (d) 1 minute.
11. A server may hit the ball (a) directly off the holding hand, (b) with the arms, (c) with one or both hands, (d) with a, b, and c.

Part III: Identification. Directions: Fill in the 10 blanks on the Answer Sheet with the appropriate term to best describe each of the 10 statements below.

1. Playing area occupied by one's own team.
2. A defensive play in which the player(s) attempts to intercept the ball close to the net at the position where the opponent attempts to return the ball across the net.

3. Ball that is temporarily out of play.
4. Ball that visibly comes to rest momentarily on any part of the body above and including the waist.
5. Putting the ball in play over the net into the opponent's court by a player positioned in the serving area.
6. Contest between two teams in which the team first winning two games is declared the winner.
7. Any surface of object outside the court except a player in the act of playing the ball.
8. Act of shifting positions in a clockwise direction.
9. Decision following the infringement of a rule by the serving team, at which time service is awarded to the opposing team.
10. A ball hit forcibly at a downward angle from a height greater than the top of the net.

### Mid-Term

Part I: Rules and Regulations Concerning Girls' Physical Education Classes. Directions: Write the word "true" or "false" in the blanks.

- \_\_\_ 1. Physical Education Notebooks are to be kept in your street lockers.
- \_\_\_ 2. You should be in your squads 5 minutes after the tardy bell rings.
- \_\_\_ 3. Your physical education teacher will not take care of your deodorants and lotions necessary in your physical education class if they are in glass containers.
- \_\_\_ 4. Jewelry should be worn with your gym-clothes.
- \_\_\_ 5. To receive credit for suiting-up, a girl must have on white tennis shoes, socks, and gym-suit.
- \_\_\_ 6. Locks may be left on long lockers as long as you take them off on Fridays.
- \_\_\_ 7. It is all right to bring coats, books, and purses to your physical education class.

- \_\_\_ 8. Suits, tennis shoes, and socks should be taken home each Friday, laundered, and brought back on Monday.
- \_\_\_ 9. Only the class leader is allowed in the Physical Education Office except in emergency cases or with the teacher's permission.
- \_\_\_ 10. Stockings may be rolled down under your socks so long as they cannot be seen.

Part II: Line Soccer Rules. Directions: Write the number of the word that best describes each sentence.

- |                    |     |   |
|--------------------|-----|---|
| 11. forwards       | ___ | The players in line soccer who stand on the end lines.      |
| 12. one            | ___ | How a line soccer game is started.                          |
| 13. two            | ___ | The number of points for a free kick.                       |
| 14. foot-dribbling | ___ | The way the ball is carried down the court.                 |
| 15. passing        | ___ | The players in line soccer who stand on the side lines.     |
| 16. guards         | ___ | The penalty for a foul.                                     |
| 17. goal-keepers   | ___ | The number of points for a field goal.                      |
| 18. kick-off       | ___ | The way of giving the ball from one team member to another. |
| 19. free kick      | ___ | Touching the ball with your hands.                          |
| 20. a foul         | ___ | The players in line soccer who play in the center.          |

Part III: Swimming Statements. Directions: Fill in each blank with a correct word taken from the following listing--

athlete	Basket	breathing	Caps	chart
Monthly	prone	Showers	slide	Turtle

21. \_\_\_\_\_ must be taken before any girl can enter the pool.
22. Swimming \_\_\_\_\_ must be used by all girls going swimming.
23. \_\_\_\_\_ float is done by drawing your knees up to your chest, folding your arms around your legs, placing head on knees, and holding position.
24. To take a deep breath out of water, place your face in the water, and blow bubbles to a count is rhythmic \_\_\_\_\_.
25. Suits must be wrung out and placed in a \_\_\_\_\_ on leaving the pool area.
26. Girls with \_\_\_\_\_ feet may not go swimming.



27. To lay out straight with your face in the water is called your \_\_\_\_\_ float.
28. When entering the pool you must sit, cross right leg over left, turn on your stomach, and \_\_\_\_\_ in the pool.
29. A swimming \_\_\_\_\_ is kept on each girl's progress.
30. Girls on their periods should answer \_\_\_\_\_ when their names are called for one-half credit on swimming days.

Part IV: Rhythms. Directions: Draw a circle around the alphabet and word(s) that best fit the statements.

31. Run, Hop, Skip, Walk, Leap, Jump, Slide, and Gallop.  
a/Patty-Cake Polka    b/Locomotions    c/Dances
32. Jumping Jacks, Touch Your Toes, and The All-Around Stretch.  
a/Five-Foot-Two    b/Locomotions    c/Exercises
33. Movement done to piano, drum, singing, and records.  
a/Rhythms    b/Sports    c/Intramurals
34. Heel-Toe, Heel-Toe, Slide-Slide-Slide-Slide. (Steps to)  
a/Locomotions    b/Patty-Cake Polka    c/Five-Foot-Two
35. Dances done with a partner.  
a/Couple dances    b/Marches    c/Drills
36. Two slides into the circle, Two slides out from the circle, Four walk steps forward.  
a/Patty-Cake Polka    b/Five-Foot-Two    c/Locomotions
37. Three claps with right hands, Three claps with left hands.  
a/Patty-Cake Polka    b/Five-Foot-Two    c/Exercises
38. Girls walk around boys 6 counts and move to new partners on counts 7 and 8.  
a/Five-Foot-Two    b/Patty-Cake Polka    c/Drills

Part V: Stunts (Type). Directions: Fill in each blank with letter of the correct word taken from the following listing--

- |                   |              |                       |
|-------------------|--------------|-----------------------|
| a. Chinese Get-Up | e. Leap Frog | h. Tandem Walk        |
| b. V-Six Seat     | f. Log Roll  | i. Turk Stand and Sit |
| c. Human Rocker   | g. Rocker    | j. Wheel Barrow       |
| d. Inch Worm      |              |                       |

- \_\_\_ 39. Individual is in a prone position on floor, arms and legs stretched.
- \_\_\_ 40. Assume a prone position on the floor. With the back arched, bend knees and reach back and grasp feet.
- \_\_\_ 41. Sitting on floor, partners get back to back with elbows locked and knees bent to chest.
- \_\_\_ 42. The base assumes a front leaning support position while the top stands between her legs, lifting the knees and moving forward.
- \_\_\_ 43. Partners sit on floor facing each other. One partner's legs are on the outside, the other's are inside, and both are sitting on each other's feet.
- \_\_\_ 44. In a standing position, arms and legs are crossed and weight is on outer edge of feet.
- \_\_\_ 45. Body is supported on hands in a front rest position.
- \_\_\_ 46. Individual sits on floor with knees to chest; as legs are extended the hands are raised.
- \_\_\_ 47. The base assumes a squatting position. The top gets in an approach position approximately three steps behind base.
- \_\_\_ 48. The base assumes a bent position with hands and feet on floor and hips raised.

### End of Term

Directions: Use Answer Sheet. Place an X through the T if the statement is entirely true. If any part of the statement is not true, mark an X through the letter F on the Answer Sheet.

### Part I: Field Hockey

- 1. The bully to start a game of field hockey takes place between the center halfbacks.
- 2. A roll-in is called when the ball is hit over the sideline.
- 3. The wings are supposed to play primarily in the alley.
- 4. An official hockey field is 100 yards long.
- 5. A method of taking the ball away from an opposing player is called a push pass.
- 6. There are ten players on an official hockey team.
- 7. Sticks is called when the stick is carried higher than the waist.

8. In an official hockey game there are two goal-keepers.
9. In an official hockey game there are two fullbacks.
10. A forward should always shoot for a goal when she gains possession of the ball.
11. Lofting the ball is considered a foul.
12. A free hit is awarded for a foul occurring outside of the striking circle.
13. The goal-keeper may kick the ball with her feet.
14. A bully is called if two players on opposite teams foul simultaneously.
15. A center bully is not considered a penalty in field hockey.

Part II: Badminton

16. A defensive stroke hit high and deep over the opponent's head is known as the drop shot.
17. The game score at the beginning of the game is called love-all.
18. The side that is receiving the serve is known as the "in" side.
19. The area of the court near the net is referred to as the backcourt.
20. The first game of badminton was played in Cambridge, England, in 1873.
21. The present game of badminton was developed in India and was known as Poona.
22. The side which is serving is referred to as the "in" side.
23. Any bird that lands on the line is good.
24. The period in which both teams have had one complete turn of service is called an inning.
25. A game played with two players on a side is known as a singles game.
26. If the shuttle touches and passes over the net, it is a good hit and should continue to be played.
27. It is legal for players to hit the "birdie" twice on a side before sending it back over the net.

28. If a fault is made by the "in" side it gives a point for the "out" side.
29. A match is the best two out of three games.
30. If the server contacts the shuttle with the head of the racket above her waist on the serve, it is a fault.

Part III: Basketball

31. If a player is standing behind the endline for a throw-in, the coach from the opposing team may request a team time-out.
32. If a player catches the ball with her right foot on the floor, she may stop on her left foot and use it as a pivot foot.
33. The player taking the ball out of bounds may bounce it on the side boundary line as she waits for her teammates to get into position.
34. The ball is dead if a player's pass hits an official on the court and is recovered by an opponent.
35. The official should hold the whistle if a team is passing the ball in the front court an opponent steps over the division line and becomes the fifth player across the line.
36. If an offensive player receives a pass within the free-throw lane she may hold the ball for two seconds, pass it to a teammate, and stay in the lane two additional seconds.
37. If a player in bounds holds the ball for three seconds and, after her opponents move in to guard her closely, she holds the ball for four more seconds before passing, it is legal.
38. If a player starts a dribble with both hands, uses her right hand to give impetus to the ball three times, and then uses her left hand to give a fourth impetus, it is a violation.
39. If a player has possession of the ball and, while running down the court, collides with an opponent who has been standing there, it is considered charging.
40. If the score is tied at the expiration of playing, the game shall be continued without change of baskets for one or more extra periods of 2 minutes each.

41. A coach may request a time-out from the official at any time, whether or not his team has the ball in its possession.
42. Time in shall be taken on a missed free throw as soon as the ball, which has touched the ring, touches a player on the court.
43. A jump ball is taken when simultaneous contact by two opponents causes the ball to go out of bounds.'
44. It is a violation if the player taps the ball before it reaches its highest point.
45. The defensive player is the one who has the ball in her possession.
46. A player on the court may request a team time-out from an official when her team is in possession of the ball or when the ball is dead.

#### Part IV: Volleyball

47. The serving team loses the serve when the ball hits the net on the serve, even though the ball goes over the net in fair territory.
48. Points are awarded to either the serving or receiving side when the receiving side fails to return the ball legally.
49. The ball may be hit with any part of the body when a player is attempting to play the ball.
50. A player may not run out of bounds to play a ball which has been knocked out of her side of the court.
51. A ball played simultaneously by two players on the same side constitutes a play by each player.
52. If the ball falls below the chest, the best method for playing the ball is an underhand method.
53. When the ball is played above the head, the little fingers are close together as the play is made.
54. The server is always in the right back position.
55. In official volleyball the server, in the act of serving, must have both feet behind the end line.
56. A player may run out of the court to catch the ball and call it dead.

57. Serving the ball by throwing it into the air is legal.
58. A player may not play the ball out of the net on a serve.
59. When the ball hits a line it is called a dead ball.
60. When the ball momentarily rests in the hands of a player it is called holding.
61. Touching the net when helping the ball over the net is illegal.
62. All players must stay within boundary lines except when serving or returning a ball.
63. The ball that lands on a boundary line is considered good.
64. The ball may be volleyed three times on a side and still be considered good.
65. A point is scored if the serving team gets the ball over the net and the receiving team does not hit the ball back.
66. An illegal serve is when the ball does not reach the net, hits a person, hits an object, or goes out of bounds.
67. Rotation is the shifting of the players to the position of service.
68. It is illegal to step on or over the center line into the opponent's court while the ball is in play.
69. A match is concluded at the end of 8 minutes or 15 points.
70. A let serve can be reserved and no points awarded.
71. A spike is a legal play in volleyball.

#### Part V: Softball

72. As long as the player is playing and is still considered "in the game," the pitcher may not change to another position and return again in the same game.
73. A substitute player may enter the game only at the end of an inning.
74. Any player except the pitcher may be removed from the line-up at any time.
75. A ball that a fielder bounces off her glove and has it roll down her arm before it is finally caught under the elbow is a play that is illegal.

76. The baserunner in a forced play must be tagged at second base.
77. When a second baserunner is following another, the former may over-run the first baserunner to make it home.
78. In delivering the ball, the pitcher may take a step forward and then bring her arm forward to release the ball.
79. The ball is fair if it rolls foul, hits a stone, and rolls back into fair territory just before reaching first base.
80. The third strike rule is not in effect if the catcher drops a called third strike.
81. A ball is called if the batter swings and misses a pitched ball but the ball hits the batter on the arm.
82. The outfield is that portion of the field which is included within the diamond.
83. An appeal play must be made before the next ball is delivered to the batter.
84. It is legal for a player to impede the progress of a baserunner who is legally running bases.
85. An inning is that portion of the game within which the teams alternate on offense and defense.

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A PROGRAM OF PHYSICAL ACTIVITIES FOR EDUCABLE MENTALLY  
RETARDED GIRLS ON THE JUNIOR HIGH SCHOOL LEVEL

by

LULA HALL BOUNDS

B.S., Tennessee Agriculture and Industrial  
State College, 1951

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AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

Department of Physical Education

KANSAS STATE UNIVERSITY  
Manhattan, Kansas

1970

## ABSTRACT

Mental retardation today afflicts the lives of an estimated six million persons in the United States. It is directly felt by many family members who share the burden and problem of care of the retarded, whose inadequate intellectual development impairs their ability to learn and cope with the difficulties to adapt to the demands of society.

The impetus for change and its challenge have reflected in the mind and feeling of professionals in their drive for commitment to innovate, to initiate, to lead, to evaluate, and to introduce new ideas to benefit the handicapped.

Interest in the problem of the mentally retarded has grown rapidly since 1950. Increased activities have been stimulated by a few foundations, interested professional groups, and members of legislative bodies who have been convinced of the urgent need for programs in the field.

In the belief that all children are entitled to an opportunity for maximum physical, mental, emotional, and social development of their potentials, the purpose of this report was:

1. To provide a helpful program of physical activities

for physical education teachers who are not well informed regarding the techniques of working with the educable mentally retarded yet, through their instructional programs, are striving to help educable mentally retarded girls attain optimum happiness, independence, and responsibility.

2. To acquire knowledge and understanding about curriculum content, methods, techniques, policies, procedures, and adaptations needed for a program of physical activities that will help create successful situations by eliminating feelings of frustrations and failure through participation in physical activities.

The information in the report is not all-inclusive. It touches on the important facets. An excellent bibliography, however, is presented for those who wish to study further the subject areas opened up by the material in this report.

Educators have been concerned for many years with the numerous learning and adjustment problems that mentally retarded children face in America's public school. The retarded child benefits from all types of attention and training. Physical activities, especially, seem to satisfy many of his needs. New evidence indicates that physical fitness increases the retarded child's ability to learn. Retarded individuals have been able to participate to some degree of success in virtually all team

sports, with appropriate modifications and adaptations.

There are rhythmic and dance activities that may be challenging, satisfying, and enjoyable for mentally retarded girls of all ages and at all levels of functional ability.

Activities in this report were focused on:

1. Basic movement patterns, fundamental motor skills, development of self-awareness, body concept, and self-image.
2. Activities in which patterns, movements, and skills developed earlier in life are applied to increasingly complex situations.
3. Adapted and lead-up activities in which patterns, movements, and skills are used in preparing girls for participation in sports, games, and higher organized activities.
4. Team and individual sports and recreational activities.
5. Dancing, rhythms, and self-testing.

Programs of physical activities will have a significant and far-reaching impact upon education and rehabilitation of the mentally retarded.