

1-1-1970

Value of a physical education program for mentally retarded children

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THE VALUE OF A PHYSICAL EDUCATION PROGRAM
FOR MENTALLY RETARDED CHILDREN

by

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A RESEARCH PAPER
SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS IN EDUCATION
(EDUCATION OF MENTALLY HANDICAPPED)
AT THE CARDINAL STRITCH COLLEGE

Milwaukee, Wisconsin

1970

This research paper has been
approved for the Graduate Committee
of the Cardinal Stritch College by

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(Date) February 26, 1970

ACKNOWLEDGEMENTS

The writer wishes to express gratitude to all those who have given the assistance and encouragement necessary to complete this research paper, especially to her community and her fellow teachers.

Sincere appreciation is extended to Sister Joanne Marie, O.S.F. and Sister Gabrielle, O.S.F. for their advice, invaluable assistance, and direction of this research paper.

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Chapter I

INTRODUCTION

Educators for centuries have asked themselves, what role does the school play in the life of the child? The answer, obviously, was a very important one. For years stress has been put on that precious gift called the "mind." Develop the mind, was the cry of all. Educators within the past fifty or sixty years began to realize their responsibility is much greater than just the education of the mind.

It is becoming increasingly clear that the words physical, mental and social are aspects of a totality, a unity, a personality.¹

In many of the physical activities, retarded children have to make their own decisions relating to courage, loyalty, courtesy, fairness, honesty, cooperation, sportsmanship, and citizenship in general; therefore, these activities contribute directly to their personality development. The activities provide the child with many opportunities to be generous, tolerant, kind, and friendly. Physical education² instills manifestations of self-reliance, independence, and adventurous

¹George E. Stafford, Sports for the Handicapped (Englewood Cliffs, N.J.: Prentice-Hall, 1947), p.9.

²All technical terms used in this paper are explained in the terminology section, page 6.

spirit, which contribute to the development of a strong personality. Every experience leaves a behavior deposit in the habits and attitudes of these special children. Physical education is no exception to this rule since the retarded care about the activities in which they participate. Helen Manley, former Director of Health, Physical Education, and Safety, has stated:

Physical Education is bigger than free play, exercise or recess; it is education. It recognizes that a child is an integer and as such cannot be torn into parts with mind, body and soul educated separately.¹

One thing to be remembered by educators about retarded children is that their daily school experiences play a great role in the preparation for independent living. Their day-by-day living helps them to mature and adds to their intelligence, which in turn permits them to adjust to others and to their community. The mentally retarded child can learn and can achieve success, if each step in the teaching-learning process is developed slowly, specifically, with repetition and sustained interest. According to a booklet published by the American Association for Health, Physical Education and Recreation in 1968:

An important factor contributing to the growing interest in exploration of movement in programs for the mentally retarded is that specific activities can be structured so success is assured for the participant. Since so many retarded youngsters

¹H. Harrison Clarks, ed., Health and Physical Education for the Elementary School (Englewood Cliffs, N.J.: Prentice-Hall, 1964), pp. 17-18.

have known nothing but failure and frustration all their lives, these activities can help them break out of this vicious cycle.¹

The aims and objectives of the physical education program for retarded children are the same as for all children. The emphasis, however, will vary from that of a regular program. Play in its highest form combines rhythms, coordination, and skill and holds the possibilities of joyous creative expression.

The Purpose

Physical activities are a vital element in the daily life of the retarded child at each level of his development, from the first movement of the infant to the coordinated movements required for participation in games and later vocational tasks.

The purpose of the present study was to investigate the areas of motor, social and cognitive development as they are affected by physical activities and/or exercises. Secondly, the writer attempted to bring together lists of games, activities, equipment, records and movies to be used in working with retarded children.

Justification of the Problem

The writer has through experience seen the value of physical education for the mentally retarded and has attempted to incorporate it as a vital aspect of the entire curriculum.

¹Ralph Allen, et al., Physical Activities for the Mentally Retarded (Washington, D.C.: American Association for Health, Physical Education and Recreation, 1968), p. 9.

Physical education provides extraordinary opportunities for group consciousness; for example, the opportunity to develop and learn skills through new activities, to make meaningful choices, to develop new interests through participation with others.

Tensions are released and the child develops a sense of freedom and of well being, a feeling of self-confidence and contentment. He may gain mental stimulation, joy in the development of certain skills, creative expression in many of the different activities which afford him emotional release through artistic pursuits which supplement and complement the activities of everyday life.

It gives the child a chance to live in a world he had not known before, filled with bright lights and colors, wonderful sounds, sweet smelling things, smooth surfaces and movement. Many opportunities to develop and to utilize those areas of personality which otherwise lie dormant are supplied through recreational activities. Often the child may find constructive expression for those instinctive urges toward competition, comradeship and cooperation; a chance to sublimate in a wholesome way the need for adventure, for change, excitement; and for rules, fair play and courage. By participating in various forms of play the child renews old acquaintances and makes new friends.

No area of development yet explored can contribute so much to the social enrichment of the retarded

and the maturation of positive attitudes toward these special children. The greatest moments are when passivity is superseded by activity without external stimuli, when quiescence ceases and independent vitality begins, when purposeful movement replaces restive, involuntary responses; and finally that magic moment when a neighboring child might ask, "can Johnny come out to play?"¹

Summary

This study has attempted to investigate the importance of physical education for the mentally retarded. The idea evolved from the personal experience of the writer in using physical education with a group of such children. A second purpose of this paper was to list available games, materials, records, equipment, and films which would be aids to the teacher in the teaching of physical education to mentally retarded children.

¹Allen, et al., op. cit., p. 4.

Terminology

- Agility - the ability to change directions quickly and to control body movements (total body).
- Balance - the ability to maintain body position and equilibrium both in movement and in stationary body positions.
- Gross-Fine Motor Skills - classification of motor skills on a continuum from those involving large space, force, range of movements or locomotive; gross to those physical activities which are termed manual or manipulative skills; which involve precision and small muscle control, fine.
- Locomotor Agility - hopping, jumping, and other locomotor behavior performed with accuracy and/or speed.
- Motor Coordination - the ability to perform hand-eye and foot-eye tasks such as kicking, throwing, sticking, etc.
- Motor Development - motor behavior which permits us to move from one place to another, including crawling, walking, skipping, etc.
- Motor Proficiency - a movement or limited series of movements performed with high degree of precision for the accomplishment of a specific end.
- Muscular Coordination - the ability to move a limb or limbs through a range of motion.
- Perceptual Motor Function - reasonably complex voluntary movements involving the combining of sensory information and cues gained from the movement itself into an integrated task.
- Physical Education - that area of the curriculum in which learning experiences are provided through the medium of motor movement.
- Physical Fitness - composed of many different aspects including health related physical fitness aspects and motor fitness (skill) related aspects.
- Social Development - progress that a child makes in his relationship to others so that he can take his place in society as a self-sustaining adult who is capable of having the fullest most satisfying and worthwhile life possible.

Chapter II

REVIEW OF RELATED LITERATURE

The findings of experts and conclusions drawn from studies will be discussed separately insofar as some stress the intellectual stimulus received, some the improvement in motor skills, and some the advancement in social adjustment. It must be borne in mind, however, that the three overlap in many areas.

In all the areas mentioned above, the need of a physical education program for the mentally retarded has force. Professional educators have long recognized the equal importance of development of body and of mind. This is even more evident in the case of mentally retarded children. Physical activities are a necessary part of their education and can make important contributions to their growth and development.

The physical education program is important in the beginning and throughout the school experiences of the mentally retarded child. Besides developing and strengthening his body, it opens up a whole new world for the child. The retarded child's new experiences will lead to an investigation of things about him, as he discovers for himself what he is capable of doing (motor development) and how he can relate to others (social development).

Our mission is not to make champions or even talented athletes and performers, but to use the full impact and potential of physical education and recreation to enable each individual to become better prepared physically, mentally, emotionally, and socially to take his place in society as a self-sustaining adult who is capable of living the fullest most satisfying, and worthwhile life possible within the limitations of his impairment.¹

Although research on the physical education of retarded has not been extensive, the writer will review research pertaining to the three areas of intellectual development, physical fitness, and motor function and their influence on the social adjustment of the retarded child.

The motor ability of children otherwise comparable may be vastly different because of opportunities provided by parents with education in the field or the economic means to provide care and guidance of a specialized nature. A child's personality -- his degree of ambition and determination -- will influence his acquisition of motor skills even more than will his intelligence. Achievement may be a matter of opportunity and propensity to acquire through repetition rather than a greater or lesser degree of intelligence. No two children are alike, so all comparisons of social adjustment, acquisition of motor skills or increased IQ, must always be somewhat modified by the recognition of other factors at work than the one examined at the moment.

¹Frank H. Hayden, Recreation and Physical Activity for the Mentally Retarded, American Association for Health, Physical Education and Recreation, Washington, D.C. (1966), p. 13.

Area of Intellectual Development

Mental and physical activities are closely related in childhood; the development of the physical will greatly enhance the retardate's intellectual development. Higher forms of behavior are the outgrowth of motor learning.

Hayden¹ states that not only physical fitness and motor ability of the retarded can be improved through physical education, but that these changes may be accompanied by increases in IQ, learning ability and low-skilled work capacity.

Both Benoit² and Stein³ found that the physical activity of the retarded can affect the personal capacity for thought. Their degree of well being, alertness, and interest in reality will be raised. The retardate's attention span will increase, with the result that he will have the benefit of more awareness, more associative perception, and more thought processing. In short, his intellectual potential will be increased.

¹Frank J. Hayden, "The Influence of Exercise and Sports Programs on Children with Severe Mental Deficiency," Ment. Retardation Bull., XV (Fall 1965), 13.

²Paul J. Benoit, "Extending the Mind through the Body," J. Hlth. Physical Educ. Recreation, XXXVII (April 1966), 28-29.

³Julian U. Stein, "The Potential of Physical Activity for the Mentally Retarded Child," J. Hlth. Physical Educ. Recreation, XXXVII (April 1966), 25.

Carroll and Abshier¹, Doll², and Tredgold³ have claimed that intelligence and motor proficiency are related, that the education of the physical and the mental aspects go hand in hand. Sloan⁴, using groups of twenty institutionalized mental defectives and normal children matched for sex and age, presented some data confirming this relationship. Within the limits of this study, a definite positive relationship between intelligence and motor proficiency was found, as the mental defectives scored significantly lower than the normal children in all six subtest areas. Both experimental and control groups were given the Vineland Social Maturity Scale, which showed that social maturity was also closely related to both intelligence and motor proficiency. Sloan concluded that motor proficiency was not a distinct aspect of functioning that could be isolated from general behavior and that it was only another aspect of the total functioning

¹Robert Carroll and Mildrew Abshier, "To Play Is the Thing," J. Hlth. Physical Educ. Recreation, XXXVII (April 1966), 33.

²E. A. Doll, The Oseretsky Tests of Motor Proficiency: A Translation from the Portugese Adaptation, (Minneapolis: Educational Test Bureau, 1946), as quoted by Leslie F. Malpass in "Motor Proficiency in Institutionalized and Non-Institutionalized Retarded Children and Normal Children," Amer. J. Ment. Defic., LXIX (1959-60), 1012-1015.

³A. F. Tredgold, A Textbook of Mental Deficiency, (Baltimore: Williams and Wilkins, 1947), p. 171.

⁴William Sloan, "Motor Proficiency and Intelligence," Amer. J. Ment. Defic., LV (1951), 394-406.

of the individual. However, in another study of sixty institutionalized retarded Rabin¹ failed to reveal a significant relationship between these variables.

Today there are rays of hope emerging for the mentally retarded. Scrutiny, investigation and research of the possibilities of intellectual development through physical education reveal that a very desirable contribution can be made through this medium. This belief substantiates in part the affirmation made by well-known educators and philosophers such as Plato, Locke, Rousseau, Pestalozzi and countless others. Plato postulated that learning can take place better through play. Locke proposed the idea of a sound mind and body. Rousseau believed that all children should receive plenty and wholesome physical activity early in life, and Pestalozzi observed that children approached their studies with a greater amount of interest after engaging in enjoyable physical activity. These men have all contributed to the modern idea that physical education and intellectual development are closely associated.²

Physical and mental development go hand in hand. It would be utterly impossible to divorce the two and succeed

¹Herbert M. Rabin, "The Relationship of Age, Intelligence and Sex to Motor Proficiency in Mental Defectives," Amer. J. Ment. Defic., LXII (1957), 507-516.

²James H. Humphrey, Elementary School Physical Education, (New York: Harper and Brothers Publishers, 1958), p. 320.

in either. As stated by Stefanelli¹, to develop a mind to its greatest capacity, every individual must also gain knowledge that will help improve body function to its greatest potential. It is axiomatic that an ineffective body will not and cannot benefit the mind. Instead it has a tendency to curb or even "block" the receptiveness of the mind. Educators today must build up the underdeveloped bodies of the mentally retarded so that their minds will reflect a healthy body instead of an underdeveloped body.

Brace², using feeble-minded girls as his subjects, concluded that there is slight relationship between IQ and the ability to learn gross bodily motor skills of a sport type. He suggested that the amount of participation in physical activities during the important periods of physical growth is influenced by slight differences in intelligence, which may also have significant effect upon the ability to learn and perform such skills. Emotional reaction patterns rather than lack of physical abilities may also have operated to produce poor performance scores.

In a study of superior, normal and subnormal fifth and sixth grade boys and girls, Kulcinski³ reported on the rela-

¹John R. Stefanelli, "Physical Education for the Educable Retarded Child," Amer. Teacher, XLIX (December 1964), 11-12.

²D. K. Brace, "Motor Learning of Feeble-Minded Girls," Res. Quart., XIX (December 1948), 269-275.

³L. E. Kulcinski, "The Relation of Intelligence to the Learning of Fundamental Muscular Skills," Res. Quart., XVI (December 1945), 266-276.

tionship between the various degrees of intelligence and the ability to learn twenty-two fundamental muscular skills of a stunt or tumbling nature. He found a highly positive relationship between these variables: subjects of superior and normal intelligence scored significantly above the sub-normal group on the difficult battery of tests.

It appears that the complexity of the movements and the associated intellectual action necessary to carry out the movements could be greater factors in limiting the motor performance of the retardate than the lack of motor ability per se. This is consistent with the findings of Heath¹, who postulated that the awkwardness exhibited by certain types of retardates was a function of intellect and comprehension of the task and not one of inherent motor deficit. He predicted that, as the intellectual counterpart of the motor act was learned and reduced to habit level, the resultant performance would become increasingly quick and smooth. Some studies have indicated doubt as to whether retarded subjects understood the instructions of the examiner or the task to be accomplished. These are only some of the factors needed to be considered and controlled in future research.

¹S. R. Heath, Jr., "Clinical Significance of Motor Defect, with Military Implications," Amer. J. Psychol., LVII (July 1944), 482-499.

Oliver¹, Shotick and Thate², and Corder³ have presented findings which suggest that improvement in mental ability may be elicited after participating in programs designed to improve physical ability because of a generalized effect due to an increase in the child's self-confidence.

Some studies have indicated that the IQ of the retarded child may be improved by a physical education program. It has been further demonstrated that the number of skills learned and the greater degree of self-dependence achieved may be increased by physical training. Now it is pertinent to discuss the value of motor training in itself, of the use of physical education as true education of the physical properties, not as a means of intellectual stimulation or personality development.

Area of Physical Development

There is an increasing need for research in the area of physical fitness and motor function of the mentally retarded. Because of the scarcity of research in this area there are few contemporary publications that concern themselves with the physical education, recreation and physical fitness or

¹J. N. Oliver, "The Effect of Physical Conditioning Exercises and Activities on the Mental Characteristics of Educationally Sub-Normal Boys," British J. Educ. Psychol., XXVIII (June 1958), 155-165.

²A. Shotick and Thate, "Reactions of a Group of Educable Mentally Handicapped Children to a Program of Physical Education," Except. Child., XXVI (January 1960), 248-252.

³W. O. Corder, "Effects of Physical Education on the Intellectual, Physical, Social Development of Educable Mentally Retarded Boys," Except. Child., XXXII (1966), 357-364.

motor function of the mentally retarded to the same degree that they have dealt with other aspects of their behavior and function. Most of the studies have been done by psychologists, special educators or psychiatrists. Few reports have been by physical educators or have resulted from an interdisciplinary approach in which a physical educator was a member of the research team. Several important questions might arise from these observations. Is this dearth of research a reflection of an attitude on the part of workers in this field that attaches a place of relative unimportance to motor function of the mentally retarded? Might we intimate from such practices that service and research personnel in mental retardation are unaware of the nature and potential contributions of motor activities to the over-all growth and development of the retarded population. Perhaps they have also failed to realize the potentiality of the motor channel in the education of this type child.

With programs for the mentally retarded becoming more and more common, the implications for using physical activities to help meet the need of retardates are tremendous. Disciplines concerned with this growing segment of our population must fully exploit the potential of movement, games, sports, rhythms, and other facets of physical activities in order to: 1) develop a better understanding and theoretical base for explaining the behavior of retardates, 2) gather

useful information concerning the growth, development, and learning of the mentally retarded; and 3) develop sounder, more efficient, effective, and practical methods and techniques for the management and education of the retarded.¹

For the mentally retarded, physical education must be recognized and interpreted in its broadest sense if it is going to be a positive force and have a lasting effect on the programs that are established to help in this area. Dubin² observed, based on the findings at the Parc School in Philadelphia, that many of the things taken for granted in the average child had to be learned by the retardate. Because the mentally retarded child is so often excluded from many experiences of the normal child, he has to be taught how to play. Muscles can grow and develop only with use; without use they atrophy and become liabilities. Organic powers can be developed and maintained only through activity.

Much of the research that has been done in the area of improving motor functions of retardates concerns itself more with a study of what is rather than of what could be. Three

¹Julian U. Stein, "Motor Function and Physical Fitness of the Mentally Retarded: A Critical Review," Rehabilit. Literature, XXIV (August 1963), 230-242.

²H. N. Dubin, "Some Observations on the Place of Physical Education and a Health Program in Building a Program for the Mentally Retarded Child," Amer. J. Ment. Defic., LIX (July 1954), 6-12.

studies, Brace¹, Francis and Rarick², and Howe³, included batteries of items designed for the comparison of performance in a variety of motor skill tasks of mentally retarded and normal children. Many of the items previously identified as specific components of motor proficiency or skill were included in these studies. All three of these descriptive studies found rather consistently that the mentally retarded performed at a considerably lower level than their normal peer comparison groups. Relationships between motor proficiency and intelligence were found to be more highly correlated in the mentally retarded than in normal children. The various investigators attempted to hypothesize possible reasons for these differences. As in the studies relating physical exercise and intelligence, factors of motivation and failure to comprehend test instructions may have contributed in part to the low performance scores of the mentally retarded. Subjects of normal intelligence participated more freely and spontaneously from the youngest age in play involving motor performance, while the retardate often had to be taught these things. The greater intelligence of the normal

¹D. K. Brace, op. cit., 269-275.

²R. J. Francis and G. J. Rarick, U. S. Department of Health, Education, and Welfare, Cooperative Research Monograph No. 1: Motor Characteristics of the Mentally Retarded, (Washington, D. C.: Government Printing Office, 1960), pp.1-37.

³Clifford E. Howe, "A Comparison of Motor Skills of Mentally Retarded and Normal Children," Except. Child., XXV (April 1959), 325-354.

child aided him in learning the motor skills involved in these play activities. In certain academic and social areas the retardate must be taught what normal children seem to learn incidentally. Perhaps more specifically structured programs for the mentally retarded would be one solution to their motor skills problems.

Francis and Rarick¹ indicated that in the retarded, age trends in strength for each sex followed about the same pattern as those in normal children, although at a lower level at every age. On the power tests, age and sex differences were similar to the differences reported for normal children. In running speed, balance, and agility, the differences among the levels of performance of the mentally retarded followed the same general age and sex patterns as those observed in normal children. For the 284 mentally retarded children studied, the mean on most measures for both boys and girls was two to four years behind the published age norms for normal children. Furthermore, the discrepancy between the normal and mentally retarded tended to increase at each successive age level.

Howe² found normal boys significantly superior in eleven motor tasks included in his study; normal girls significantly superior in nine of the eleven tasks. A wide range of scores was noted in both groups with no definitive pattern being established, and a great deal of overlap was found between

¹Francis and Rarick, op. cit., pp. 1-37.

²Howe, op. cit., 325-354.

normal and retarded achievement. This experiment was carefully designed and controlled to minimize potential contamination of the results through differences in opportunities and socio-economic background.

Some effort to use physical exercises for motor improvement have proved or shown by research, to have unfavorable effects. Studies by Fait and Kupferer¹, and Ammussen and Hellioll-Neielsen² revealed that a series of movements built upon previous movements diminished chance of success and caused undesirable frustration in the subjects, especially in those with low IQ. A test of muscular strength, measured through leg extension and flexion of the fingers, was used as the simple task, and the vertical jump was used as the complex task. Compared to subjects of average or better intelligence, boys of low IQ (70 to 90) performed less well. Much smaller differences were found in the more difficult vertical jump than in more direct tests of muscular strength.

Could it be that lack of an adequate base in terms of minimum levels of physical fitness has caused the consistently low results of retarded subjects on tests of motor

¹H. F. Fait and H. J. Kupferer, "A Study of Two More Achievement Tests and Its Implications in Planning Physical Education for the Mentally Retarded," Amer. J. Ment. Defic., LX (April 1956), 729-732.

²E. Ammussen and K. Hellioll-Neielsen, "Physical Performance and Growth in Children; Influence of Sex, Age, and Intelligence," J. Appl. Psychol., VIII (January 1956), 371-380.

ability? To a considerable extent motor learning is dependent upon physical fitness expressed in terms of strength, speed, agility, and power. Numerous studies of motor proficiency have included items of this type, so it can be concluded that level of fitness would appear to be an important consideration in the development of certain types of motor ability. Lack of discrimination between motor proficiency and physical fitness is apparent in the literature. Motor proficiency refers to the presence of complex coordination skills which include such factors as agility, hand and wrist flexibility and finger dexterity. On the other hand, physical fitness generally refers to strength, endurance and general health of the body.

Wellman¹ postulated that certain tests designed to measure "native motor ability" probably fail to do so to any useful degree, while the simplest physical fitness tests prove more valid in measuring actual skill. She established the validity of physical fitness tests as measures of motor skills. In concluding, she states that, since performance of any motor act depends upon strength and all life functions depend on physical fitness, the greater the level of physical fitness, the greater the potential for life efficiency.

¹E. B. Wellman, "The Validity of Various Tests as Measures of Motor Ability," Res. Quart., VI (March 1935), 19-25.

In experiments producing more optimistic results, Oliver¹, Corder², and Solomon and Pangle³ show evidence that the physical performance of the mentally retarded can be improved. Oliver made a study involving institutionalized mentally retarded boys twelve to fifteen years of age, and the results were considered dramatic. All academic subjects except numbers and English were replaced for a ten-week period in the experimental group by activities of a physical nature, i.e., daily periods of physical education, individual remedial exercises, strengthening activities, and recreative games of a team nature. During the same period the control group followed its normal schedule, including only two periods of physical education a week and daily organized games after school. Not only did the experimental group improve significantly in measures of athletic achievement, physical fitness and strength, but there were significant increases in the IQ's of twenty-five percent of the group -- no significant improvements in IQ were reported among the controls. Oliver attributes the changes to such emotional factors as are affected by achievement, improved confidence, better adjustment, and a feeling of importance that the boys must have

¹Oliver, op. cit., 155-165.

²Corder, op. cit., 357-364.

³A. Solomon and R. Pangle, "Demonstrating Physical Fitness Improvement in the EMR," Except. Child., XXXIII (1967), 177-181.

developed because of the interest and attention centered on them. He concluded that greater emphasis should be placed on physical education of the mentally retarded, more time should be devoted to physical activities, and greater demands should be made on each of these children. The more we demand, the more they will produce.

Corder¹ found significant improvement in physical fitness and measured intelligence after only four weeks of a daily progressive and systematic program of physical education activities. The increase in physical fitness and intelligence scores did not significantly affect the social status of the educable retarded boys in the study.

Solomon and Pangle² reported that an eight-week program of planned and progressive physical education activities significantly improved the physical fitness status of educable retarded boys. The improvement was demonstrated to be relearned after a post-experimental interval of six weeks. The authors felt an important aspect of the study was the degree of the demonstrated physical fitness improvement displayed by the experimental group. At the end of the study on each of the four measures of physical fitness, the performance of the educable retarded group was equal to or superior to comparative norms of non-retardates of the same age.

¹Corder, op. cit., 357-364.

²Solomon and Pangle, op. cit., 177-181.

In recent years, a fairly extensive amount of research has been conducted on motor learning, especially for mentally retarded children. Consequently, a great deal of data including a number of acceptable procedures for testing and measuring motor learning are available. In general this body of research has indicated that mentally retarded and normal children are more alike in motor learning than in any other area of learning.¹ Very little of the research has concerned itself directly with programs for improving motor efficiency.

While it is relatively easy to determine that a child's IQ has been raised, that he has mastered certain tasks requiring a degree of mental exercise, that he has added on to the number of skills of which he is capable; it is more difficult to indicate that he has become more acceptable to a group, is more happily adjusted, is deriving a greater and more consistent satisfaction from his work and his play.

Every child possesses a basic urge to grow -- a basic striving to become what he can become, to become more of himself, to become a fuller and more complete self. This becoming occurs within each individual's own private world; and the quality of the becoming depends on the richness of relationships, conditions, and² experiences characterizing this private world.

¹Leroy Aserlind, "Research: Some Implications for the Classroom," Teaching Except. Child., I (February 1969), 42-54.

²H. Gertham Morgan, "Building Self Esteem at Home and School," Childh. Educ., XXXVI (February 1962), 278.

Area of Social Development

In the third area, that of social development, the writer will attempt to answer the question: Is the retarded child any different from the normal child? The retarded child is no exception to the idea expressed in the above quotation, and in many of the studies and reports given it has been seen that physical education does make a large contribution to the social adjustment of this child. Social adjustment in turn, plays an important role for these children in their attainment of independence and happiness not only for the present, but especially in the future, for the adult retardates.

The purpose of some of the activities of a good physical education program is to increase the pleasure and satisfaction derived from active work and play, and to develop persistence derived from individual or group games and use of playground equipment. Besides developing and strengthening his body, which may help to improve the child's posture and carriage, it may also help this retarded child to be more accepted by other people. Physical activity also provides socially acceptable outlets for inner drives and tensions, enabling the child to become better adjusted to the environment in which he lives.¹

One of the important basic needs of the retarded child is to be recognized and to be made to feel important to himself and others. While a good physical education program

¹Natalie Perry, Teaching the Mentally Retarded Child, (New York: Columbia University Press, 1961), p. 48.

focuses upon the physical skill development of the child, it is extremely important that it help each child see himself change and improve. This necessitates beginning with activities at a level best designed to allow immediate success in some areas, thus avoiding frustrations and eliminating excessive failures as much as possible. Many of the activities must be modified to fit the child, and must be of such a nature that they will feature his strong points, and not embarrass him on account of his short-comings.

Mentally retarded children are truly more like normal children than they are unlike them especially in their desire for achievement and success, and physical education has proven to be one of the main avenues in which this has been experienced. "This is a field where normal yardsticks of achievement are of less importance than personal performance and personal progress."¹ Training in motor skill would render them less conspicuous in the eyes of all and enhance their potential for acceptance.

It is possible to underestimate the ability of the retarded child in this area. We fail to make the necessary challenge; and do not demand sufficiently high performance of him. These children are often protected by cautious and anxious parents who exert no pressure on them. More should be demanded of them up to the limit of their capacity where

¹James N. Oliver, "Add Challenge with Variety in Activities," J. Hlth. Physical Educ. Recreation, XXXVIII (April 1966), 30-32.

physical education is concerned. Their competition should not be others, but themselves. They should be challenged to take the steps which will lead them toward the next level of progression. However, there should be much repetition in the various activities and skills they can do well because this will give them more confidence in themselves, increase personal satisfaction, and also allow for the opportunity to enjoy something they know they are capable of doing well. Praise can go a long way, especially for the mentally retarded child, be he young or old. Praise is one of the most powerful incentives for these children; and should be given not only for a win, but also for the efforts of a loss or failure. So often this is the only kind of success that the child is given, a feeling of importance because of the attention and interest centered on him.

Retarded children have a sense of belonging, a sense of social fitness, and an urge to imitate their peers. Often their mental handicap prevents them from measuring up to their ideals, but it does not prevent them from recognizing when physical activities are below or above them.

It is in play that they work up a will to live, a will to do things, a will to grow. Furthermore, it is mostly in play activities that they can obtain the beneficial stimulation they require for their development, it is mostly in play that they learn the skills that lie at the root of social living.¹

¹Paul E. Benoit, "The Play Problem of Retarded Children," Amer. J. Ment. Defic., IX (July 1955), 45.

Benoit states that most recent studies on the effect of stimulation on various organisms show that the more the sluggish nervous systems of retarded children are stimulated through the different senses, the more growth is likely to be registered; and the earlier in life such stimulation occurs, the greater will its effect normally be. Play is the most valuable part of their experience; it is the starting point of their personality development.

In play the child's emotions are involved. For the retarded child needs help in developing control of his emotions and this control will be one of the surest approaches to the fundamentals of getting along with his peers. Socially adjusted mentally retarded children benefit from play experiences with normal children. Welch and Pangle¹ stated that this type of integration frequently leads to improved behavior, social adjustment and progress in motor skills. Mentally retarded children are great imitators and may profit when given the opportunity to observe patterns of behavior and motor performances of the non-retarded. Social adjustment is the key to personality development and not all mentally retarded can merit or profit from this experience.

From the results of a study done by Oliver² it was seen that there is a highly significant improvement not only in

¹Paula Welch and Roy Pangle, "Physical Education and the EMR: Separate vs Regular Classes," Physical Educ., XXIV (October 1967), 102-104.

²Oliver, op. cit., 155-165.

the physical abilities and mental characteristics, but also in the emotional area. This is likely to be a combination of: 1) the effect of achievement and success and improved confidence that is associated with these findings; 2) improved adjustment and the happier atmosphere that arises from it; 3) improved general fitness and the feeling of well being that goes with it and 4) the effect of the feeling of importance that the boys must have had because so much interest and attention was centered on them.

Physical education also contributes to the development of a respect for rules and authority. Physical education provides an opportunity also of teaching certain health and safety facets and encouraging the development of good habits pertaining to personal care and protection in the wise use of leisure time. According to Carroll¹ all results of a physical education program are of basic importance when compared with the advance in learning to live and play harmoniously with one's peers, with the gains in self confidence, and with the improvement of classroom conduct and performances.

It is so important to remember that every child, especially the retarded youngster, needs that feeling of success and of being able to do something well that will give him feelings of happiness, security and well-being that every individual needs.

¹Carroll and Abshier, op. cit., 33-34.

Specialists in learning and vocational training and special educators are daily achieving new methods of success in dealing with retarded children. Despite this wealth of information accumulated, it is the duty of those working with the retarded to see that every opportunity is given them to achieve success, and therefore gain confidence in themselves, thereby becoming useful members of the society in which they live. Their success will permit them to become a greater personal, social and economic asset to their community and a source of pride to themselves.

Recreation can teach a person to laugh and be joyful in the use of his muscles. It can help him to be himself, to achieve self-expression and develop a personality. Each person moves at his own pace. Activities which interest one child may not interest another, but the manner in which retarded children have developed when given the opportunity to play has taught us that barriers¹ between adults can be broken in the same way.

Summary

At no period more than in the last decade has there been greater interest in means of aiding the mentally retarded child. A number of studies have applied themselves to the use of physical education as a means of improving the child intellectually, physically and socially. Some of the studies considered the relative degree of mental and physical prowess between normal children and those classed as retardates.

¹Pearl Buck and Gweneth Zarfass, The Gifts They Bring, (New York: The John Day Book Company, 1965), p. 94.

Results of tests directed to intellectual improvement have generally been positive. Exercise has been proven to improve mental ability; in some cases it was held that the exercise was more habit-forming than actually mentally stimulating.

Although not as much research has been devoted to the area of improvement of motor efficiency, enough has been done to indicate that there is a distinct connection between the practice of motor exercises and the improvement of skills. On the whole, however, less attention has been given to the survey of existing conditions and comparisons of normal and sub-normal children than to means and procedures for individual development.

In the area of social adjustment, the greater variation in factors involved and the relative lack of success in measuring results prevent scientific studies from being as definite or as final as are those made in other areas. It is a general concensus that play is essential to the well-being of a child, and that organized, arranged play is extremely beneficial.

Chapter Three

ATTEMPTS TO MEET THE PROBLEM

Physical education, play and recreation are important to the everyday living of the mentally retarded child. Physical education is an essential part of the retardate's education. The physical well-being of the child is enhanced through active participation in recreational activities. Development of muscular coordination promotes sound health and integration of the physical and mental forces of personality.

When determining direction for a specific part of the physical education program, emphasis should be placed upon developmental needs, abilities, interests, and the limitations of the individual participating in the activity. There are certain general objectives in guiding the mentally retarded that should be borne in mind. Some pertain to physical well-being. These are:

- To improve general physical health and appearance.

- To develop and improve the basic motor skills and fundamental body movements -- for example, walking, running, grasping, climbing, handing, throwing.

- To increase physical stamina, motor ability and physical fitness through the development of the organic prowess of the body. Specific characteristics involved include coordination, strength,

muscular endurance, cardio-respiratory endurance, muscular power, flexibility, agility, balance and speed.

To facilitate more balanced growth.

To improve posture, body mechanics, rhythm and grace, and control of movement.

To improve functioning of the sense receptors and proprioceptors.

To develop a sound mind in a sound body through participation in healthful activity.

Others are concerned with the child's social adjustment.

They include:

To develop skills and abilities necessary for successful participation in a variety of wholesome recreation activities appropriate for the individual's capacities and situation.

To provide social experiences that will increase the degree of social independence.

To facilitate a greater degree of acceptance and belonging as an individual respected through his participation and contribution to group social-recreation situations.

To develop better self-care skills.

To help the child become a better citizen and contributing member of the community through participation in a variety of service projects.

To encourage more participation with the family.

To help the child adjust to the demands of the group and to work as a part of it.

To help the child to respect the rights of others and to develop respect for materials and tools.

To help the child to become more cooperative; to accept and share responsibilities and to do his share; to learn to take turns and share equipment and supplies.

To develop leadership qualities in opportune situations.

To help the child to become more sociable, outgoing, and friendly; to get along better with others; to increase his circle of friends.

Objectives which consider the child's intellectual welfare as basic are:

To develop spontaneous and meaningful nonverbal ways of self-expression.

To improve communication skills and language development; to improve vocabulary.

To accelerate the development of basic educational skills.

To improve attention span and the ability to concentrate.

To develop the ability to follow directions.

To develop prevocational and vocational skills

To develop the ability to plan.

To arouse a sense of curiosity.

To develop new skills, hobbies, and interests that have life-time values.

To develop previously untapped talents.

To help the child become more observant; better able to remember; understand more; become better able to evaluate; more willing and able to make his own decisions.

To improve auditory and visual discriminatory powers; to promote rote learning and to increase ability to handle abstractions.

While specific objectives and outcomes for those participating in the same activity might differ, the basic aim of the over-all program is the achievement of some particular

¹Cecil W. Morgen, et al., Recreation and Physical Activity for the Mentally Retarded, (Washington, D.C.: American Association for Health, Physical Education, and Recreation, 1966), pp. 24-26.

skill which will enhance progress toward a greater degree of social competence, physical well-being and intellectual advancement.

Coordination begins with the child's first movement and continues throughout his life. To develop certain skills in this child, games, rhythms and other activities must continually be repeated. The obvious objective of these activities is the achievement of that particular skill. The physical education program is geared to fit the individual; specific activities for different age levels are determined by the characteristics of the child. His abilities, needs and interests are taken into consideration and then activities are selected that will both challenge and satisfy him.

Some physical, social-emotional, and mental characteristics of the Kindergarten child to be considered are: full of energy but tires easily; rapidly growing heart; slow mental growth; incomplete eye-hand coordination; slow reaction time; poor coordination; eager to learn but restless; short attention span; desires adult approval; moves from solitary to cooperative play; learns best through simple concrete activities; lacks sense of responsibility; quarrelsome; limited self-care skills.

General characteristics of a child on the Primary Level are: rapid physical growth; slow mental growth; active but

tires easily; some growth in attention span but still restless; desire for participation with peers; period of cooperative play; learns best through concrete experiences; sense of responsibility.

Characteristics of a child on the Intermediate Level are: capable of longer periods of activity; general physical weakness and frequent fatigue due to rapid growth; increased development in control of fingers and hands; increased social adjustment; individualism is less marked; desire for participation and approval of peers; eager to try things; learns best through concrete instructions; growth in responsibility and self reliance; interest in movement and activity.

Only after the general characteristics of the mentally retarded are known can we begin to work for specific objectives on different levels. No child should be thrust into activities at a higher level until the skills which logically precede this stage have been developed.

In attaining these objectives, the following goals are to be firmly established in the mind of the teacher. They are goals as laid down in the Physical Education Curriculum for the Mentally Handicapped by the Sisters of St. Francis of Assisi.

Specific Objectives on the Kindergarten Level
(M. A. 3-0 to 5-0)

- To develop a sense of rhythm through listening and expressive activities.
- To foster sensory-motor development.

- To develop recognition of forward, backward, and sidewise positions, as well as up and down, through bodily movements.
- To stimulate the directional sense.
- To develop an awareness of the significant parts of the body and to provide practice in the use of their correct names.
- To provide practice in following oral directions.
- To encourage socialization through group activities.

Specific Objectives on the Primary Level
(M. A. 5-8 to 7-2)

- To foster increased ability to respond to music with gracefulness and poise.
- To develop strength, endurance, balance and coordination.
- To stimulate interest in correct posture.
- To provide group experiences for the promotion of alertness, attentiveness and cooperation.
- To introduce competitive activities.
- To develop accurate sense of right and left in body movements.

Specific Objectives on the Intermediate Level
(M.A. 7-2 to 9-6)

- To aid in overcoming adolescent awkwardness in performing basic skills.
- To promote graceful response to music.
- To foster development of correct posture.
- To develop strength, endurance, poise and coordination.
- To instill attitudes of sportsmanship and cooperation.
- To present fundamentals of proper care of equipment.
- To introduce rudiments of common sports.¹

It is imperative for every mentally retarded child to have an adequate opportunity to develop to his fullest potential, even though that potential may be very limited. In order for this child to develop body control it is necessary

¹Sisters of St. Francis of Assisi, Physical Education Curriculum for the Mentally Handicapped, (Milwaukee, Wisconsin: The Cardinal Stritch College, 1963), pp. 1-51.

that he become involved in activities that involve movement. Movement is activity -- it is running, jumping, chasing, climbing, pushing, turning, skipping, galloping, and a hundred and one different activities. Movement is also a basic way of expressing ideas and feeling, an outlet for release of energy and relief from tensions. The child learns to express his feelings through movement with his body as he goes through various activities. Movement is the common factor in all of the child's activities. The freedom to move and the chance to achieve mean much to the mentally retarded child. Achievement and success are hard to come by, but physical education in the life of the retarded quite often spells success.

There are many games and activities that can be used to develop Motor Coordination, Motor Development, Muscular Coordination, and Perception. On the following pages games and activities have been enumerated that will help to overcome specific disabilities.¹

¹Information on games, activities, and equipment is given at the end of Chapter Three.

Motor Coordination

1. **Stooping**
Develop large muscles in the leg. Bend knees and drop center of gravity low to ground.
2. **Dodging**
Develop motor coordination in moving freely. Move body weight to side with knees bent. Use toes for gripping to maintain balance. Also use arms for balance.
3. **Tossing**
Develop large arm muscles. Grip with one or both hands according to size of object. Step forward with weight on left foot as object is released.
4. **Throwing**
Develop large arm muscles. By starting with his shoulder forward, the child uses the rotation and movement of the body for adding power to the throw.
5. **Catching**
Develop muscles in the fingers. Draw back with hands as object is caught and bring it toward body.
6. **Kicking**
Develop balance and timing. Swing right foot backward directly behind ball with knee bent and arms raised for balance. Swing right leg forward, with sharp straightening of the knee as the instep come in contact with the ball.

Primary

Elevator Stoop
Simon Says
Circle Stoop
Giant Steps

Cat and Mouse
Bird Catcher
Hound and Rabbit
Crows and Cranes
The Target

Leader and Chase
Toss Ball
Ring Toss
Toss It Up
Bean Bag Circle Toss

Throw for Distance
Circle Stride Ball
Beanbag Circle Throw
Circle Pass Ball
One Hand Ball Throw
Throw Balls in a Basket

Three Chances
Center Base
Ring Call Ball
Toss and Catch

Kick It and Run
Kick Bag Race
Kick for Distance
High Kick

Intermediate

Statues
Stop the Music
Kick Ball
Charlie Over the Water

Dodgeball
Keep Away
Strike and Chase
Telephone Tag
Call Dodgeball

Darts
Beanbag Toss
Beanbag Tire Toss
Keep Away
Ball Distance Toss

End Ball
Baseball
Hit the Bucket
Scramble Ball
Line Keep-Away
Boundary Ball

Indian Ball
Trades
Hot Bun
Back Ball

Kickball
Two Basekick
Hitpin Baseball
Circle Kick Ball
Longest Kick
Line Soccer

Motor Development (Locomotion)

1. Walking
Transfer weight from one foot to the other without losing contact with the floor.
2. Running
Transfer weight from one foot to the other while the body is suspended in the air.
3. Jumping
Distribute weight on two feet; push into the air and land on two feet simultaneously.
4. Hopping
Put weight on one foot, push off floor, land on same foot. Arms serve to balance the movement.
5. Leaping
Transfer weight from one leg to the other involving elevation and suspension in the air.
6. Skipping
A series of step-hops done with alternate feet. Spring from toes, land lightly on toes.
7. Galloping
The progress of the individual is in a forward direction. One foot leads and the other is brought rapidly up to it.

Primary

Imitation: Walk like
Daddy, etc.
Indian Walk
Line Walking
Raggedy Ann Walk

Cat and Rat Race
Drop the Handkerchief
Squirrels in Trees
Red Rover
Brownies and Frairies

Jump the Brook
Jack Be Nimble
Jumping Rope
Frog Jump

Hop-Scotch
I Spy
One-legged Hop
Hop, Stop, and Jump
Rabbit Hop

Mister Grasshopper
Leap Frog
The Kangaroo Leap
Obstacle Races

Mouse Trap
Skip Tag
Skipping Forward Relay
Double Circle

Gallop Tag
Gallop Step
Galloping Lizzie
Gallop Pony

Intermediate

Follow the Leader
Around the Row
Walking Relay
Elephant Walk

Link Tag
Stealing the Bacon
Fire Engine
Cowboys and Indians
Last Couple Out

Standing Jump
Mark and Jump
Rope Jumping
Jump Ditch Relay

Lame Fox and Chickens
Farmer and Crow
Hopping Relay
Double Foot Hop
Single Foot Hop

Leap Frog
Straddle the Fence
Superman Leap
Leap for Distance

Skipping Race
Skip Rope
Walk, Slide, Skip
Skipping Backward Relay

Galloping Broncos
Galloping Bounce
Follow the Leader
Gallop Relay

Perceptual Motor Functions

	<u>Primary</u>	<u>Intermediate</u>
1. Walking Board Develop a sense of balance and postural flexibility.	Use a 4-inch board. Forward Walk Backward Walk Forward Walk (Tiptoe) Sidewise Walk	Use a 2-inch board. Forward Walk Backward Walk Sidewise Walk Pivot
2. Jumping Develop balance, postural flexibility. Use of two sides of body. Alternation of sides.	Trampoline Jumping Rope Crossing the Brook	Mark the Jump Trampoline
3. Imitation of Movements Develop ability to reverse laterality. Body image and control interpretation of visual clues.	Simon Says Follow the Leader	For Primary Only
4. Obstacle Course Develop the child's awareness of the space occupied by the parts of his body in various positions.	Crawling through Maze Spiral Crawl (Circle) Snail Pattern	Swinging Tunnel Climbing Obstacles Electric Maze
5. Angels in the Snow Indicates whether the child is experiencing problems in controlling the parts of his body individually or in prescribed combinations.	1. Move just one leg. 2. Move just one arm. 3. Move both arms. 4. Move both legs. 5. Move one arm and one leg. 6. Move both arms and both legs.	For primary use only unless needed here.
6. Mat Drills Sequences of mat activities to develop coordination.	Log Roll Snake Pulling Crawling (hands and knees) Swimming Ball Rolls	Forward Somersaults Backward Somersaults Wheelbarrow Walk

Muscular Coordination

1. Lifting
Divide weight evenly, or alternate weight from left arm to right. Keep back tall and straight. Balance with one foot forward.
2. Carrying
Develop muscular coordination of the arms by carrying heavy articles.
3. Climbing
Strengthen arm and leg coordination.
4. Hanging and Stretching
Draw hands toward body, using force. Extend and expand one or more body parts.
5. Pushing and Pulling
Shove away from body using force. Draw toward the body using force.
6. Swinging
Consists of a pendulous, arc-like movement executed by the arm or the leg, or the body as a whole.

Primary

- Pick-Up Race
Relay Race
- Stealing Sticks
Pick-Up Race
- Sliding Board
Stairs
Step-Up
- Jungle Bars
Rubber Band Stretch
Bed Springs Stretch
Squeeze Up (Accordian)
- Forward Roll
Chinese Pull-Up
Hand Push
Bell Ringing
Push the Wheelbarrow
Push Up
Pull Up
- Monkey Swing
Elephant Trunk
Pendulum on a Clock

Intermediate

- Relay Race
- Potato Race
Fetch and Carry
- Hang Tag
Volleyball (stretching)
Cartwheel (stretching)
Somersaults
- Tug of War
King of Mountains
Shuffleboard
Pulling Up Anchor
Chinning
Push Up From Knee
- Lasso the Horse

The following are additional games and activities which have not been divided into specific skill areas, but rather into types of activities, such as walking, running, jumping, skipping, throwing a ball, catching a ball, etc.

To develop skills the retarded child should have frequent activity periods and be given the opportunity to participate in varied activities. Through careful planning the teacher can provide for the attainment of many motor skills just through the use of simple games and activities. Many times these children are not able to easily execute physical movements that should have occurred spontaneously in their normal growth. A retarded child must be taught what a normal child learns naturally, and he must be motivated to do the activities. When a retarded child begins to master some of the basic skills required in these activities and games, he derives many benefits, such as coordination, agility, balance, strength, muscle tone, speed and advancement in his social development. Learning to work, play and share with others is an essential aspect in the development of the retardate.

Kindergarten

Walking	
Indian Walk	Imitation Walk of Daddy, etc.
Doll Walk	
Marching	
Follow the Leader	Soldiers in Parade
Running	
Red Light	Bean Bag Race
Rag Relay	Drop the Handkerchief
Cat-Rat Race	Squirrels in Tree
Jumping	
Crossing the Brook	Rubber Ball Bounce Jump
Jack Be Nimble	Jumping Jacks
Hopping	
Hopscotch	One-legged Hop
Hop, Stop and Jump	
Skipping	
A Tisket, A Tasket	Did You Ever See a Lassie
Drop the Beanbag	Three Deep
Go In and Out the Window	
Throwing	
Beanbag Game	Ring Toss (Quartz)
Bouncing Balls	
Ball Race	Bounce the Ball
Call Ball	
Tag Games	
Squirrels Up the Tree	Back to Back
Beanbag Games	
Beanbag Throw (Clown)	Beanbag Call Ball
Round the Clock	Overhead Beanbag Relay
Leaping	
Mister Grasshopper	The Kangaroo
Little Frog	
Catching	
Toss Ball Catch	Roll Catch
Circle Catch	
Singing Games	
Round and Round Went	Did You Ever See a Lassie (Laddie)
the Gallant Ship	Sally Goes Round the Moon
In and Out the Window	Ring Around the Rosie
Hickory, Dickey, Dock	Salley Waters

Primary

Walking

Giant Step
Line Walking
Crow Race

Shake Up
Double Space
Railroad Train

Jumping

Frog Jump
Kangaroo Jump
Crossing the Brook

Spinning Top
Jumping Rope
Run Rabbits Run

Skipping

Magic Carpets
Charley Over the Water

Double Circle
Flowers in the Wind

Tag Games

Circle Walk Tag
Number Exchange
Last Couple Out
Big Black Bear
Back to Back

Stoop Tag
Shadow Tag
Link Tag
Squirrels in Trees
Drop the Handkerchief

Relay Games

Cross Over Relay
Skip Rope Relay
Scramble Relay
Toss Over Relay

Across the Room
Stoop and Stretch
Line Ball Relay
Down and Back

Running

Fairies and Brownies
Run, Rabbit, Run
Bird Catching
Duck, Duck, Goose

One, Two, Button My Shoe
Cat and Rat
Red Rover

Dodging

Cat and Mouse
Bird Catcher

Hound and Rabbit

Catching

Center Ball
Ring Call Ball

Toss and Catch

Hopping

Hop-Scotch
Hop, Stop, Jump

I Spy

Singing Games

Farmer in the Dell
Oats, Peas, and Beans
A-Hunting We Will Go
Skip to My Lou
Hot Cross Buns

Looby-Loo
Mulberry Bush
London Bridge
Bluebird Through the Window
Go 'round and 'round the Village

Intermediate

Walking	Elephant Walk
Follow the Leader	
Walking Relay	
Running	Club Snatch
Link Tag	Two Deep
Last Couple Out	Fire Engine
Shuttle Relay	
Jumping	Mark the Jump
Standing Jump	Rope Jumping
Jump and Touch	Jumping the Shot
Floor Tag	
Hopping	Hopping Relay
Lame Fox and Chicken	Hopscotch
Farmer and Crow	
Skipping	Skip Rope Relay
Skipping Relay	
Ball Games	Donkey Dodge Ball
Stride Ball	
Keep Away	
Tag Games	Pom-Pom-Pom-Pull-Away
Poison Tag	Cross Tag
Chain Tag	Goal Tag
Link Tag	
Relay Games	Rush Over Relay
Zigzag Relay	Blackboard Relay
Arch Ball Relay	Round Toss Relay
Sack Relay	Carry and Fetch Relay
Toss Over Relay	Over and Under Relay
In and Out Relay	
Dodging	Telephone Dodge Ball
Dodge Ball	Circle Dodge Ball
Keep Away	
Strike and Chase	
Kicking	Hitpin Baseball
Kickball	
Two Basekick	
Singing Games	Pop Goes the Weasel
Skip to My Lou	Polly-Wolly-Doodle All Day
Paw-Paw Patch	Turn Myself Around
Hoky-Poky	If You're Happy and You Know It ¹
Ten Little Indians	

¹For additional activities see Appendix.

In fulfilling the goals and objectives of physical education it is necessary to have sufficient equipment. Equipment is exciting and challenging to most boys and girls. Equipment which gives children practice in acquiring specific skills, and at the same time helps them to develop strength, coordination, balance, agility, courage and self confidence is desired. On the following pages some equipment is listed which gives children practice in acquiring specific skills. The ingenious teacher can devise many ways to provide a good physical education program even if the school cannot afford purchase of equipment. As long as the space is available -- indoors or outdoors -- it is possible to carry on a well-rounded physical education program. Many games and activities listed in this paper can be played with little or no equipment. The skills developed in a physical education program will depend on the teacher, not on the equipment in itself.

Balance Equipment

Balance Beam (4-inch wide)
Balance Beam (2-inch wide)
Balance Tilt
Horizontal Bar
Horizontal Ladder
Low Parallel Bar
Parallel Bars
Parallel Ladders
Rocking Board
Sinking Tires
Square Balance Board
Stationary Circle Travel
Rings
Swinging Tunnel
Table Swing
Uneven Parallel Bars

Manipulative Equipment

Automobile Tires
Bean Bags
Jump Ropes
Large Medicine Ball
Large Rubber Balls
(of various sizes)
Plastic Bowling Set
Plastic Softballs
Sandbox
Small Medicine Ball
Small Rubber Balls
Small Rubber Football
Tether Ball
Volleyball

Movement Explorative Equipment

Barrels and Kegs (Movable)
Chinning Bars
Climbing Poles
Climbing Obstacles
Climbing Ropes
Climbing Stairs
Collapsable Tunnel
Crawling Maze
Exercise Bars
Hopscotch (Painted on ground)
Jungle Gym
Large Inner Tubes
Large Sandbox
Obstacle Course (Homemade)
Platform Slide
Scooters
Spiral Crawl
Trampoline
Tumbling Mats

Although music is effective in teaching any child, it is of particular value in working with the mentally retarded. This child who often is so unaware of his surroundings may become aware of how he can respond to music by clapping, jumping, marching to the beat of the music. Thus a learning experience is made more pleasant and effective. The beat of the music may stimulate an unresponsive child into active participation with the group, thus promoting social development of the retarded child. Often the child is able to perform better if music accompanies the physical activity. On the following pages are listed numerous records that will provide various activities that will stimulate the youngster.

Records

Rhythms

Source: Stanley Bowmar Co., Inc., 4 Broadway, Valhalla, N.Y. 10595.

Rhythm Time No. 1 (1-12" long play)

Basic Rhythms: Walk, run, tiptoe, skip. Combinations: Skip, walk and whirl, tiptoe-run and leap, walk and hop. Mechanical Rhythms: Jet plane, mechanical toys, clocks. Circus: Circus parade, merry-go-round, circus ponies (gallop-high).

Rhythm Time No. 2 (1-12" long play)

Basic Rhythms: Skip, walk, run, tiptoe. Combinations: Run-walk-run, skip-walk-skip, skip-whirl, walk-hop. Basic and Combinations: Skip, giant walk, walk-run-tiptoe, run-leap. Country Rhythms: Windmills, ponies, galloping horses, hopping rabbits.

Rhythms for Today (2-12" long play)

Natural Movements: Movable objects, body movements, make-believe people, animals, nature, real people, travel, space travel. Creeping, walking, faster walk, tip-toe walk, happy walking, running, skipping, marching, galloping, jumping, hopping. Travel: Truck, fire engine, motorcycle, tug boat, train, airplane, etc.

Rhythmic Activity (1-12" long play)

Basic Rhythmic Activities: Walk, skip, slide, small run, gallop, jump series. Combinations: Turn-walk-hold, run-jump, bounce-swing, walk-run-fall.

Classroom Rhythms (1-12" long play)

Basic Rhythmic Activities: Designed to encourage successful first experiences in rhythms. Introduces marching, running, tiptoeing, galloping, skipping, jumping, swaying, and hopping. Text with suggestions.

Childhood Rhythms No. 1 (3-10" 78rpm)

Skip I, march jump, gallop, skip II. Animal and toy rhythms: ducks, camels, horses, elephants, trains, tops. Play and character rhythms: swings, see-saws, bicycles, dwarfs, giants.

Childhood Rhythms No. 2 (3-10" 78rpm)

Rhythm Combinations: Up-down, round and round, fast and slow, walk and skip, bouncing balls, jumping rope, bounce and catch, bounce-bounce-bounce, jump in place, jump fast, skip-jump.

Rhythmic Play (4-10" 78rpm)

Let's Play: Skip, walk, slide, hop, jump, run, gallop, skip and jump, etc. Let's Pretend: Giants, trains, elephants, airplanes, curling smoke, etc.

Creative Rhythm Albums, Album O-The Circus (4-10" 78rpm)

Run, walk, monkeys, giraffes, acrobats, swinging, galloping, roping, etc.

Creative Rhythm Albums, Album R-Visit to the Farm (4-10" 78rpm)

Bus, walking, running, climbing, pitching hay, skipping, fishing, etc.

Creative Rhythm Albums, Album S-The Seasons (4-10" 78rpm)

Skipping, whirling, leaves, picking apples, sailing, pulling anchor, etc.

Creative Rhythm Albums, Album T-A Visit to the Park (4-10" 78rpm)

Walking, trees swaying, running, swinging, jumping rope, bouncing balls, etc.

Action Songs and Games

Source: Stanley Bowmar Co., Inc., 4 Broadway, Valhalla, N.Y. 10595.

Action Songs and Rounds (1-12" long play)

Simple actions help the child join more completely in the singing.

Singing Action Games (1-12" long play)

Bright and sprightly singing action games that require neither partners nor the need to learn specific steps and movements. Children are encouraged to use their imagination and ability to pretend.

One, Two, Three, and a Zing, Zing, Zing, (1-10" long play)

Games and rhythms: Bounce ball, jump rope, clapping games, etc.

Sing 'n Do

Album #1	(3-45rpm)	
Album #2	(3-45rpm)	
Album #3	(3-45rpm)	The Holiday Album
Album #4	(3-45rpm)	The Toy Shop Album
Album #5	(3-45rpm)	Down on the Farm
Album #6	(3-45rpm)	

Multipurpose Singing Games (1-12" long play and manual)

These multipurpose singing games offer a variety of moods and subjects. They were designed to aid in the

development of both classroom and physical fitness skills. The activities encourage purposeful listening and help develop agility, coordination, spontaneity, rhythm and dramatic expression.

Physical Fitness

Source: Stanley Bowmar Co., Inc., 4 Broadway, Valhalla, N.Y. 10595.

Fun and Fitness (1-12" long play)

Designed to assist primary teachers in meeting physical fitness needs of boys and girls. Selections are short in keeping with growth and developmental physical traits of primary children.

Exercise is Kid Stuff-Rhythmics (1-12" long play and manual)

Eleven children's songs which encourage active participation and appeal to their imagination. Little Ducks, Celery Stalks, Toot the Flute, Beat the Drum, I Can Skip, Funny Little Bunny, Up and Down, Elevator.

Animal Rhythmics (1-12" long play and manual)

Twelve songs for rhythmic activity, self-expression and delightful enough to have children join in and sing along. Animal Talk, Mother Goose Parade, Squeaky the Mouse, I'm an Inch-worm, Genevieve the Giraffe, etc.

Physical Fitness for the Younger Set (1-12" long play, manual)

Six inspiring songs for children to sing and exercise to. The Elephant, Happy Children, The Rabbit, I'm a Little Book, The Windmill, Jumping Jacks.

Listening and Moving: Exploring Perceptual-Motor Education Needs of Primary Level Children (1-12" long play)

This album provides a sequentially-developed training program to help pupils establish necessary perceptual-motor skills. The training includes the sequential development of agility, balance, combination balance and locomotor agility; turning locomotor agility, complex locomotor agility, etc.

Listening and Moving: Development of Body Awareness and Position in Space (2-12" long play)

This album provides a researched and sequentially-developed training program to help the pupil establish an accurate awareness of his body and its position in space. The program develops from perception of body surface through directionality of self and other objects.

Developing Body-Space Perception Motor Skills - Album 1

(1-12" long play and manual) The child is helped to develop a sense of himself in relation to place through the use of appropriate games and exercises.

Developing Body-Space Perception Motor Skills-Album 2

(1-12" long play and manual)

The child's sense of laterality, directionality, and other early psycho-motor abilities is encouraged by participation in activities carefully structured to induce successful motor accomplishments.

Developing Body-Apace Perception Motor Skills-Album 3

(1-12" long play and manual)

Provides the child with necessary structured activities to stimulate sensory-motor performance.

Exercises for Fitness and Fun (3-10" 78rpm)

Four jumping exercises, four bending and stretching, four for trunk and body swings. Verbal instructions on the first part with musical accompaniment following to allow several repetitions of movements.

Modern Dynamic Physical Fitness Activities (4-12" 78rpm)

A diversified grouping of activities for fun, relief, and strengthening. Each has "talk-through, walk-through" instructions followed by music and commands. Trunk bend with toe touch, sawing wood, bear walk, lame dog, etc.

Musical Ball Skills (2-12" long play and manual)

Bouncing, throwing, catching, rolling, passing, dribbling balls in rhythmic patterns is an excellent method of enhancing coordination ability and perceptual skills.

Fitness Fun for Everyone-Album 24 (4-12" 78rpm)

All activities are set to simple, appealing, well-known melodies that children instinctively enjoy. Clear and concise instructions are followed by song and action activities designed to develop legs, arms, shoulders, waist, abdomen, feet and back. Bend jump, arm swing, running in place, arm fling, leg swing, one foot balance, run and hop.

Chicken Fat (1-7" 45rpm and instructions)

This is the official song of the President's Council on Physical Fitness. Directions are given on the record for each exercise. Music and rhythm are snappy and invigorating so that the child will be stimulated to action and activity. The school version, encompassing eleven different exercises lasts six and one-half minutes.

Source: Golden Records, Department of H. G., 630 Fifth Avenue, New York, N.Y. 10020.

Songs and Games of Physical Fitness for Boys and Girls

(1-12" long play)

This record consists of a group of song-exercise games especially designed for children four to eight years old.

The original lyrics about subjects appealing to children of these ages have been written to correlate with specific exercises: Alphabet Exercise, Foot to Head, My Little Airplane, Circus Day, Toyland, and Posture Pete.

Source: Statler Records, 73 Fifth Avenue, New York, N. Y. 10003.

First Lessons in Creative Movement (1-12" long play)

The purpose of this album is to introduce young children to movement and dancing in an elementary form as a physical expression of feeling and moods, and to widen their contact with other living and moving creatures around them. While enjoying creative activity, the child will be going through the basic exercises that are the foundation for a healthy and strong body, coordination and dance training, and physical fitness. The children use their bodies in planned physical activities, stretching, contracting, expanding, and discovering elementary differences between fast and slow through walking, running, and skipping.

The films enumerated on the following pages will help not only the physical education teacher, but even the regular classroom teacher of the mentally retarded to see that in every child -- normal or retarded -- lies some creative power. This child has motor impairments; he cannot express himself, lacks basic knowledge to explore the world about him, and cannot relate to others and function independently. Movement contributes to these goals by instilling in the retarded child a sense of awareness of the world around him. In these films children are shown participating in activities that stimulate exploration of the parts of the body and attack coordination problems. A wide variety of activities are shown. The joy that comes from success, no matter how small, has been captured in many of the following films.

Films

Aids for Teaching Mentally Retarded

Phase A: Motor Training

16mm
Sound
Color
11 minutes

Unique devices and exercises stimulate the passive child to initiate activities and help him to understand cause and effect relationships. The crawling maze, stepping ladder, table swing, balance beam, and swimming table are designed to improve locomotion, coordination, spatial orientation, and balance. Climbing obstacles, sinking tires, and off-centered tires introduce the child to a variety of sensations and experiences through which he may increase motor control and gain awareness of his body and what it can perform.

Phase B: Initial Perceptual Training

16mm
Sound
Color
8 minutes

Exercises involving various sensory areas are provided to help improve perceptual skills: discrimination with respect to sight, touch, weight and sound; and development of manual dexterity, and hand-eye coordination.

Phase D: Integrated Motor-Perceptual Training

16mm
Sound
Color
6 minutes

Activities that integrate movement and perception are emphasized. Hop Scotch requires concentration and muscle coordination. Roller skating promotes an awareness of the body and its capabilities. Folk dancing is a skill that also teaches social courtesies and consideration for others. Singing develops a sense of rhythm and improves auditory acuity. Varied craft activities often point the way toward vocational aptitudes that may be developed by further training. Completed craft articles provide the student with tangible and satisfying evidence of his accomplishment.

Educational Motion Pictures, Bureau of Audio-Visual Instruction, 1312 West Johnson, P.O. Box 2093, Madison, Wisconsin 53701.

Anyone Can -- Learning Through Motor Development

16mm
Sound
Color
27 minutes

Anyone Can is actually four short films on one reel. It demonstrates a carefully planned motor development program for atypical children. Shown are 1) rope skills; 2) ball handling; 3) the Stegel; and 4) the trampoline. The film shows special techniques used to directly involve the children in motor skills which enhance their learning, and more important, improve their self-image.

Bradley Wright Films, 309 North Duane Avenue,
San Gabriel, California 91775.

Bob and His Friends on the Playground

16mm
Sound
Color
5 minutes

This film shows how desirable concepts are developed in a special elementary level classroom for the educable mentally retarded child. A young boy and his classmates are shown exercising, playing games, and participating in sports.

Educational Materials Distributors, Weslaco,
Texas 78596.

Bright Boy -- Bad Scholar

16mm
Sound
Black and white
25 minutes

Dr. Sam Rabinowitz discusses the theory and practice involved in the program of the Learning Clinic affiliated with the Montreal (Canada) Children's Hospital. Emphasis is upon the variety of skills and abilities necessary to learn and upon the many facets that make-up the "intelligence" of an individual. The importance of shape discrimination, eye mobility, and left-right relationship is discussed in terms of their importance in learning to read; physical coordination is shown to be basic in learning to write. Simple tasks combining perception, interpretation and action are demonstrated as the teacher and parent try to focus on what the child can do as well as what he can't do. The young child "thinks" with his muscles through movement and activity so that clumsiness, awkwardness, and lack of coordination are in reality

problems in "thinking" for him. It is important that the child experience success as emphasis is placed upon ability.

Note: While this film deals with children of average or better intelligence who have difficulty in learning, the rationale and principles involved in attacking these problems are quite appropriate and applicable for the mentally retarded.

Contemporary Films, 267 West 25th Street,
New York, N.Y. 10001.

Cast No Shadow

16mm
Sound
Color
27 minutes

This is a unique and dramatic motion picture which vividly depicts a wide range of recreation activities for severely and profoundly mentally retarded, physically handicapped, multihandicapped and emotionally disturbed children, teens, and adults at the Recreation Center for the Handicapped (San Francisco, California). Emphasis is placed upon the values of recreation and its effect upon the lives of the handicapped as an integral part of their total learning experiences and social development. Equally important, it is a film about handicapped individuals, ages 2 to 25 as people. Enthusiasm, satisfaction, and enjoyment are shown on their faces as they participate in activities from snow skiing at Squaw Valley's Olympic Village to wheelchair surfing in the Pacific Ocean.

Professional Arts, Inc., Box 8484, Universal
City, California.

A Demonstration Lesson in Physical Education

16mm
Sound
Black and white
28 minutes

This film depicts the approaches and techniques of Mr. Ernie Davis and some of the activities he includes in the physical education program at Crowley Special School, St. Paul, Minnesota. Activities demonstrated include: responding to commands; lining up and counting off; running relay races; participating in circle games; organizing squads; using innovative and creative warm-up activities; teaching tumbling activities (shoulder roll, progressively to the hand stand); and doing

partner stunts. A great deal of emphasis is placed upon physical education as an integral part in the total learning process and in presenting skills that can carry-over to other areas.

Director, Project on Recreation and Fitness for the Mentally Retarded, American Association for Health, Physical Education, and Recreation, 1201 Sixteenth Street, N.W., Washington, D.C. 20036.

A Dream to Grow On

16mm
Sound
Color
28 minutes

This film tells the story of the 1968 Special Olympics in Chicago where 1,000 mentally retarded children competed for coveted medals in running, jumping, swimming, and other Olympic events. It suggests that what took place in Chicago can happen all over the country as other communities become a part of this new program.

Bone Film Service, 3132 M Street, N.W., Washington, D.C.

Exploring Movement Through Bicycle Tires

16mm
Silent
Black and white

This film shows a wide range of creative and original ways to use bicycle tires in physical education and recreational programs.

Dick Bergner, Greendale Public School, Greendale, Wisconsin 53220.

Into the Sunlight

16mm
Sound
Color
15 minutes

This film describes the activities of the Canadian Summer Camp for Trainable Mentally Retarded Children. This camp was of three weeks duration for each fifty boys and girls with an IQ below 50. It shows usual camp activities, such as hiking, nature study, swimming, games, crafts, etc., modified to meet the needs of mentally retarded and so-called "exceptional" children.

Ontario Association for Retarded Children, 55 York Street, Toronto, Ontario, Canada.

Motor Development I

16mm
 Sound
 Black and white
 51 minutes

This film deals with the early development of motor sequences in children.

Purdue University, Lafayette, Indiana 47907.

Movigenic Curriculum

16mm
 Sound
 Black and white
 41 minutes

This film explains an experimental curriculum for children with learning disorders. It shows exercises in various areas; muscular strength, balance, body awareness, visual training, auditory dynamics, kinesthesia, tactual dynamics, bilaterability, rhythm, flexibility, and motor planning.

Bureau of Audio-Visual Instruction, 1312 West Johnson Street, P.O. Box 2093, Madison, Wisconsin 53706.

The Neurological Approach (Program #7)

16mm
 Sound

This film shows one application of the neurological approach in teaching motor activities. A film about the special clinic at the University of Southwestern Louisiana is included.

Norman Lunenfeld, NBC Enterprises, National Broadcasting Company, 30 Rockefeller Plaza, New York, N.Y.

New Experiences for Mentally Retarded Children

16mm
 Sound
 Black and white
 36 minutes

This film depicts a program for in-service training of the moderately mentally retarded child at a residential summer camp. The relationship between school and camping program, and the training in self-care and social responsibility is clearly shown.

Virginia Department of Education, Special Education Service, Richmond, Virginia.

New Experiences for the Mentally Retarded

16mm
 Sound
 Black and white
 20 minutes

This film presents a variety of education and recreational activities for the mentally retarded. It emphasizes methods for teaching and the development of self-confidence and social maturity.

Audio-Visual Department, Virginia State
Department of Education, Richmond, Virginia.

Newfangled Ideas on Mental Retardation (Program #10)

16mm
Sound
30 minutes

This film includes a specially made film dealing with Research on Perceptual-Motor Theories. Guests representing various agencies discuss: "What does tomorrow hold for the retarded?"

Norman Lunenfeld, NBC Enterprises, National Broadcasting Company, 30 Rockefeller Plaza, New York, N.Y.

The Packwood Experiment (Program #8)

16mm
Silent
Black and white
30 minutes

This film features the Packwood Experiment and Dr. James Oliver. Through the use of extensive physical education methods and activities, a group of mentally retarded youngsters showed remarkable progress-- including significant intellectual gains.

Note: A taped narration accompanies this film which can be played during the showing.

Norman Lunenfeld, NBC Enterprises, National Broadcasting Company, 30 Rockefeller Plaza, New York, N.Y.

Patterns

16mm
Sound
Color
17 minutes

The focus of this film is upon the need for physical education for trainable and below mentally retarded. Featured is the Title III (Elementary and Secondary Education Act) physical education program at Austin State School. Physical activities and equipment are demonstrated, showing how they promote motor development and improve physical fitness of the retarded. Steps involved in effecting positive behavioral changes in the severely and profoundly retarded through the medium of physical education are explained. The physical education staff is seen in actual teaching sequences which illustrate why a particular activity is included in the program. Residents of widely differing skill levels and a variety of activities, including an improvised and homemade obstacle course, are shown.

Guy Owen, Title III Physical Education
Research Grant, Austin State School, P.O.
Box 1269, Austin, Texas.

Physical Education at Packwood School

16mm
Silent
Black and white
15 minutes

This film is an authentic record of the types of activities used by Dr. James N. Oliver in his study of mentally subnormal adolescent boys. The whole film was taken in one day during the seventh week of the ten-week program and includes the gymnastic table, strengthening activities, log exercises, roadwork, remedial gymnastics, partner work, special fitness activities, and games.

Director, Project on Recreation and Fitness for the Mentally Retarded, American Association for Health, Physical Education and Recreation, 1201 Sixteenth Street, N.W., Washington, D.C. 20036.

Physical Education: Lever to Learning

16mm
Sound
Color
20 minutes

Emphasis in the film is upon the use of wholesome, vigorous physical activity as a medium for motivating and challenging the mentally retarded to improved performance and in stimulating his total growth and development. The breadth of these activities is such that all retardates regardless of their age, background, experience or functional level, can find ones in which they can achieve and succeed. Primary and intermediate educable youngsters are shown negotiating obstacles on an improvised confidence course of tires, ropes, ladders, softball backstop, hurdles, a jungle gym, and a balance beam. Advanced elementary school educable youngsters are shown participating in indoor activities involving chairs, logs, ropes, and balance boards.

Stuart Finley, 3428 Mansfield Road, Lake Barcroft, Falls Church, Virginia 22041.

Pine School Summer

16mm
 Sound
 Black and white
 10 minutes

This film records two phases of a summer school outdoor education program for culturally disadvantaged educable mentally retarded children. In Phase I, instruction was given in the classroom and on the playground in science, recreation, camping, and homemaking as each related to camping and outdoor education. In Phase II, nature activities, hiking, fishing, other types of recreational activities, and camp chores were activities engaged in during the camp program.

James Andrews, 219 River View, Iowa City, Iowa 52230.

A Program of Motor Development Activities

16mm
 Sound
 Color
 22 minutes

A program of developmental motor activities built around the concept of neurological organization as practiced at the Developmental Clinic, University of Southwestern Louisiana, Lafayette, is presented. Fundamental to this approach is the premise that neurological organization is essential to visual perception, spacial relationships, reading skills, and writing, and that an improvement in the neuromotor area should contribute to increased performance in the academic areas as well. Four recognized levels of development (moving arms and legs without forward movement; crawling; creeping; and walking) are demonstrated by the student clinicians who are working with youngsters in different activities and with a variety of approaches which promote neurological organization.

Director, Project on Recreation and Fitness for the Mentally Retarded, American Association for Health, Physical Education, and Recreation, 1201 Sixteenth Street, N.W., Washington, D.C., 20036.

Recreation Center for the Handicapped

Founded in 1952, the Recreation Center for the Handicapped provides year round programs for the severely handicapped.

16mm
Sound
Color
23 minutes

Emphasis of the program is upon the development of happiness and contentment as each individual, regardless of his impairment, learns to do for himself and to stand on his own two feet. Scenes include participants active in checkers, music activities (tamborine and bongos), clay work, outdoor activities, table games, wrestling, swimming, fishing and casting, woodworking, playground activities, snow and winter activities, and dancing. Some of the many ways in which the participants help each other are vividly shown.

Director, Project on Recreation and Fitness for the Mentally Retarded, American Association for Health, Physical Education, and Recreation, 1201 Sixteenth Street, N.W., Washington, D.C. 20036.

Recreation Unlimited

16mm
Silent
Black and white

This film shows a summer recreation program for the mentally retarded. It shows the children participating in swimming, folk dancing, acting, and crafts.

Note: A seven and a half inch tape recording accompanies the film.

Houston Council for Retarded Children, 8350 Leafy Lane, Houston, Texas.

Recreational Activities for Mentally Retarded Children (A Community Enterprise)

16mm
Silent
Color
28 minutes

This film shows summer recreation program for mentally retarded children. The activities include games, crafts, music, swimming, special outings, picnics, and parties. The day camp program is possible through the cooperation of recreation department, parent group, Kiwanis, and other groups.

Note: An excellent paper which describes the day camp program is mailed with the film for use as a commentary when showing the film.

Recreation Department, West Hartford, Connecticut 06107.

Roadwork

16mm
 Silent
 Black and white
 15 minutes

Roadwork is a program combining the use of different types of movement with interesting and challenging physical activities. A typical roadwork session is shown including "ambling", fast or race walking, jogging, trotting, sprinting, skipping, hopping, bounding, running backwards, and crawling. Various partner activities, stunts, and tumbling activities, formal exercises or calisthenics, combatants, and self-testing activities are shown. Full use is made of fallen tree trunks, small ditches, hills, and trees. This film shows how the activities and this environment can be integrated into a vigorous, challenging, and interesting activity emphasizing fitness and skill development.

Note: A taped narration accompanies this film.

Director, Project on Recreation and Fitness for the Mentally Retarded, American Association for Health, Physical Education and Recreation, 1201 Sixteenth Street, N.W., Washington, D.C. 20036.

Show Me

16mm
 Sound
 Black and white
 30 minutes

This film deals with some of the basic motor problems of the severely retarded (IQ 20-45). Filming was done at Wood County Retarded School (Ohio) with children (CA 6-14) who had no regular physical education program at the school. Many of the activities shown were new to these boys and girls who had their first exposure to them during the filming itself. The major teaching method employed and demonstrated involves exploration of movement. Sequences include activities which emphasize (a) movement in space, (b) time elements in movement, (c) force variations, (d) movement integration, (e) handling and manipulating objects, (f) rhythmic and creative expression, and (g) partner work. Through active participation body image, body control, and coordination, and object exploration are promoted.

Creative use of simple, easily obtained and improvised objects is shown as a means of making the approach more meaningful to the child.

United World Films, Inc., 221 Park Avenue, South, New York, New York.

Time is for Taking

16mm
Sound
Color
23 minutes

This film explores the work of Camp Kentan, a residential camp for educable and trainable mentally retarded children, operated by the Northern Virginia Association for Retarded Children. The film uses actual events as they happened in the everyday camp situation to provide a realistic insight into the world of the retarded child. The Camp is jointly sponsored by the Joseph P. Kennedy, Jr. foundation and Civitan.

Stuart Finley, 3428 Mansfield Road, Lake Bancroft, Falls Church, Virginia 22041.

To Lighten the Shadows

16mm
Sound
Black and white
20 minutes

The world of the mentally retarded child can be enriched through recreation and camping experiences. Boys and girls are seen in typical camp activities as riding the bus to camp, arts and crafts, singing activities, fishing, self-testing activities, and circle games. Outstanding teachers from the field are seen and heard in providing information about retardation, a rationale for recreation programming for the retarded, information about staff and leadership, and data about coordination between camp and home.

International Film Bureau, Inc. 332 South Michigan Avenue, Chicago, Illinois 60608.

Up and Over

Exploring on the Stegel: This film shows Stegel activities to develop creative problem solving. It demonstrates specific techniques any teacher can learn to use. It illustrates

16mm
Sound
Color
20 minutes

success-oriented programs to build strong self-image and confidence. Included is a seven-page Study Guide, list of Stegel manufacturers and selected bibliography.

Bradley Wright, Films Distribution Center, 309 North Duane Avenue, San Gabriel, California 91775.

You're It

16mm
Sound
Color
25 minutes

This film emphasizes the importance of recreation as a means of educating the mentally retarded. Specific examples of how participation in recreational programs can contribute to physical growth, social development, more productive use of leisure time, and vocational placement are discussed. Methods dealing with the retarded in recreational programs, along with teaching hints and suggestions are important inclusions.

Alden S. Gilmore or Thomas A. Rich, MacDonald Training Center, 4424 Tampa Bay Boulevard, Tampa, Florida.

The following film, The Other Side of the Shadow, won a special Emmy Citation as the outstanding documentary of the year 1967.

The Other Side of the Shadow

16mm
Sound
Color
26 minutes

This film depicts a world of hope and growth and achievement that exists for the retarded children of New Orleans at St. Michael's Special School. It is the gentle, often poignant story of the training and care of the mentally retarded in the Archdiocesan Department of Special Education. The physical education part of the film depicts staggered rows of used tires, which the children run through with enthusiasm, especially after encouragement from the teacher. The goals of the program are manifold: Strengthening young arms and legs; developing motor control; coordinating the eye with the movement of the body.

St. Michael's Special School, 1522 Chippewa Street, New Orleans, Louisiana 70130.

Summary

Once it has been determined that physical education is beneficial to the mentally deficient and that progress in one area promotes improvement in another, it remains but to come to specifics in regard to means and ends.

In each area of concern -- physical, social, and intellectual -- there are certain objectives to be met. The specific characteristics of children at each level of development must be borne in mind. To meet the needs at each level lists of simple games, activities and equipment have been provided. A list of records for providing the added stimulus of music has been included. This is followed by an annotated list of films for use in physical education for retardates.

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Chapter IV

SUMMARY AND CONCLUSIONS

Society today has begun to realize that the mentally retarded can become useful and even contributing persons. But first they must be taught to get along with others, to respect themselves and others, to give and take and, most important of all, to gain self-confidence. Gaining self-confidence gives them the chance for success so necessary in the life of the retarded.

It has been proven that a good physical education program is a great asset in this process of overcoming diffidence and a tendency to withdraw from or to turn against other persons. Long before a retardate can master skills requiring mental effort, he can successfully perform simple physical exercises. This brings to him the warm feeling of achievement and well-being.

A living testimony of this is what took place July 20, 1968, in Chicago's Soldier Field when boys and girls ran, jumped, and swam their way to victories in the first Special Olympics for the mentally retarded. Every retarded child was a winner that day and there is nothing comparable to the thrill and reward of wearing the medals they had won.

The beam, the glow, the look of satisfaction will long be remembered by those who were privileged to sit on the sidelines and be spectators that day.¹

Success experiences should be of no small concern where retarded children are involved. A sound physical education program has tremendous potential in providing success experiences. So often failure is the rule rather than the exception for these children, but where success experiences begin to appear frequently enough they can contribute to the child's becoming a useful and functioning member of society.

Success is, after all, a relative thing. No one claims that the retarded child can become normal; but it has been proven that he can develop, achieve, become a happier, a more satisfied and satisfying person.

Needless to say, the various areas in which he can achieve overlap. Through physical education he increases the number of technical skills he can perform. He can become a winner, as was seen in the case of the children in Chicago. But he does more than this. He becomes better coordinated, more alert, and this affects his intellectual development. He gains confidence, overcomes shyness, becomes more docile and willing to cooperate with other children and with adults. In turn, his increased intellectual functioning and better developed social graces make him more able to compete in

¹Frank J. Hayden, "Sometimes They Stumbled," Challenge, IV (November 1968), 1-4.

physical activities. He can perform more complicated skills and participate in games requiring a higher level of ability and more teamwork.

Fortunately, the means for securing these benefits are at hand. There are innumerable films, records, and a number of other devices that can be acquired to supplement the efforts of the teacher. A large amount of information has been included in this paper, covering a number of types of exercises and games. Programs have been worked out in special schools involving much of this material. But it is not necessary to have a wealth of material or an inexhaustible supply of funds at hand for equipment. Simple games and drills can be used, requiring little extra material. Lists of these games as well as brief descriptions of activities and drills, many of them requiring little or no equipment, have also been included in this paper. Simple games require little extra material.

In this area, as in many others of the teaching field, the most valuable assets are the intangibles -- the mother wit, the ingenuity of the teacher. Creativity is a gift, but even this precious commodity needs backing. It needs the prompting of a love for children, the deep desire to see them grow and develop, that will invent devices and facilitate the adoption of a physical education program suited to the abilities and the needs of the children and directed

toward their threefold growth: physical, intellectual, and social.

Even with this extremely commendable goal in mind, no teacher can put a good, result-producing program into effect if the proper motivation and desire for the children's success is not present. All the props in the world will not compensate for the creative ingenuity which is partly a gift of nature and partly the inspiration of a deep love and concern that will push to success in spite of seemingly insurmountable obstacles and a discouraging paucity of movable equipment.

APPENDIX

The games and activities found on the following pages were compiled by teachers of the mentally retarded (one of whom was the writer of this paper) who participated in the inservice workshop (1968) at Louisiana State University, New Orleans, Louisiana. This compiled material is untitled and unpublished.

Story Activities

On the Farm

Theme: A farm is an exciting place for children, especially during summer. Let's pretend we are visiting a farm on a sunny Wednesday in July. What do you like to do on a farm?

Motivating Ideas

Guided Responses

1. Play in the hay.
First let's run out to the barn. In the barn just under the roof is the hayloft. Let's climb the ladder that goes up to the loft. Now if we climb onto the rafters we can jump into the hay. That should be fun! Let's pretend the chairs are the rafters. Jump as softly as you can into the hay.
2. Feed the chickens.
It's time to feed the chickens. Run quickly to get a bucketful of grain. Now throw the grain to the chickens a handful at a time. See if you can throw it high over the fence.
3. Gather eggs.
Now we must hurry to gather the eggs. Be sure to look in all the nests and put the eggs that you find in your basket.
4. Pump water from a well.
The animals need some water. We had better get some water at the well. Push down hard on the handle and bend your knees.

Running. Imitating climbing movements. Climbing onto chairs and jumping softly onto the floor, landing on the toes first. (Remind the class that the feet make no sound when jumping into hay. Repeat a number of times.)

Running and carrying. Throwing, swinging the arm freely from the shoulder.

Pantomiming movements of egg gathering on a walking base.

Deep knee bending, pushing on an imaginary handle, rising, and raising the arms overhead.

5. Pitch hay.
Can you show me how the farmer pitches his hay?

With one foot forward, lifting forkfuls of hay into the barn with the pitchfork.

6. Ride a tractor.
How does a tractor go?
The field is very bumpy.
Can you show the way your tractor goes over the bumps?

Shuffling forward with small steps, using up and down movements with the body to suggest riding over rough ground.

The Playground

Theme: Today we shall pretend that we are playing on the playground. What shall we do on the playground?

Motivating Ideas

1. Slide down the slippery slide. How do you get to the top of the slippery slide? Now get ready to slide down. Here we go.
2. Ride on the seesaw. How does the seesaw go when you ride on it? Can you show me with your arms and with your body? How can you show that you ride up and down? Can you do it with a partner?
3. Play in a swing. How does the swing move? Show us with your arms. What different ways can you swing your arms? How do we ride in a swing?
4. Climb in the climber. Let's climb up the climber. Now we have to duck under to get through the bars. Now let's

Guided Responses

High stepping to climb the ladder, reaching with hands. Deep knee bending.

Alternate sideward bending with arms extended. Two children holding hands, alternate knee bending.

Swinging arms forward and backward, from side to side. Running alternately forward and backward or stepping forward and backward from one foot to the other pretending to hold the ropes.

High stepping, reaching with the arms. Bending. Twisting.

twist around and reach for the next bar. See what else you can do in your climber. Now it's time to climb down again.

5. Play hopscotch.

How do you play hopscotch? Can you all hop? Let's see. What other steps do you use in playing hopscotch? Let's see you jump. Now throw your stone, hop, and jump forward; pick it up; jump around to face the other way, and come back again.

Hopping. Jumping. Hopping, jumping, bending.

6. Play with a ball.

What can you do with a ball? How can you show you are bouncing the ball? Now let's do it with the music. Can you throw the ball and catch it? Do it with a partner. Now throw it high in the air and catch it.

Using arms as if bouncing a ball. Throwing and catching movements.

7. Jump rope.

How do you jump rope? Let's jump over the rope with both feet. Now hop over the rope with one foot. Now change and hop with the other foot. Faster! When you go very fast, jump with both feet. Don't forget to swing the jump rope. Let's have two children who will turn the jump rope while the rest of you jump. Who would like to do it?

Jumping. Hopping and step-hopping. (Alternate phrases of slow and fast tempo; musical or drum beat accompaniment.) Swinging arms in a circle.

8. The school bell is ringing. How can you hurry?

Running.

Firemen

Theme: Firemen are ready to go anywhere at anytime of day or night to put out fires. What happens when the fire bell rings in the station at night, calling the firemen to a fire?

Motivating IdeasGuided Responses

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| 1. The fire bell rings.
The firemen, waking,
begin to dress quickly. | Pantomiming of waking and
dressing. |
| 2. Slide down the fire-
house pole. | Quick deep knee bending (hold-
ing the imaginary pole),
repeated to represent more
than one fireman. |
| 3. Drive to the fire. | Running. |
| 4. Unwind the hose. | Using large circular arm
movements. |
| 5. Play the hose on the
fire. | Holding an imaginary hose,
point nozzle in various
directions. |
| 6. Raise the ladder. | Pushing the imaginary ladder
up with both hands. |
| 7. Climb the ladder. | Imitating climbing motions. |
| 8. Carry valuables down
the ladder. | Pantomiming climbing down
the ladder, holding an imag-
inary object. |
| 9. Wind up the hose. | Reversing motions of unwind-
ing. |
| 10. Drive back to the fire
station. | Slow trotting. |

March Winds

Theme: March brings gusty, blustery wind which blows every-
thing it can reach. If you went out-of-doors on a March
day, what are some of the things you might see and do?

Motivating IdeasGuided Responses

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| 1. Treetops blowing in
the wind. | Swaying forward and backward
and from side to side with |
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| | arms above the head or with just the upper body. |
| 2. Branches waving up and down. | Moving arms and body up and down like branches in the wind. |
| 3. The weather vane turning. | Twisting the upper body with arms extended or turning the entire body. |
| 4. The windmill turning. | Imitating the turning of the windmill by alternately raising and lowering the extended arms or by circling them together. |
| 5. Fly a kite. | Tossing the kite into the air, running back a few steps, pulling the string of the kite, running with the kite, hauling it in by winding the string. |
| 6. Chase a hat. | Running after an imaginary object which changes direction frequently, at the same time avoiding collisions with other people. |
| 7. Skip home. | Skipping. |

Autumn

Theme: In autumn, the leaves turn red or brown or yellow on the trees and drop off to cover the ground. The days get shorter, and the air is cool. On autumn days we like to go to the woods to tramp through the dry leaves. Let's pretend we're going to the woods on a crisp autumn afternoon!

Motivating Ideas

1. Walk through the leaves and rustle them with your feet.
2. Gather the leaves with your hands and arms.

Guided Responses

Walking softly, kicking or stirring imaginary leaves.

Stooping to fill the arms with imaginary leaves, carrying them to an imaginary pile.

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| 3. Rake the leaves into a pile. | Imitating the movements of raking leaves into a pile with large reaching movements. |
| 4. Run and jump into the pile of leaves. | Running and jumping softly. |
| 5. Lie down in the pile of leaves and cover yourself with the leaves. | Lying down and pretending to cover the body with the leaves, starting at the feet. Resting. |
| 6. Watch a leaf that is about ready to fall swing back and forth on the twig and finally to the ground. | Imitating the movements of a leaf that is ready to fall by swaying, running, and whirling to the floor. |
| 7. Cross a little brook in the woods. | Walking, balancing carefully on the stepping stones. |
| 8. Recross the brook. | Jumping across the imaginary brook. |
| 9. Run home quickly. | Running. |

Winter Play

Theme: The morning after a snowfall, children love to wrap up warmly and go out to play in the soft, new snow. What do they do?

Motivating Ideas

1. Put on rubber boots to go out into the snow.
2. Walk in deep drifts.
3. Sweep the snow off the walk.
4. Shovel the snow into a pile.
5. Roll a snowball to make a snowman.

Guided Responses

- Pantomiming of pulling on boots.
- High stepping with knees bent.
- Sweeping motions with the arms.
- Shoveling motions, lifting the shovel, and dumping the snow into a pile.
- Bending low to roll a little snowball, gradually rising and pushing harder as the ball grows larger.

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| 6. Make small snowballs and throw them at each other. | Pantomiming the making of snowballs, and throwing them with right and left arms alternately. |
| 7. Warm arms, hands, and feet. | Arm flinging across chest to slap opposite shoulders, stamping feet or hopping or jumping in place. |
| 8. Run home. | Running. |

Christmas Toys

Theme: Some people say that on Christmas Eve, when everyone is asleep, the toys come to life and play until the cock crows to warn them that morning is near. Let's pretend we're toys under a Christmas tree! (Note: The pupils may play all the parts or each may choose one of the parts to enact.)

Motivating Ideas

1. The waking toys.
2. The parading toy soldiers.
3. The jumping jack.
4. The dancing doll.
5. The rocking horse.

Guided Responses

- From lying or sitting positions on the floor, pretending to awaken by stretching and rising.
- Marching with legs and arms straight to suggest wooden limbs, shouldering an imaginary gun or beating a drum.
- Jumping into the air with arms and feet spread, bringing feet together and arms to the sides when landing. (Stress landing softly.)
- Turning around on the toes with tiny mincing steps, moving the arms stiffly, bowing stiffly.
- One foot well in front of the other, rocking forward and backward in a stiff legged manner, alternately lifting the free leg in front and to the rear.

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| 6. The top. | Whirling in place, wobbling, and falling gently to the floor. |
| 7. The train. | Shuffling forward slowly, then faster and faster; moving to suggest the movement of wheels. |
| 8. Noah's ark kangaroos. | Jumping forward with the knees slightly bent and the arms bent in front of the body. |
| 9. Noah's ark elephants. | Walking slowly and heavily (but not noisily); swaying from side to side, hands clasped and hanging down in front to make the trunk. |
| 10. Noah's ark mice. | Scampering. |
| 11. The crowing of the cock, when the toys run back to their places under the Christmas tree. | Stopping, listening, and running to original places on the floor, then standing or sitting very still as if the toys had suddenly become lifeless again. |

Making a Garden

Theme: Gardens take a great deal of care, but we don't mind the work because we like the fresh vegetables and the pretty flowers which grow in them. What do we do when we make a garden?

Motivating Ideas

1. Spade the garden, breaking the ground.
2. Rake the garden.
3. Pick up stones and throw them into a pile.
4. Make a furrow, in which to plant the seeds with a stick or hoe.

Guided Responses

- Imitating spading with large body and arm movements.
- Pantomiming raking movements.
- Stooping (knees bent) and throwing movements.
- Bending and running; drawing straight lines with an imaginary stick.

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| 5. Plant the seeds. | Dropping the seeds into the furrows; then throwing grass seed over the rest of the ground with large arm movements. |
| 6. Water the furrow. | Pantomiming use of a hose or a watering can. |
| 7. Pull weeds and throw them into a pile. | Pulling and throwing movements. |
| 8. Pick the flowers or vegetables. | Stooping, picking and walking. |
| 9. Rest. | Stretching with large movements, after which the weary farmers lie down on the floor. |

Springtime Fun

Theme: In the spring, as soon as the weather is warm enough and the ground is dry enough, children begin to play outdoors. How good it is to play out in the sun and fresh air! What kinds of games do children play in the springtime?

Motivating Ideas

1. Roll a hoop or rubber tire.
2. Spin a top.
3. Jump rope.
4. Fly a kite.

Guided Responses

- Running while pushing an imaginary object.
- Imitating the movements of the top; whirling, slowing down, wobbling, and gradually falling to the ground.
- Hopping on one foot; step-hopping right and left foot; (alternately); jumping on both feet; hopping slowly or quickly while turning an imaginary rope. (Each child can make up his own pattern of hops and jumps.)
- Throwing the imaginary kite into the air, running backward, pulling on the kite, then running around the room with the kite.

5. Roller-skate.

Moving forward with long gliding steps free leg extended backward.

6. "One, two, three O'Leary."

Bouncing an imaginary ball, swinging one leg over the ball on every fourth bounce.

Playing at the Beach

Theme: On a hot summer day, nothing is more fun than going to the beach. What are some pleasant things to do at the beach?

Motivating Ideas

Guided Responses

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| 1. Run down to the water's edge. | Running. |
| 2. Gather sea shells. | Walking and stooping with knees bent. |
| 3. Dig a hole in the sand and jump into it. | Digging with an imaginary shovel; jumping forward. |
| 4. Bury the feet in the hole and cover them with sand; wiggle the toes in the sand. | Bending forward from the waist and scooping the sand with the hands wiggling the toes. |
| 5. Lift feet out of sand. | Lifting one foot and shaking it vigorously, then the other foot. |
| 6. Wade. | Stepping forward with long steps, lifting the knees high. |
| 7. Race the waves. | Taking a few steps to meet the wave and then running back quickly to avoid getting wet. |
| 8. Jump over the waves. | Jumping on signal over an imaginary wave, hands of several children to form a line. |
| 9. Swim to a raft. | Pantomiming swimming motions. |

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| 10. Jump onto a raft. | Kneeling on classroom chairs. |
| 11. Swim to shore. | Pantomiming swimming. |
| 12. Run on the beach to get warm. | Running. |

The Circus

Theme: When the circus comes to town, the entire family goes to see it. What do you do and see at the circus?

Motivating Ideas

1. Throw peanuts to the elephants.
2. Elephants. (Some of the children can represent the elephants being fed and the rest can represent the people feeding the elephants.)
3. Ringmaster and circus ponies.
4. Trick dogs.
5. The trapeze artists.

Guided Responses

- Pantomiming throwing motions.
- Walking, swaying slightly, with the body bent forward from the hips and with the arms forming the trunk in front. (If the arms are crossed before the hands are joined, the arms will be able to function like an elephant's trunk when he puts peanuts in his mouth.)
- Cracking an imaginary whip in the center of the room (by a child acting as ringmaster) while the rest of the children gallop around the room, changing direction on each crack of the whip.
- Walking on toes and leaning slightly forward like little dogs walking on their hind legs; walking forward and turning in place.
- Moving backward and forward, in imitation of swinging on the trapeze.

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| 6. The tightrope walker. | Walking carefully on a single board of the floor or on an imaginary line, holding an imaginary umbrella. |
| 7. Circus clowns. | Pantomiming a juggling act. |

Indians

Theme: Indians lived in this country long before anyone else. They got food and clothes in ways very different from the ways we secure them today. Do you know some of the things they did?

Motivating Ideas

1. Paddle a canoe.
2. Walk softly through the forest stalking a bear.
3. Shoot the bear.
4. Return with the bear.
5. Paddle home.

Guided Responses

- Kneeling on one knee, or both, to imitate movements of paddling a canoe.
- Walk noiselessly (on whole foot) in different directions while looking one way, then another.
- Placing an imaginary arrow in an imaginary bow and drawing the bow to shoot the bear.
- Running, lifting the bear to the shoulder, and carrying it slowly back to the canoe with the body bent forward from the weight of it.
- Kneeling on one knee, or both, to imitate the movements of paddling a canoe.

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