ROCIS ON DXCDPNONAL OHILDREN

PHYSICAL EDUCATION FOR THE MENTALLY RETARDED

Darlene Conover¹

Do you recall the rather popular television show of a few years back, "Candid Camera"? In order to "catch people in the act of being themselves," the program was designed so that people would find themselves in situations different from those found in everyday living. Most of these situations were unbelievable and, in some cases, bordered on the miraculous. The reactions of those involved were recorded by hidden cameras and microphones.

One of the most memorable programs (and a rather interesting study of human nature as well) was staged in a lunchroom containing several long tables. On each table was a vase holding a single flower. All the tables and all the vases were the same-except one. When an unsuspecting person selected this particular table, a very interesting thing occurred. The flower bent forward toward a glass and emptied its contents. Needless to say, those persons involved in this experience responded/in a variety of ways.

One response was that of the individual staring in disbelief. He looked, looked again, but could not believe what he was seeing. The second response was that of the individual who looked, saw what was happening, and then looked around to see if others had noticed anything out of the ordinary. The third response was that of the individual who looked, saw what was happening, ignored it, and continued to eat. The last response was that of the individual who looked, saw what was happening, ignored it, picked up his tray and moved to another table.

Perhaps physical education and special education personnel have been playing the nize-the inadequacy and inappropriateness of the physical education provided for the retarded? How often did we look, see what was happening, and then look around

PHYSICAL EDUCATION

FOR THE RETARDED

GAMES AND ACTIVITIES

[&]quot;Candid Camera game" with retarded students in regard to their physical education experiences. How often have we noticed yet failed to recognize-or refused to recog-

^{1.} Darlene Conover is Assistant Professor, Department of Physical Education for Women, Iowa State University.

[©] Love Publishing Company, 1972

to see if anyone else noticed the type of experiences being provided? How often did we look, recognize yet ignore the ineffectiveness of the experiences, then continue to perpetuate the problem? How often did we look, see what was happening (or not happening) to the retarded, and turn our backs to their problem? How often have we refused to see?

In the past physical education for the retarded has been minimal at best primarily because:

- 1. No special provisions were made for the retarded.
- Physical educators have been inadequately prepared both in attitude and in professional skills to provide movement experiences.
- Special educators are lacking adequate preparation necessary to provide physical education experiences.
- Few attempts have been made to determine what the child can do.
- We have accepted the assumption that just because the child has a retarded mind he also has a retarded body.

It is interesting to note here that some retarded individuals are quite adept in physical skills. A nationwide study (Rarick, 1968) of some 4,200 educable retardates shows that motor retardation is not invariably the case.

For example, a California twelve-year-old mentally retarded girl ran the fifty-yard dash in six seconds flat on a hard top

FOCUS ON EXCEPTIONAL CHILDREN is published monthly except June, July, and August as a service to those concerned with mentally retarded and emotionally disturbed children. Subscriptions rates, \$9.50 per year. Copyright 1972 Love Publishing Company. All rights reserved. Reproduction in whole or part without written permission is prohibited. Printed in the United States of America. Second class postage is paid at Denver, Colorado.

Executive and Editorial Offices 6635 East Villanova Place Denver, Colorado 80222 Telephone (303) 757-2579

EDITORIAL BOARD

Edward L. Meyen University of Missouri Glenn A. Vergason Georgia State University

Richard J. Whelan University of Kansas Medical Center

Sallie A. Keeney Senior Editor Stanley F. Love Publisher playground. A 6'4", 220 pound, seventeen-year-old boy with an I.Q. of 70 jumped over one hundred inches in the standing broad jump, climbed a sixteen-foot rope three times without stopping (using arms only), and chinned himself twenty times. On the previous day, the same boy won the quartermile run, the running broad jump, the seventy-yard hurdles, finished second in the hundred-yard dash, and ran a leg on the relay team at an inter-school meet.

For too long, life for the mentally retarded has been a journey down a one-way street lined with closed doors and, in many cases, leading to a dead end or to the dumping grounds of an institution. Fortunately, in the past few years streets have broadened into thoroughfares leading to avenues of hope, opportunity, and meaningful experiences. Physical education has finally emerged as an area of importance for the retarded.

IMPORTANCE OF PHYSICAL ACTIVITY

Physical education and recreation experiences play an extremely important role in the lives of children. A recent publication of the Association of Childhood Education International entitled *Feelings and Learnings* (1965) lists what children want to be:

accepted, liked, trusted friendly active daring successful, able to achieve permitted time to daydream inside and behind things able to test strength independent amused free to initiate new activities responsible for helping themselves encouraged in their work free to experiment with old material in new ways involved in tasks significant to them identified with adults important to them exhilarated by rough play helpful to others able to explore the joys of living able to experiment with instruments adequate in meeting physical situations adequate in meeting intellectual situations supported when hurt

given opportunity to explain mistakes to be the nselves

It is in esting to note that almost half of the wants listed refer directly or indirectly to physical activity, one of the strongest urges in children. Children need freedom and ease of movement. The above list is applicable to all children-not just the bright, happy, and well-adjusted, but the retarded and handicapped as well. It is often said that the retarded child is more like the normal child than unlike him. He has the same major characteristics of growth and development and the same major needs and wants. Although the needs and wants are similar, the opportunities for the retarded child to have experiences to meet these needs are usually unavailable. Oftentimes, the needs are more pronounced due to privation. Seldom do these children walk to and from school balancing on a curb, kicking a stone or testing their body's abilities with the environment. All too often they are driven to and from the door of the school building. Some of the children seldom, if ever, stay after school hours to play on the playground. Many times they are not included in neighborhood games because they have not had the opportunity to develop the skill, ability, or understanding to participate effectively.

In many cases, mentally retarded children must be taught to play. Usually they have not had experiences that accrue from opportunities to participate in organized physical activity largely because the school physical education program is designed to meet the needs of normal children; thus, they do not learn from association by playing with other children. Oftentimes, these youngsters shy away from physical activity due to the "failure-frustration cycle" and to the lack of sufficient successful experiences.

The importance of play and movement experiences for children is often overlooked. Play has been called the work of childhood. Eda J. LeShan² emphasizes the necessity and the meaning of play in the lives of children.

It is easy to recognize how a child may enhance his physical growth as he learns to romp, run, climb, balance, ride a bicycle. It ought to be equally clear that children come to a deeper understanding of themselves and others by pretending to be storekeepers, wild animals, doctors, or bridge builders.

When a child moves into a play group, when he shares or

takes turns, when he recognizes another's pain or frustration, when he acts out his own conflicts, anxieties, fears and confusions—all in a world of make believe—he is doing the plain, hard, uncompromising work of growing up.

Unless the retarded child is provided with proper, sequential movement and play experiences, not only will his physical development be impaired, but his mental, emotional, and social development as well. Each of these areas can be developed through physical education experiences.

Contribution to Mental Development

A child's level of intellectual achievement is interrelated with and partially dependent upon his physical development and activity. Godfrey (1964) and Kephart & Radler (1960) have found, in studies with low achievers, that deficiencies in perceptual skills contribute to poor academic performance. According to Kephart (1960), many learning problems stem from inadequate sensorimotor training, especially the lack of opportunity to develop motor skills. There are several factors which affect one's intellectual development and academic performance. Physical activity is a most important factor and a valuable contribution to the total development of the child.

Contribution to Emotional Development

A child's level of emotional stability is interrelated with and partially dependent upon his physical development and activity. Only when a child's emotional needs are met can he effectively interrelate and interact with his environment. Play experiences and physical activities can contribute to the development of emotional control. As the child participates in activity, he learns to control his body. According to Breckenridge and Vincent (1960):

To the psychologist the control of one's own body means the beginning of self-control in general. In bringing his own body under control the child brings under control the most ever-present piece of his environment. Having controlled this most obvious part of himself, the child finds it easier to bring his temper and other emotions under control.

Through play and movement experiences, the child can develop emotionally by improving his self-concept, learning to accept his potentialities and limitations, improving self-control, being accepted by and accepting others, and

See "The Conspiracy Against Childhood," Readers Digest, March, 1969, p. 114.

experiencing feelings of belonging and success.

Contribution to Social Development

A child's level of social development is interrelated with and partially dependent upon his physical development and activity. The physical education setting provides a laboratory in which children have social interaction experiences. It provides the child a means of expression. It places him in an environment in which he learns to accept responsibility and discipline. Play and physical activity experiences help the child develop his ability to work, share, and relate with others. At the same time, he is developing acceptable social habits and attitudes

Each of the four areas of development—physical, mental, social, and emotional—is dependent upon and interrelated with each of the others. Since the child grows and develops as a total unity, one area cannot be affected without having an effect upon the other areas. As a child's needs are met in one area, and thus his development in that area advanced, it is likely that his total development is also enhanced.

ROLE OF PHYSICAL EDUCATION

Physical education can be defined in a variety of ways. Suffice to say it is a discipline—a body of knowledge—which attempts to educate of and through the physical. Its unique medium is movement. Physical education is a part of the total educational scheme and has the same ultimate objective as other areas of education—the development of the total individual. This objective is met through the use of movement and various selected and planned activities. Recognizing the fact that physical education is centered around the physical ability and activity of the child, it is essential to keep the following in mind:

- Movement and activity are essential for proper growth and development.
- 2. The retarded generally perform nearer the norm in physical activity than in social activity.
- 3. The retarded are less competent in motor skills and fitness components than the normal.
- The physical performance of the retarded is usually two to four years behind normal children of the same

- chronological age.
- The greater the retardation, the lower the physical fitness and motor skills.
- 6. The retarded tend to achieve better in activities characterized by simple neuromuscular skills.

In order to provide proper, sequential, developmental physical education experiences for the retarded, it is essential that both special and physical educators become knowledgeable and qualified in the selection and modification of programs and activities and in methods and techniques of effectively teaching and exposing the retarded to movement experiences. The necessity for the special educator and the physical educator to work together must not be overlooked. Communication and cooperation must be stressed. Each has valuable contributions to make resulting from his unique relationships with the child. The utilization of the team approach in the program planning will lead to better, more appropriate experiences for the child.

Keys to Program Development

It must be stated that there is no single magic program, no panacea. The question then becomes, "Where does one start?". One starts where the child is and takes him as far as he can go. The focus, then, must be on the child rather than on the activity. The degree of physical development must be ascertained and the needs of the individual child must be assessed. This appraisal will give direction for program development. It will help identify areas needing emphasis, such as basic body movements, strength, endurance, balance, general fitness, and relationships with objects and other persons in the environment. In any case, the program should be designed to help the child achieve at least a minimum level of body awareness, basic movement competency, physical fitness, game and sports skills, and social interaction. Activities which help the child overcome a sense of failure and a lack of confidence should be included. Wherever possible, experiences should be interrelated and coordinated with other learning experiences which the child is receiving. The program should also have the element of enjoyment for the child. Specific activity selection should be based on the following:

1. functional level of the child

- 2. growth and developmental level of the child
- 3. needs and interests of the child
- child's ability to manage body and handle a range of movement experiences safely and successfully

BASIC MOVEMENT

The foundation of the physical education program for the retarded should be that of basic movement which provides the starting point for all future movement experiences. Basic movement skills are essential in order for the child to perform the tasks of everyday living and to participate successfully in activity. Through the basic movement skills, the child develops an awareness and understanding of his body and its ability to move in relationship to his environment. Basic movement experiences help the child to become comfortable with his own body, to enhance his self-image, and to develop an appreciation for the body and what it can do.

The progression in basic movement skills is natural and unhurried. The individual progresses at his own rate. He is encouraged to explore and experiment with his body, with movement, and with his environment. The basic components or elements of movement are *time*, *force*, *space* and *flow*. All four elements must be present in order for movement to take place. In any movement time is consumed, force is expended, space is utilized, and the movement is characterized by flow.

Time refers to the speed with which the movement is executed. Time encompasses the concepts of fast, medium, and slow. The child develops an awareness of what he must do in order to move the body or body parts at different speeds. The ability to alter speed of movement is essential to the efficient and effective performance of movement tasks.

Movements may be performed using various amounts of muscular tension or power. The efficiency and effectiveness of movement is also dependent upon the amount of force exerted. Force encompasses the concepts of hardsoft, strong-weak, and light-heavy.

The element of space involves two concepts—self-space and general space. Self-space is that area which the individual child occupies, the space he needs to accommodate himself. General space refers to the total area available in which to move. The child learns how his self-space relates to and is a part of general space. Space also encompasses the concepts of direction, range, and level.

Thus, he learns the meaning of forward, backward, sideward, far, near, long, short, high, medium, and low.

The element of flow refers to the child's ability to combine various movements into coordinated patterns. Flow deals with transitions from one movement to another and encompasses concepts of free and bound movement. Some movements involve bound flow, some free flow, and others require a combination.

Movement Activities

Retarded children must receive a wide variety of movement experiences. In order for this to occur he needs time for exploration, a variety of suitable equipment, and proper guidance. He must have the opportunity to explore his environment, to experiment with his body and with objects, and to express himself through movement. These experiences don't just happen-especially with the retarded-they must be planned. The method or technique most commonly used with basic movement is problem solving or guided discovery. The advisability and success of this particular method depends on the child and his level of functioning. For example, some children need very specific, concrete problems, while others may be given open-ended problems which encourage the child to invent or discover his own solutions. The problem or movement task is given, and the child responds through movement. It should be stressed that the method used or the type of problem presented is not the important thing; what is important is the type of movement experiences that result. Sample problems are listed below:

- 1. Find your own space in the room. Can you touch the top of your space, the bottom, back, sides?
- 2. How small can you be? How big, round, flat, etc.?
- 3. Can you stay in your own space ond move only your arms?
- Show me how you can move your arms and legs at the same time.
- Show me how you can stretch your arms like a rubber band.
- 6. Show me how many different ways you can move around the room. How tall can you be? How small? Etc.
- 7. Show me how you can run (hop, skip, etc.) around the room and then stop when you hear the drum. See if you can keep your balance when you stop.

- 8. How can you balance yourself on two body parts? Three, four, etc.?
- 9. Can you stay in your own space and get your knees higher than your head?
- 10. How do you move when it's very windy outside? Icy, cold, hot, etc.?
- 11. Walk on your tiptoes, heels, etc.
- 12. Walk slowly, taking very long steps, tiny steps, etc.
- 13. Jump like a bouncing ball.
- 14. Jump in and out of circle, hoop, etc.
- 15. How many times can you bounce and catch the ball?
- 16. How many times can you clap your hands before catching the ball?
- 17. Can you bounce the ball with just one hand?
- 18. Can you bounce the ball with both hands?
- 19. Can you make one small part of you move? Can you add another small part and keep them both moving?
- 20. Can you place your hoop on the floor and then jump in and out of it without touching the rim?
- 21. Can you crawl through your hoop while its moving?
- Show me how you can balance one body part outside the hoop and two body parts inside the hoop.
- 23. How many ways can you find to throw the ball back and forth with a partner?
- 24. How can you and your partner balance by having a total of 3 body parts touching the floor?
- Work with a partner. See if you can move at a low level while your partner moves at a high level.
- 26. Show me how you can walk to the white line, then run to the black line as fast as you can, but stop before you cross over the black line.
- 27. Show me how you can move about the room, come close to someone, but don't touch him.
- 28. With your partner show me how many rounded shapes you can make.

There are numerous problems and combinations of movement tasks which can be presented. The above represent problems involving locomotor, nonlocomotor, manipulative (object handling), and partner or small group movement experiences. The type of problem presented, the degree of difficulty, and the phrasing of the problem must be suited to the child's level of ability.

Basic Movements

Below are listed basic movements which children should experience. It should be understood that balance is fundamental to the development and performance of any basic movement.

Locomotor movements are movement that take one through space.

crawling	hopping	dodging
walking	leaping	rolling
running	sliding	skipping
jumping	galloping	starting

Nonlocomotor movements are movements performed in place.

standing	swinging	stopping
sitting	rotating	bending
twisting	stretching	turning

Manipulative movements are movements involving the giving and receiving of force.

throwing	pulling	falling
hitting	bouncing	jumping
kicking	catching	landing
lifting	carrying	

Equipment

Below is a list of suggested equipment to be used in basic movement experiences. It is far from complete. Types of equipment are limited only by the limits of one's own inventiveness, ingenuity, and creativity. It should be noted that much of the equipment is inexpensive and can be homemade.

balls	stretch ropes	highway cones
hoops	tin can stilts	balance boards
wands	yarn balls	blocks
bean bags	inner tubes	cardboard boxes
jump ropes	tires	ropes
balloons	spools	parachute

Future physical education programming should be built upon the foundation of basic movement experiences. As the retarded child begins to learn about his body and its abilities, to become comfortable with himself and his environment, and to enjoy and control movement, the focus of the program can shift to activities involving game and ports skills, fitness, and socialization. Only after the child gains some control over his body can his level of fitness be raised. And, only after he learns to control his body, can he successfully participate with others in games and sports skills.

GAMES AND ACTIVITIES

It has been found that the retarded can participate in most of the same activities as does the normal child. The success of teaching the retarded various physical skills lies with the teacher and his ability to individualize his teaching in order to meet the unique needs and interests of each child. Just as there is no panacea—no single best program of activities—neither is there a single best teaching method.

Games of low organization are popular with most elementary age children, both normal and retarded. It is beneficial to include games of this type in the program of physical education experiences for the retarded. If the retarded child learns these games and activities, he can then participate more successfully in neighborhood play. Thus, both the retarded and the normal child can gain from relationships with one another. The importance of this two-way sharing and learning should be emphasized.

It is often necessary to modify activities in order to make them more consistent with the child's needs and abilities. Activities and games of low organization can be adapted by changing any one or more of the following:

- 1. distance and/or size of playing area
- 2. rules
- 3. number of players
- 4. skills used or required

The following are examples of low organization games. Suggestions for modification are included.

RED LIGHT

A goal line is drawn at each end of the playing area. Children stand in a flank line (shoulder to shoulder) behind one of the boundary lines. One child is "it" (policeman) and stands in the middle of the playing area. "It" gives a signal for the players to advance forward, counts

to ten, and gives a signal to stop. The object of the game is for the players to move to the opposite boundary line. Any player caught moving after the signal to stop has been given must return to the starting line. The first player to reach the opposite boundary line is the new "it."

Modifications:

- Starting and stopping signals may be given verbally ("green light") or visually (colored discs, etc.). "It" may turn his back to the group for the green light and his front to the group for the red light or stop signal.
- 2. "It" may count to five, ten, fifteen, or twenty depending upon functioning level of group.
- 3. "It" may stand in various positions: facing away from the group with eyes open or closed, standing or sitting, to accomodate children with crutches, braces, or wheelchairs. He may stand (sit) in the middle or at one end of the playing area.
- 4. New "it" may be selected by the teacher in order to speed up the game and give more children an opportunity to be "it."
- 5. Game may be played either outside or inside.
- 6. The following may be utilized to mark boundary lines: highway cones, ropes, tires, flags.
- 7. This same game may be played using a different name: "Stop and Go," "Policeman," "Green Light," or "Stop and Start."
- When possible, relate concepts to other learning experiences—number, color, safety.
- The game may be played using any one or a combination of the following locomotor movements: crawling, walking, running, jumping, hopping, leaping, sliding, galloping, or skipping.

CAN YOU

Children may be in any formation. The teacher poses a movement problem or task and illicits a movement response from the group.

Modifications:

- 1. Teacher may demonstrate if necessary.
- 2. Children may be placed in a definite formation.
- Movement problems or activities may be formulated for the following purposes:

to appraise individual and/or group abilities

to emphasize specific movements

to teach a particular movement

- to allow the child the opportunity to explore the possibilities of his body
- to stimulate creativity
- to determine individual and group needs for use in future programming
- Problems may be phrased to allow and encourage a variety of responses or a single definite response.

POM POM PULLAWAY

Children line up in a flank line behind one boundary line. The opposite boundary line (goal line) is placed at the other end of the playing area. Side boundaries should also be established. One player is "it" and stands in the middle of the playing area. To begin the game, "it" shouts, "Pom Pom Pullaway, come away or I'll pull you away." The players then move forward toward the goal line. The object is to make it to the goal line without being tagged by "it." Any player caught must then help "it" catch others. The last player to be caught is the new "it."

Modifications:

- 1. Shorten the size of the playing area.
- 2. Shorten starting phrase.
- 3. Have more than one "it" to start the game.
- Teacher may select the new "it" to give more children the opportunity to be "it."
- The game may be played using any one or a combination of the following locomotor movements: crawling, walking, running, jumping, hopping, leaping, sliding, galloping, or skipping.

The following activities may be performed by using any one or a combination of the nonlocomotor movements of twisting, turning, bending, stretching, swinging, or rotating.

COFFEE GRINDER

The child starts from the following position: knees bent, weight supported on balls of feet and toes, one hand is positioned on the floor behind buttocks, and the other hand is on the hip. The arm is straightened and the body extended in a straight line horizontal with the floor. The child then walks in a circular pattern using the hand as a pivot keeping his head back and body held straight.

Modifications:

- 1. Child may use both hands for support with the front of the body then facing the floor.
- Child may be allowed to bend the knees to make movement and balance easier.
- Child may be allowed to remove hand from hip and use it for balance.

DISH RAG

Partners join hands (right to left and left to right) facing one another. Make sure height of partners is approximately the same. Arms are raised, partners then drop one set of hands and move them in front of the body. This causes turning so that partners are back to back with hands still joined. Complete turning motion and return to starting position.

Modification:

1. Have the children join just one set of hands for the first few times the stunt is performed.

PROPELLER

Child stands with feet apart, one foot ahead of the other. He then raises one arm straight up in the air (if right foot is forward, right arm would be raised) and swings it in as large a circle as he can. Have the child touch the floor with each rotation.

Modification:

- 1. Child need not touch floor on each rotation.
- 2. Child may bend knees if necessary.
- Child may hold in his revolving hand objects such as chalk to mark floor or crepe paper to twirl.

Games and activities requiring more complex skills and rules can also be adapted for the retarded. As with equipment, one's degree of ingenuity, inventiveness, and creativity is the only factor limiting the nature and extent of modifications used.

VOLLEYBALL

Volleyball may be modified in the following ways:

- 1. shorten the dimensions of the court
- 2. lower the net
- 3. move the serving area closer to the net
- 4. allow more than three hits per side
- 5. allow more than six players on a side
- 6. allow students to throw and catch the ball rather than volley it

PARACHUTE PLAY

Activities involving the use of a parachute are becoming increasingly popular. The parachute may be used with children at all levels of functioning. It is especially good for developing endurance and muscular strength in the arm, shoulder, chest and back areas. The necessity for children to cooperate in order to make the stunts work aids their social development. Parachute play has the elements of excitement, challenge, and enjoyment.

Suggested Activities:

- Children stand around chute which is spread out on the floor. They grasp chute using a palms down position. Chute is then raised to waist level. With arms extended the children then shake the chute up and down. Light objects such as yarn balls or small playground balls may be placed in the center of the chute. The object is to shake the objects off the chute.
- Children stand with chute at waist level. They grasp
 the edges of the chute with a palms down grip.
 Upon a given signal, the chute is passed rapidly in
 a clockwise direction, then in a counterclockwise
 direction. The object is to pass the chute as quickly
 as possible.
- Children stand with chute at waist level. They grasp the edges of the chute with a palms up grip and with their feet in a forward stride position. Upon a given signal, each child pulls the chute toward himself.
- 4. Children stand with chute at waist level, backs to center of chute. They reach back and grasp the chute with a palms down grip. Feet are in a forward stride position for balance. Upon the signal, each child tries to pull the chute toward himself.

5. The chute is spread out on the floor. The children kneel down and grasp the edges of the chute with palms down. On signal the children straighten up quickly and lift the chute up above their heads. The chute will be temporarily sustained up in the air. Variations include having the children exchange places before the chute comes down, having the children see how quickly the chute can be returned to the starting position, letting go of the chute to see how high it will go by itself.

ACTIVITIES WITH TIRES

Old automobile, truck, or bicycle tires are inexpensive, relatively easy to obtain and can be used in a variety of ways. The use made of tires for movement experiences is limited only by the imagination of the teacher.

- The tires may be partially embedded in concrete in an upright position. The children can then walk across the tires and learn to react (balance) to the resiliency of each tire.
- 2. Tires may be suspended from ropes for climbing and swinging. They may also be used for target practice. The child tosses a ball or beanbag through the center of the tire.
- 3. The tires may be placed flat on the ground in various patterns. The following activities may be used when tires are in this position:

jump in and out of center of tire

walk around edge of tire

jump from tire to tire-land on edges only (land in center only)

use various types of locomotor movements to travel through maze of tires

follow the leader through maze of tires

use various movement stunts from tire to tire bunny hop, frog jump, etc.

go through maze of tires placing right foot in center of tire and left foot outside—reverse

use two colors to designate tires—have children go through maze placing right foot in tires of one color and left foot in tires of other color

It should be noted that various concepts of shape, number, color, and direction can be developed and reinforced through tire activities. After the child has a good foundation of basic movement experiences, a suitable level of physical fitness, and some successful experiences in games of low organization, he is then more ready to participate in activities involving more specific sports skills. Wherever possible, skills which can be used in sports and recreational settings should be developed. Hopefully these experiences will aid the retarded in being better able to use his leisure time, to participate in family and community activities, and to feel better about himself. Some suggested activities include: swimming, bowling, hiking, riding, shuffleboard, table tennis, archery, cycling, badminton, volleyball, softball, and horseshoes.

CONCLUSION

In an effort to help the retarded become more of what is possible for them to become and to help them develop into more "complete" selves, it is essential that physical education be an integral part of the total education program. It is imperative that the physical educator and the special educator work together in the development and provision of programs of physical education for the retarded. It is time to stop playing the "Candid Camera game." It is time to stop overlooking, ignoring, and turning our backs on the inadequate or inappropriate physical education experiences now being provided the retarded. It is time to ensure that the retarded receive the physical education they need and deserve.

For information on program planning, suggested activities, and additional resources contact:

> Mrs. Morris Pomeroy, Director Recreation Center for the Handicapped Great Highway near Sloat Boulevard San Francisco, California 94100

Dr. Julian Stein, Consultant
Programs for the Handicapped
American Association of Health, Physical
Education and Recreation
1201 16th Street, Northwest
Washington, D.C. 20036

For information on activities and suggested school programs contact:

Mr. Ernest Davis Crowley Special School 82 East Delos St. Paul, Minnesota 55107

Portions of the preceding were adapted from materials prepared at the College Professors Seminar through a grant made to Temple University and Buttonwood Farms Incorporated, from NIMH #5 T21 MH 11810-01. The materials were developed during the summer of 1970.

REFERENCES

Breckenridge, Marion E., and Vincent, Lee. Child Development. New York: Saunders, 1960, p. 309.

Feelings and Learnings. Washington, D.C.: Association of Child-hood Education International, 1965, p. 12.

Godfrey, Barbara S. "Motor Therapy and School Achievement." Journal of Health, Physical Education and Recreation, May, 1964, p. 28.

Kephart, Newell C. The Slow Learner in the Classroom. Columbus: Charles E. Merrill Publishing Company, 1960.

Kephart, Newell C., and Radler, D. H. Success Through Play. New York: Harper and Row, 1960.

Rarick, Lawrence. "The Value of Physical Education for the Retarded." A paper presented at the State University of Iowa, Iowa City, March, 1968.

RESOURCE MATERIALS

Avaril Wedemeyer and Joyce Cejka

THRESHOLD LEARNING

The threshold Early Learning Library consists of three teaching manuals to aid the classroom teacher in developing the child's cognitive skills in perception, organizing, mathematics, science, language, and social concepts. Each manual relates these skills to curriculum areas of the elementary school program.

These manuals present materials that will encourage manipulation and response by the child. They give a teacher assurance that she has provided the proper learning experiences to ensure a child's maximum development for success in school.

Volume I - Perceptual and Organizing Skills (95811) includes color, size, shape, and sound; classification, sequencing, and seriation.

Volume II - Mathematical Skills and Scientific Inquiry (95812) offers mathematical experiences and measurement; physical world; living things.

Volume III - Language Skills and Social Concepts (95813) involves comprehension; creative use of oral language; the child and himself; his family and the community.

Each volume is priced at \$6.95 and may be ordered from CCM School Materials.

REVERSIBLE PUZZLES

Judy Corporation has produced several series of reversible puzzles. The puzzles are 9" x 12" hardboard and are priced at \$3.45 each. Related pictures on both sides of each puzzle illustrate processes and relationships. For example, in the nature series one side shows moth eggs, caterpillars, and a chrysalis; the other side shows a full-grown moth. The food series consists of six 4-piece puzzles. On the apple puzzle, a scene from an apple orchard is shown on one side while a ripe red apple, a peeled apple, apple pie and apple juice are shown on the other side. A teacher's guide accompanies the puzzles in this series. The puzzles are distributed by Mafex Associates, Inc, 111 Barron Avenue, Johnston, Pa. 15906.

THE NEW NURSERY SCHOOL

The New Nursery School, developed by Glen Nimnicht et al., is a program based on the authors' experience at the experimental New Nursery School in Greeley, Colorado. The book is priced at \$5.95 and is accompanied by six Learning Activities booklets at \$1.50 each. The complete set of booklets plus the Program book costs \$12.95 and is available from Mafex Associates, Inc., 111 Barron Avenue, Johnston, Pa. 15906. The learning activities

booklets include techniques for encouraging children to solve problems independently, directions for making equipment from everyday materials, ideas for classroom management and control, and ways to organize learning activities by objectives and levels of difficulty.

READERS DIGEST ADULT READERS

Each of the Adult Readers offers high interest, low vocabulary stories of courage, daring, self-reliance and adventure.

Each book includes a short, practical exercise to develop comprehension and work-attack skills and to promote vocabulary building. Answers are included at the back of each book. Books at the same reading level—and selections within each book—may be used interchangeably and in any sequence. The Adult Readers include 12 books, 32 pages each.

Reading levels 1-2: Workers in the Sky, Send for Red., Mystery of the Mountains, Second Chance.

Reading levels 2-3: A Race to Remember, Valley of 10,000 Smokes, Santa Fe Traders, Men Who Dare the Sea.

Reading levels 3-4: Guides to High Adventure, First at the Finish, I Fell 18,000 Feet, What's On the Moon?

The books may be purchased from Reader's Digest Services, Inc., Educational Division, Pleasantville, New York, for 40¢ each. Teacher's Manual for entire set is 10¢.

ALERT

The Council for Exceptional Children's 50th Anniversary International Convention will be held in Washington, D.C. at the Sheraton Park Hotel March 19-25, 1972.

The Third Annual Regional Workshop in Physical Education Techniques and Methods for Mentally Retarded, Physically Handicapped, and Neurologically Handicapped is to be held at the Riviera Hotel in Palm Springs, California, May 17, 18 and 19, 1972.

On February 2-5, 1972, the Ninth Annual International Conference of the Association for Children with Learning Disabilities will be held in Atlantic City, New Jersey.

<u>CLASSROOM</u> FORUM

Edited by Austin J. Connolly, University of Missouri

PROBLEM 14

I don't have a classroom aide for my EMR special class, although several students need individual attention. What about using children from regular classes as aides? Any comments or suggestions?

I would like to broaden my response to your question to include several possibilities for peer teaching, not just using children from the regular class as aides.

At the present time, there is considerable interest and activity in the use of peer teaching as evidenced by the mounting literature. (Readers interested in further exploration of this topic are referred to the Northwest Regional Education Laboratory, the 1971 Spring issue of *Teaching Exceptional Children*, and the 1971 September issue of *Exceptional Children*.) However, it should be recognized that peer teaching is no more a new concept than the little red school house. In recent years the idea is flourishing because it has some particular advantages.

The most obvious reason peer teaching is flourishing can be attribtued to the fact that it serves as a vehicle to provide individual attention to youngsters needing more attention than the teacher alone can supply. More subtle is the fact that selected tutors may experience greater success in providing explanations that reach the troubled student. Similarly, selected tutors may serve as effective models for the troubled student not only in areas of academic achievement, but also in aspects of motivation and attitude.

Troubled students are not the only beneficiaries from peer teaching. Research suggests that tutors continue to grow and sometimes accelerate. Perhaps this epitomizes the idea that if you want to learn something—teach it. Not only do tutors continue their academic growth, but also they acquire the satisfaction and self-esteem that accrues from helping others. If the tutor is coming from regular classes, he or she may acquire a feeling of identity with the special education class and gain a greater toler-

ance for personal differences. Should the special class teacher observe this situation occurring, she may wish to capitalize on it by extending the buddy system into some integrated activities with regular classes.

Peer teaching is an instructional delivery system that will require teacher direction and management to become effective. For tutors to be effective, they must know what their role is and precisely what it is they are to accomplish. To provide this kind of direction, the teacher must carefully assess the needs of her students and identify specific objectives to be attained through peer instruction. With her objectives before her, the teacher can determine whether tutors can be obtained from within the room or must come from classes outside her room. If outside tutors are needed, the teacher will need to involve the administration and selected teachers in the planning. After tutors have been selected, it is essential that the teacher provide them with a careful orientation to the role of a tutor, the designation of specific goals, the use of positive reinforcement, a time schedule, etc. The teacher must be ready to support the tutor and student in time of need and provide positive reinforcement and recognition for evidenced improvement.

Peer teaching places many demands on the teacher but the results of this effort can be great!

PROBLEM 16

As a teacher I have heard so much about the need for creative art activities. However, if I let my special education students be "creative," how will this contribute to their ability to follow directions, evaluate their products, etc.?

All readers are invited to send their solutions to Problem 16. The March 1972 issue will summarize contributions by readers. Complimentary subscriptions will be awarded each month for the best solutions. Send your response to the Editorial Offices, FOCUS ON EXCEPTIONAL CHILDREN, 6635 East Villanova Place, Denver, Colorado 80222.

FOCUS ON EXCEPTIONAL CHILDREN back issues are available. Single copies 80¢, 2-9 copies 70¢, and 10 or more copies 50¢ each.