

# PE for Kids

## *Developing a Physical Education Program for Elementary Schools*

By Daniel W. Berk and Barbara J. Berk

*True education means more than the pursuit of a certain course of study. It means more than a preparation for the life that now is. It has to do with the whole being, and with the whole period of existence possible to man. It is the harmonious development of the physical, the mental, and the spiritual powers. It prepares the student for the joy of service in this world and for the higher joy of wider service in the world to come.<sup>1</sup>*

The purpose of physical education is *education*. Just as all education is concerned with the greatest possible development of the individual, so is physical education designed to help meet the needs of the individual and of society. However, physical education is unique because it is the only area of the curriculum that ensures a planned daily instructional experience in vigorous movement.

In order to have a successful spiritual experience, a person must first make a total commitment to Christ, then dedicate himself or herself to a life of service for others. Through play and physical education programs the selfish "I" drives often become the finer "we" drives. Probably no quality is more desperately needed in the world today than that of cooperation—the willingness to sacrifice one's personal and selfish interest for the greater welfare of the group. Students learn to cooperate as members of a team by actually cooperating, not just listening to lectures about cooperation.

An additional benefit of physical education will be improved fitness and mental ability of your students. Today's students are a rather sedentary bunch. Most get little exercise beyond getting up to switch the dial on the TV (remote control eliminates even that source of activity!). Few get the amount of daily exercise that they need to be fit and healthy. Because of this, the American Medical Association has recommended that physical education become a basic and essential part of the curriculum in all schools, kindergarten through college level.

"Sounds good," you say, "but I'm not trained, and the school has no money, facilities, or space." So what can you do? Let's explore ways to overcome these problems.

The following areas need to be considered when establishing a physical education program: *rationale, administrative/board support, budget and equipment, curriculum and scheduling, space,*

---

*Through play and physical education programs the selfish "I" drives often become the finer "we" drives.*

**Students need vigorous exercise at least three times a week.**

storage, teaching strategies, and resource materials.

### **Rationale**

Current research suggests that in order to maintain minimal physiological fitness standards, students need 20 minutes of vigorous activity, three times a week. This will help maintain cardio-respiratory endurance. On the other two days, the physical education period should be devoted to muscular and skill development.

Muscular development and flexibility concentrate on specific muscle groups such as arms, legs, stomach. Skill learning requires equipment, instruction, practice, and evaluation.

### **Administrative and Board Support**

Administrative and board support is needed to implement a progressive physical education program. This support is seen in many ways: budget, class size, space, time. In order to educate the whole child at your school, the teacher must do the educating, and the administration must support the program.

To help the board understand the value of physical education and fitness, the teacher could ask to address one of its meetings. To emphasize the points made, handouts may be distributed that describe the benefits of fitness, the disturbing trends toward inactivity among young people, and an analysis of the fitness levels of the students. The teacher should also submit a proposed schedule of activities and goals for physical education classes.

### **Budget and Equipment**

For learning to occur, each student needs both good-quality instruction and proper equipment. Having only one ball for physical education class is as ridiculous as making a whole class of students share a pencil in a writing class.

Creative planning can help cut the costs of supplies. Socks or nylons stuffed with rags, birdseed, or polyester-fill material make soft throwing and catching balls for skill learning. Donations, fundraising, and label-collection campaigns can help defray the cost of expensive supplies and equipment. Perry's book on *Handmade Equipment* offers many helpful suggestions.<sup>2</sup>

In order to properly plan a budget, you will need to develop a yearly lesson plan, outlining what equipment will be needed. Remember to include replacement costs—for example, the life expectancy of a ball is about one year.

### **Curriculum and Scheduling**

A good physical education program begins with a horizontal base that encompasses the physiological, sociolog-

---

*Physical education is  
unique because it is the  
only area of the  
curriculum that ensures  
a planned daily  
instructional experience  
in vigorous movement.*

ical, psychological, and spiritual needs of each student. It also includes sufficient vertical structure to enable students to develop their fullest potential.

### Glossary of Terms

**Movement Exploration:** Rhythm and body awareness activities using space, force, time, and flow with accompanying language.

**Fine Motor Skills:** Movements that emphasize eye/hand coordination skills such as playing jacks, string tricks, Lummi stick activities.

**Loco-Motor Skill:** Basic movement skills of walking, running, skipping, hopping, and jumping.

**Motor Skills:** Specific learned movement activities such as throwing or catching a ball, kicking a ball, hitting an object.

**Manipulative Skills:** Movement skills that use equipment, such as balls, bats, ropes, sticks, racquets, or a parachute, to accomplish a task.

**Perceptual Motor Learning:** Movement learning that involves all the senses: sight, hearing, taste, touch, smell. It is also known as **Sensory-Motor** or **Psycho-Motor Skills**. An example is crawling through different shapes, or touching something and then acting out what it feels like.<sup>3</sup>

**Lead-Up Games:** Modified games that utilize some of the skills, strategies, and rules of specific sports. Complexity of these games increases in direct proportion to improvement in skill. Children need to achieve mastery of some skills before engaging in lead-up games.<sup>4</sup>

### Scheduling

Minimum weekly time allotments for various grade levels are as follows:

K-6:	100 minutes per week
K-1:	25 minutes per day
2-3:	30 minutes per day
4-6:	35 minutes per day
7-9:	40 minutes per day
10-16:	50 minutes per day

Three times a week the classes should emphasize fitness; twice a week, motor skills.

### Space

*Safety* should be the first consideration in choosing a location for physical education classes. Permanent objects should be located at least 10 feet outside the defined movement space. On playing fields gopher holes should be filled and the area made as smooth as possible.

*The American Medical Association has recommended that physical education become a basic and essential part of the curriculum in all schools, kindergarten through college level.*

Sprinkler heads should be recessed into the ground.

The minimum space allowed should be at least two to three times the regular classroom size. The speed and force of the movements should be in direct proportion to the space available. If possible, a large room, such as a cafeteria, multi-purpose area, or gymnasium should be used in inclement weather. If no such area is available, fine motor skills, fitness exercises, quiet games, films, instruction and testing of rules and strategies can be taught in the classroom when rain, snow, or temperature extremes make outdoor

exercises impractical. Nelson's book on rainy-day activities has some good suggestions about how to cope with bad weather and limited space.<sup>5</sup>

### Storage

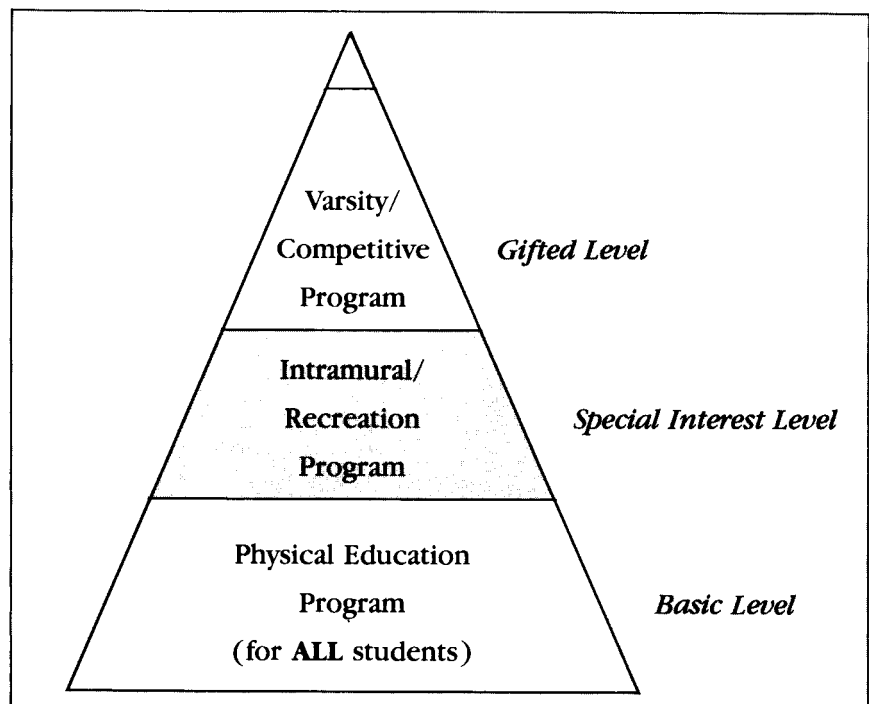
A sharp distinction should be made between recess equipment and physical education supplies. All physical education items should be stored in a central area, utilizing a simple check-out system. Physical education equipment should be a different color than recess equipment so that it can be easily identified. Sacks and large garbage cans on wheels allow easy transportation of the equipment to the instructional area.

### Teaching Strategies

The first step is to establish rules. The students need to understand that the physical education class is an instructional time, not a play time. Three basic rules cover the objectives of physical education: (1) Always do your best; (2) Concentrate and follow directions; and (3) Treat yourself, others, and inanimate objects with respect.

*Always do your best* relates to the game of "never giving up." If a student says, "I can't (climb a rope, run around the track three times, do 10 pushups)," the teacher can ask what part of the assignment the student thinks he *can* do. Observing the child's response will help the teacher evaluate his or her progress in learning the assigned movement and facilitate individualized instruction that helps ensure success for each student.

The teacher needs to offer positive feedback and encouragement to each



pupil, and to encourage students to praise one another for excellent performance and outstanding effort. The reluctant or shy child may need to be challenged to do "just a little more" each time.

*Concentrate and follow directions.* The teacher should work out verbal and non-verbal signals to which children can respond quickly. A whistle or verbal "freeze," means *stop, look, and listen* to the teacher. A finger across the lips, or cut signal across the throat means to *stop talking* or *quiet*.

*Treat yourself, others, and inanimate objects with respect* means doing good things for yourself, such as brushing your teeth, getting proper exercise, rest, nutrition, and *not giving up*. It also includes treating others with kindness and respect, asking them to join in activities in which you are having fun. Putting The Stuff Away Neater Than You Found It (PTSANTYFI) is not only considerate to those who use it next, but also makes the equipment last longer.

The physical education class presents many opportunities for students to practice problem-solving. The instructor should teach the social skills and game rules and then give students time to practice applying them as they interact with others in the context of these skills.

Physical education offers other benefits

*Continued on page 43*

## Scope and Sequence of a Physical Education Curriculum

### SCOPE

S E Q U E N C E	Primary	Intermediate	Jr. High	High School	College
	Develop attitudes of sportsmanship, self-esteem, competition-cooperation, problem-solving, health, nutrition, and safety (K-16)				
	Movement exploration, Loco-motor skills, Fitness, Gymnastics, Manipulative skills, Perceptual-motor learning, Fine motor skills, Balance.	Manipulative skills, Fine motor skills, Fitness, Lead-up games, Gymnastics, Rhythms, Balance.	Orientation to team & individual sports, Fitness, Gymnastics, Rhythms.	Refinement of Jr. High & individual skills, Fitness, Begin to develop a plan for vigorous lifetime activities.	Fitness, Stress management, Continue to refine a plan for lifetime activities.

# PHYSICAL FITNESS: WHOSE RESPONSIBILITY?

*Continued from page 9*

utes, and should be accompanied by warm-up and cool-down exercises.

Physical fitness involves more than just heart rate, however. Other important aspects include muscular strength and endurance, flexibility, balance, agility, and percent of body fat. While team sports such as soccer, basketball, or volleyball may contribute to the development of some of these components, these sports require many people, and therefore should not be counted upon for fitness training. Even the hours spent in refining movements in gymnastics should form only part of an integrated fitness program. Students should learn to enjoy a variety of physical activities that they can continue to pursue throughout their lives.

## How to Begin

The first few weeks of the school year should be spent developing overall fitness in students through physical education classes. This prepares them for a pretest of physical fitness approximately six weeks into the first semester. Activities such as progressive walking, jogging, cycling, swimming, and weight training (not lifting) increases cardiovascular endurance and helps students get in shape to learn new activities. Textbooks that provide schedules for introductory fitness programs are sold at university and shopping mall bookstores in the physical education, fitness, or health sections.

A posttest of physical fitness at the end of the school year can help the teacher assess the physical fitness program. It will also let students know how well they are progressing toward their goals. A final test also gives administrators some input on how their students compare with others the same age. An excellent test to administer is the President's Test for Physical Fitness. Kenneth Cooper's 1.5 mile run/walk can also be used to measure cardiovascular fitness.<sup>5</sup> Both tests include norms.

## Unique, Individualized, and Fun

The key to successful school fitness programs is to make them unique, individualized, and *fun*. Providing students with a variety of choices can prevent boredom. Aerobic movement, cycling, jogging, walking, jumping rope, and swimming are some traditional activities that provide fitness training. Stationery cycling, stair climbing, weight training, and continuous moving games add variety to the program. Sports such as tennis,

racquetball, volleyball, soccer, and sailing are other alternatives. Students should be taught to keep records of their fitness workouts and progress.

At first, if activities differ from what has been done before, the teacher may encounter some student resistance to the physical education classes and activities. Various incentives may be offered to encourage students to participate, such as awards or certificates for certain levels of achievement.

## Fitness for Girls

Sports and fitness are not just for boys! By offering a variety of interesting activi-

---

*Students will see the value of physical fitness only if teachers and administrators sense the urgent need for exercise and make a determined effort to become fit themselves.*

---

ties, and stressing the connection between fitness, health, and physical attractiveness, the teacher can encourage girls to become involved in active pursuits.

Every student should be encouraged to participate and improve his or her level of fitness, as well as to make a commitment to a lifetime of good health. The teacher should take the students at their current level of fitness, and help them improve through an individualized program of activities. These programs can be adjusted to meet the needs of handicapped or overweight students and those suffering from acute illnesses such as asthma or diabetes, as well as children with temporary disabilities.

Individualizing a fitness program to meet the needs of each child works particularly well in small or multigrade schools. Talent, size, weight, and skill are not barriers if the teacher helps each child to develop a personal schedule of development. Students can be trained to take such vital measurements as percent of body fat, body girth measurements, and weight, and can even help their families achieve fitness. While traditional group activities can still be utilized in the small school's physical education program, allowances can and should be made for students who work at different rates. Teacher preparation, zeal, and good record keeping are the only prerequisites

for a creative fitness program.

To reinforce the concepts learned, the physical education instructor can work together with the health teacher to help students understand the connection between fitness and nutrition, proper use of water, hygiene, sunshine, fresh air, exercise, moderation, and trust in God.

Teachers have the opportunity to extend their influence into eternity by helping young people become committed to the lifelong development of their physical, mental, social, and spiritual faculties. □

---

*Dr. Robert W. Kamieneski taught physical education at Atlantic Union College and served as chairman of the physical education department at Southern College of SDA. He is currently Director of Health Promotions and Cardiac Rehabilitation at East Pasco Medical Center, Zephyrhills, Florida.*

## REFERENCES

<sup>1</sup> Ellen G. White, *Fundamentals of Christian Education* (Nashville, Tenn.: Southern Publishing Assn., 1923), p. 147.

<sup>2</sup> *Ibid.*, p. 35.

<sup>3</sup> *Promoting Health/Preventing Disease: Public Health Service Implementation Plans for Attaining the Objectives for the Nation*, Public Health Service, 1980: *Ibid.*, 98 (September-October 1983 supplement), pp. 155-167.

<sup>4</sup> Maximum heart rate can be calculated by subtracting one's age from 220.

<sup>5</sup> Kenneth Cooper, *The Aerobics Way* (New York: M. Evans and Company, Inc., 1970).

## PE FOR KIDS

*Continued from page 13*

as well. Feelings of satisfaction and accomplishment are just as important to a child as the elation grownups experience when they get their first job, celebrate an anniversary, or successfully complete a difficult project at work. For a growing child, however, there is an added benefit: success in play means increased peer acceptance and self-esteem. Even if Mary is "just a girl," if she can hit the ball well or shoot baskets accurately, she will be accepted by all the fifth and sixth grade boys. All children want to be like Mary—successful and popular. They need opportunities to succeed in the cognitive, affective, and psychomotor domains in order to achieve optimal personal growth. Physical education, when properly taught, helps the child become more agile, graceful, physically skilled, healthy, and socially adept.

## Settling Disagreements

An emergency plan for settling disagreements needs to be established before beginning any kind of game. Students need to learn to disagree agreeably. Discuss with them how to solve social or game rule emergencies.

When mediation and discussion break down, or no game rule addresses the problem, the parties involved can be asked to play the Rock-Paper-Scissors game. In this game, a rock is signified by the closed fist; the paper by an open hand; and scissors by the showing of two fingers. The students face each other and place one hand behind their backs. On the count of three, both will show either rock, paper, or scissors. The winner is determined as follows:

- (1) Rock crushes scissors—Rock wins
- (2) Paper covers rock—Paper wins
- (3) Scissors cuts paper—Scissors wins

Both students must agree to abide by the outcome, then go back to the task or game they were working on before the problem arose. In this way students learn that it is all right to disagree, but they also learn how to resolve disagreements.

### Keep It Moving

Whenever possible avoid making children wait in line. For example, if you are teaching soccer, and don't have a ball for each pair of students, use any kind of large or small ball available, and keep everyone moving. Use smaller balls for the more skilled players, larger balls for the less skilled.

Do not insist that everyone achieve the same skill level. Let the children choose to use a batting tee or have another person pitch the ball to them. Use the Slant Rope Theory. Place a rope, or mark a line, at a slant from a given straight line marked on the field. When the students practice throwing, catching, or kicking skills, have them stand facing a partner anywhere along the slanted line. As the students' skills improve, have them progress along the slant farther from their partner until the skill is mastered.

### Individualizing Instruction

Do not require everyone to run a certain distance for endurance; rather, require a certain time span. Start with one minute, and each week increase the time by a minute, up to 12 minutes. This method allows for various fitness levels. Jumping rope, swimming, skipping, race-walking, or aerobics to music offer variety and are excellent substitutes for running.

Developing a physical education program can be one of your most rewarding experiences, because the children love moving. If well-taught, it can be one of the students' favorite classes of the day.

Children reveal their personalities most clearly through play. This presents the teacher with many opportunities to help them develop and grow in all parts of their lives. □

*Daniel W. Berk developed a physical edu-*

*cation program for the elementary students and also taught academy-level physical education at Loma Linda Adventist Academy. He helped develop the high school guide in physical education for the Pacific Union Conference. Barbara J. Berk has taught physical education at La Sierra High School and Loma Linda Adventist Academy. A husband-and-wife team, they have taught classes, clinics, and workshops in physical education curriculum development for the elementary school. They write from San Bernardino, California.*

#### NOTES AND REFERENCES

<sup>1</sup> Ellen G. White, *Education* (Mountain View, Calif.: Pacific Press Publishing Assn., 1903), p. 13.

<sup>2</sup> Rayna Perry, *Handmade Equipment*. Adapted by physical instructor, Central Unified School District, Fresno, California.

<sup>3</sup> Robin Reese, *Elementary Physical Education. Curriculum Development for the Classroom Teacher (K-6)*. Sacramento, Calif.: California State University, n.d., p. 17.

<sup>4</sup> *Ibid.*, p. 18.

<sup>5</sup> Wayne E. Nelson, *The Rainy Day Survival Book*. May be obtained from Wagon Wheel Books, 8459 Edmaru Ave., Whittier, CA 90605, or call (213) 693-5976.

#### RECOMMENDED RESOURCE MATERIALS

Capon, Jack. *Basic and Practical Lesson Plans for Perceptual-Motor Programs in Preschool and Elementary Grades*. Level 1. Front Row Experience, Ste. 217, 564 Central Ave., Alameda, CA 94501.

Dauer, Victor, P., and Robert P. Pangrazzi. *Dynamic Physical Education for Elementary School Children*. 8th edition, 1986. Macmillan Publishing Company, Inc., 866 Third Ave., New York, NY 10022.

Educational Activities, Inc., P.O. Box 392, Freeport, NY 11520 (catalog).

Gallahue, David L. *Developmental Physical Education for Today's Elementary School Children*. 6th edition, 1985. William C. Brown Publishers, 2460 Kerper Blvd., Dubuque, IA 52001.

Kirschner, Glen. *Physical Education for Elementary School Children*. 1987. Macmillan Publishing Company, Inc., 866 Third Ave., New York, NY 10022.

Kraus, Hans, & associates. *Minimal Muscular Fitness Tests in School Children*. Research Quarterly, vol. 25, No. 22 (May 1954), p. 178.

Nelson, Wayne E. *The Rainy Day Survival Book*. Wagon Wheel Books, 8459 Edmaru Ave., Whittier, CA 90605. (213) 693-5976.

Perry, Rayna. *Handmade Equipment*. Adapted Physical Education Instructor, Central Unified School District, Fresno, CA 93700.

Reese, Robin. *Elementary Physical Education. Curriculum Development for the Classroom Teacher (K-6)*. 3rd edition. California State University at Sacramento, CA 95814. (916) 278-5687.

White, Ellen G. *Education*. Mountain View, Calif.: Pacific Press Publishing Assn., 1903.

## EXERCISE PROGRAM FOR TEENS

*Continued from page 16*

to evaluate student progress and assign grades. Such evaluations also give the teacher a method of determining whether his or her instructional goals are being met. Standardized physical fitness tests given several times throughout the year can help assess progress and improvement in the area of fitness. Computer programs are available that tabulate

scores and provide reports for students and parents.

A good-quality physical education program should include a variety of activities. However, teachers in small academies often lack the facilities and/or equipment to offer the many different kinds of sport and recreation that interest their students. To overcome this difficulty, the teacher might look to programs or facilities in the local community for assistance. Because of lower demands during daytime hours, gymnasiums and pools, and even instruction in various activities can often be contracted for at lower rates during the regular school day or immediately thereafter.

Another alternative to consider is the use of contracts—forms stipulating that students will participate in a fitness program or sport on their own time. The contract should include the activity, the time required, the goals, and the method of evaluation. Designed jointly by the student and the physical education teacher, the contract provides a way for the student to earn academic credit if he or she successfully fulfills certain requirements. This is a good alternative for students who cannot fit physical education into their program due to scheduling problems, heavy academic load, or work conflicts.

Some activities that might be performed through contracts include racquetball, bowling, sailing, wind surfing, scuba diving, horseback riding, weight lifting, tennis, jogging, biking, skiing, or aerobics. If the activity is taught by an outside agency, the instructor can be asked to provide an evaluation of the student's performance. Or the student can keep a log of his or her activity and progress toward completion of the goal. A pass/fail system might be more appropriate than letter grades for these kinds of activities.

The activities described above are especially appealing to girls, who may not enjoy traditional sports. The coed nature of many of these activities allows the students to interact in a natural situation that prepares them to plan their own physical activity for a lifetime of fitness.

Physical education teachers and departments need to plan their programs around the areas they feel deserve the greatest emphasis and that can be achieved with the avail-