

Movement Right

The ABC's and 1, 2, 3's of Physical Activity for the Young Child

In today's technology-driven society, children often sit for hours in front of some type of screen (e.g., computer, TV, video game), exercising only their fingers as they manipulate the computer keyboard, remote control, or game controller. This sedentary lifestyle contributes to the growing problem of childhood obesity. Data from the U.S. Centers for Disease Control and Prevention indicate that 17 percent of all children and adolescents in the United States are obese, which is nearly three times the rate of just a generation ago.¹ Specifically, the prevalence of obesity in the U.S. over the past three decades has increased from 5 percent to 10.4 percent for children aged 2 to 5 years, from 6.5 percent to 19.6 percent for youth aged 6 to 11 years, and from 5.0 percent to 18.1 percent in 12- to 19-year-olds.² Childhood obesity has been identified as an emerging worldwide public health concern in low- and middle-income countries as well, especially in urban environments. In 2010, more than 42 million children under 5 years of age were estimated to be overweight,³ with nearly 35 million living in developing countries. Children and adolescents who are obese are more likely to become obese adults and to have a host of health and psychological problems, including high blood pressure, Type 2 diabetes, asthma, and poor self-esteem.⁴

What can educators do to combat this childhood obesity epidemic? One of the most effective ways to address this serious health challenge is to ensure that youth receive adequate amounts of daily physical activity while at school. Current recommendations from the Centers for Disease Control and Prevention and the U.S. Department of Health and Human Services state that school-aged youth should participate *daily* in at least one hour of moderate to vigorous physical activity that is developmentally appropriate, enjoyable, and features a variety

of activities that improve heart function and strengthen muscles and bones.⁵ Similar physical activity guidelines for children 5 to 17 years of age have been established by the World Health Organization.⁶

Physical Activity During the School Day

Activity time during the school day should combine unstructured free play (which could take place during recess) and structured physical activity, where the teacher leads children through planned movement sequences. On playgrounds at recess time, one sees a variety of different activity patterns. Groups of students run, play tag, or chase a ball, while others quietly engage in creative play with toys or other objects. This contrast in physical activity levels is a primary reason why at least half of the school-day activity time should be planned and led by the teacher. Weaving structured physical activity into the school day ensures that all students participate in activities that will increase their caloric expenditure, challenge their cardiovascular system, and improve their musculoskeletal function.

Movement Guidelines and Sample Activities

The majority of Seventh-day Adventist church schools in the North American Division (NAD) are small, with one- and two-teacher schools being quite common. Even schools with larger enrollments have multigrade classrooms, combining two or three grades. In more populated areas, schools may have a certified physical education teacher on staff, but this is often not the case. Consequently, classroom teachers have the primary responsibility for providing quality physical-education experiences for their students.

While the thought of preparing lesson plans may seem over-

BY DEBORAH H. MORGAN and DON W. MORGAN

t From the Start

whelming for teachers with little or no background in physical education or sports, they can design quality programs and activity experiences for their students using the basic principles described in this article. Sample activities are also provided to help students develop fundamental movement skills and enhance their physical fitness.

Principle No. 1: Provide Frequent Opportunities for Young Children to Improve Basic Locomotor Skills

Rationale. With younger children, it is important to lay a solid foundation of basic locomotor capability before adding more complex motor skills to their movement repertoire. Most children are very comfortable walking and running and can perform these skills automatically. Consequently, the teacher should provide ample practice time to develop other locomotor skills (e.g., hopping, jumping, sliding, galloping, skipping, and leaping) so that children can perform all these motions correctly without concentrated effort. Since locomotor skills require the use of major muscle groups, these movements expend large amounts of calories, increase endurance, and strengthen muscles and bones.

Sample Activities

1. *Home Base Activities.* Provide a “home base” (hula hoop, softball base, cone, etc.) for each child from which he or she embarks to perform designated activities. Once a specific task is completed, the children hurry back to their individual home bases (e.g., “Gallop around the room and leap over five cones before returning to your home base”).

2. *Secret Mission* (also called *Huddle and Go*). After the children gather around the teacher in a tight formation, he or she then issues a “secret mission,” which must be accomplished be-

fore they return to the huddle (e.g., “When I say ‘GO,’ run and touch two walls, jump in and out of two hula hoops, and hustle back to me as fast as you can”).

3. *Flag Tag.* Each player has a flag tucked into the center back of his or her waistband (this may be an actual detached flagball flag or a sturdy 15-inch strip of cloth). At the teacher’s signal, all children become “taggers” and try to pull out as many flags as possible without having their flags pulled. If a child’s flag is pulled, he or she goes to a designated “Flag Aid” station, where the teacher replaces the flag so the child can rejoin the game, ensuring that play is continuous. The movements used while playing the game can be varied to enhance different aspects of locomotor skill development.

4. “*Crossing the River*”*

5. “*Locomotor Movements and Freeze*”*

6. “*Galloping Lizzie*”*

Principle No. 2: Include Physical Fitness Development Activities in Every Lesson

Rationale. As curricular requirements increase, school-age children spend more time sitting at their desks, with fewer opportunities to be physically active. Children also pursue more sedentary after-school activities than in the past. In order for children to meet minimum physical activity guidelines,⁷ schools must provide daily opportunities for students to engage in moderate and vigorous activities that elevate heart rate and breathing and strengthen large muscle groups. Activities in which all children are moving, with little or no standing or waiting time, are recommended.

Sample Activities That Increase Aerobic Fitness and Promote Muscular Development

1. *Animal Walks* (Pre-K through 2nd grade). Most of the common animal walks (e.g., crab walk, bunny hop, bear walk, seal walk, puppy dog walk) develop upper-body strength, since



Home Base Activity: Children “freeze” (hands on knees, eyes on the teacher) in their home bases while receiving instructions for the next series of locomotor movements.

they require the body weight to be partially supported by the arms.

2. *Wall-to-Wall or Line-to-Line Runs* (all ages). Interval-training runs (a set number of high-intensity sprints of a given distance or time, separated by short, timed rest periods) or continuous runs performed at a slower pace can help children improve cardiorespiratory function. Students who make gradual, systematic increases in the time spent running or distance covered over a nine-week period can achieve noticeable gains in aerobic fitness.



Animal Walk: Children develop upper-muscle strength by performing animal walks such as the crab walk.

3. *Rope Jumping Techniques.* Jumping rope is another excellent way to develop cardiorespiratory endurance, and a skill that students of all ages can learn. For younger children (Pre-K through 1st grade), it is best to initially teach them to move forward while jumping.

This can be accomplished by instructing students to flip the rope overhead and then step through the rope after it hits the floor. For older children, success in stationary jumping will come relatively quickly; thus, the amount of time they can spend jumping without a rest can be increased more rapidly. An additional challenge for students in grades 3 through 8 is to see how many consecutive jumps they can perform without a miss. Children can be taught numerous footwork and rope-turning variations to help maintain their enthusiasm. The following are examples of “fancy footwork”: hopscotch (alternating jumps with two feet and one foot), jumping jacks (alternating jumps with feet apart and together), downhill skier (side-to-side jumps with feet together), and the bell jump (alternating forward and backward jumps with the feet together while the rope continues to turn in the same direction). Various methods of turning the rope include: backwards, criss-cross, double turns with one jump, and the helicopter, where both handles are held in one hand and the rope is twirled with a stirring motion so it passes horizontally underfoot. Children also enjoy jumping rope while running.



Rope Jumping Techniques: Students of all ages enjoy jumping rope and can reap the benefits of improved cardiorespiratory function while having fun.



Parachute Activities: Children develop upper-body strength and endurance while shaking a parachute vigorously enough to send balls bouncing in the air.

Principle No. 3: Develop Hand-Eye Coordination Through the Use of Physical Activities That Employ Sport Manipulatives

Rationale. Sport manipulatives are objects like balls, hoops, Frisbees, bats, various types of paddles or racquets, and bean bags that can be held, caught, thrown, rolled, or used to strike an object, and are used in combination with fundamental locomotor activities to teach more complex motor skills. Once children are comfortable performing basic locomotor movements that require large muscle activity and can demonstrate that these skills have become nearly automatic, they are ready to start learning fine motor skills, which use smaller muscle groups and require the optical tracking

4. *Parachute Activities* (Pre-K through 5th grade). Parachute play is an excellent way for children to develop upper-arm and shoulder-girdle strength. As they move in a circular pattern while gripping the parachute with one or both hands in an effort to keep the chute taut, the constant pulling motion strengthens the arms. Other parachute activities involve either shaking the chute to bounce balls or other light objects, or raising and lowering the parachute to various positions before releasing it into the air. These motions, performed for several minutes against the constant resistance provided by children executing similar movements on the opposite side of the chute, are great muscle builders for the upper body. Best of all, playing with the parachute is so much fun that children don't view the activities as being related to physical fitness development.

5. *Tag Games*. Children at every grade level enjoy variations of this popular game. It is important to select a tag game that engages as many children as possible in simultaneous movement. The younger children love tag games such as "Hill Dill" and "Skunk Tag," while all students enjoy "Everybody's It," "Hospital Tag," and "Chain Tag."*

of an object as it leaves the hand or moves toward the body.

Typically, younger children will have difficulty performing some fine motor movements, and they may become discouraged by their inability to successfully accomplish a given task, especially ones that require catching or striking. Therefore, it is essential to integrate these movement patterns into the curriculum at the primary-grade levels. As young children practice a variety of activities using sport manipulatives, their level of expertise at simpler hand-eye motor tasks can rival that of older children. Exposure to a wide selection of activities requiring hand-eye coordination and ample quality practice time are key ingredients in ensuring success while playing with sport manipulatives.

Sample Activities That Incorporate Sport Manipulatives

1. *Beat-the-Clock Bowling*. In this cooperative continuous-action game, students work together to knock down a line of objects as quickly as possible. Preparation: Set up a line of 20 to 30 "bowling pins" (e.g., two-liter soda bottles partially filled with water) in the center of the playing area and station equal numbers of children behind restraining lines on both sides of

the pins. These lines may be marked with chalk or tape about 10 feet from either side of the pins (for older children, make the game more challenging by positioning the lines 15 to 20 feet away from the pins). Distribute an equal number of playground balls to both groups of children (some students will not begin the game holding a ball). As you start your timing device, give the students a signal to simultaneously roll their balls at the pins. Any student may retrieve a ball that ends up on his or her side of the playing area, but all students must stand behind their respective restraining lines while releasing the balls toward the pins. After the last pin has

been knocked down, the total elapsed time is announced. If time permits, reposition the bottles and allow the children several more chances to better their collective elapsed time.

2. *Push Ball*. Use a large, lightweight ball. After dividing the class into two equal groups, have each team stand on “goal lines” about 30 to 40 feet apart. Select two or three children from each team to move to the center of the playing area, while the remaining children serve as goalies. The “middle” players from each team try to hit the ball across the opposing goal line to score a point. The ball may not be kicked, closely controlled, or dribbled—it can only be hit with the hand(s) while it is on the ground or in the air. At regular intervals, new children are rotated into the center area until everyone has had a chance to be an active player.

3. *Hot Foot (Beanbag Dodgeball)*. In a gymnasium or other room with a large open tile or wooden surface, divide the class into two equal teams. This game requires a center-dividing line and two restraining lines set at equal distances (10 to 15 feet) from the center line. Side boundaries may be necessary, depending on the size of the class and the available play space. An equal number of bean bags are laid out on each side of the center line while children stand on the restraining lines. At a designated signal, students run forward, grab a bean bag, retreat



Beat-the-Clock Bowling: Students work together to knock down all the “pins” as quickly as possible. This activity helps develop hand-eye coordination.

behind the restraining line, and throw the bag in such a manner that it slides along the floor. If the moving beanbag touches the foot of a child on the other team, that child must join the team that threw the beanbag. At a given stopping point, the team with the most children is declared the winner.

Conclusion

Quality physical education classes, in which all children actively participate and learn a variety of new skills, require careful forethought and planning. Classroom teachers with minimal prior knowledge of this subject area can learn how to create and implement a variety of physical activities for their students.

Lessons that incorporate the three basic principles discussed in this article can provide a solid foundation to teach movement skills to young children. When planning physical activities, teachers should also consider the following points:

A. *Keep activities simple*. Often, the simplest games are the most popular.

B. *Repetition, Repetition, Repetition!* Practice is the key to learning a new motor skill. To maintain the children’s interest, build on basic movement themes by including imaginative variations.

C. *Whenever possible, provide one piece of equipment per child, especially when balls or jump ropes are being used.* You can use several different types of balls (e.g., playground, soccer, basketball) as long as they are similar in size. Collect or make equipment out of “junk” (like the soda bottle bowling pins or the cloth strips for flag tag described earlier) to expand your school’s physical education inventory.

D. *Provide opportunities for every child to succeed.* When the daily lesson plan contains several segments (e.g., warm-up activity, physical-fitness development, lesson focus, and culminating game), there is a greater chance that each child will be able to excel at one or more activities.

E. *Emphasize physical fitness development in the daily program and make it FUN!* You have an opportunity to make a positive impact on the current and future health of your students and to help them develop a love for physical activity.

F. *Finish each physical education class on a happy note by ending with a game or group activity.* This allows children to leave the class feeling good about themselves and their physical abilities.

A final reminder: Teachers should serve as role models for their students. Whether it’s bringing a pair of tennis shoes to school so you can take a walk at the end of the day or telling your students about the bike ride you took with your family over the weekend, you can be a powerful promoter of a physically active lifestyle. Impromptu “study breaks,” when students set aside their books long enough to take a walk or run around the gym or field, or even stand up in the classroom and stretch or walk in place, can also be very beneficial in releasing stress and preparing the mind for more learning.⁸

We live in a universe that is based on the principles of movement and activity. Without movement, life ceases to exist. As teachers, we can provide opportunities for students to experience the health benefits and intrinsic joy that come from living an active life by setting aside sufficient class time to engage in daily physical activity. By making physical activity an integral part of the classroom schedule, teachers can help their students live healthier lives, both now and in the future. ☺

* Descriptions of these games and other physical activities can be found in Dr. Deborah Morgan’s *PE Lesson Plans for Small Schools*, which can be ordered by contacting the author at hawaiiianspirit@msn.com. Dr. Morgan is also available to conduct conference- and union-wide physical education workshops and in-service training for classroom and physical education teachers.



Dr. Deborah H. Morgan currently serves as an Adjunct Professor in the Department of Health and Human Performance at Middle Tennessee State University. An elementary school physical education specialist, Dr. Morgan’s professional background includes eight years as an elementary physical education teacher in Seventh-day Adventist elementary schools in Arizona and Tennessee and five years as an academy physical education teacher. Dr. Morgan conducts elementary physical education workshops and provides in-service training throughout North America. Her passion is to motivate teachers and students to be physically active and to equip teachers to provide fun-filled, high-quality physical education programs for their students. Dr. Morgan may be contacted by e-mail at hawaiiianspirit@msn.com.

Dr. Don W. Morgan is a Professor in the Department of Health and Human Performance at Middle Tennessee State University and Director of the Center for Physical Activity and Health in Youth, a university-community partnership aimed at promoting the activity and fitness levels of Tennessee youth. An exercise physiologist, Dr. Morgan is a Fellow of the American College of Sports Medicine and the American Academy for Kinesiology and Physical Education and a past president of the North American Society for Pediatric Exercise Medicine. Dr. Morgan also leads out in a health ministry devoted to educating church members and the public about the physical and spiritual blessings that come from adopting and maintaining an active lifestyle.

REFERENCES

1. <http://www.cdc.gov/obesity/childhood/index.html>. Retrieved May 4, 2011.
2. http://www.cdc.gov/nchs/data/hestat/obesity_child_07_08/obesity_child_07_08.htm. Retrieved May 4, 2011.
3. <http://www.who.int/dietphysicalactivity/childhood/en/>. Retrieved May 18, 2011.
4. M. D. Serdula, et al., “Do Obese Children Become Obese Adults? A Review of the Literature,” *Preventive Medicine* (1993):22:167-177. Available at <http://www.ncbi.nlm.nih.gov/pubmed/8483856>; <http://www.cdc.gov/obesity/childhood/basics.html>. Retrieved May 4, 2011.
5. W. B. Strong, et al., “Evidence Based Physical Activity for School-Age Youth,” *Journal of Pediatrics* (2005):146:732-737; Physical Activity Guidelines Advisory Committee, *Physical Activity Guidelines Advisory Committee Report, 2008* (Washington, D. C.: U.S. Department of Health and Human Services, 2008).
6. <http://www.who.int/dietphysicalactivity/physical-activity-recommendations-5-17years.pdf>. Retrieved May 18, 2011.
7. Strong, et al., op cit.; Physical Activity Guidelines Advisory Committee, op cit.; <http://www.who.int/dietphysicalactivity/physical-activity-recommendations-5-17years.pdf>. Retrieved May 18, 2011.
8. Ibid.