
SECTION 3 – PHYSICAL EDUCATION

Definition

Physical education is a planned, sequential PK-12 curriculum that provides cognitive content and learning experiences in a variety of activity areas such as basic movement skills; physical fitness; rhythms and dance; games; team, dual, and individual sports; tumbling and gymnastics; and aquatics. Quality physical education should promote, through a variety of planned physical activities, each student's optimum physical, mental, emotional and social development, using a well-defined curriculum, and offering the best opportunity to teach all children the skills and knowledge needed to establish and sustain an active lifestyle. Certified, highly-qualified teachers teach physical education and assess student knowledge, motor and social skills, and provide instruction in a safe, supportive environment. A quality physical education program must provide learning opportunities, appropriate instruction, and meaningful, challenging content for all children. Appropriate instructional practices in physical education recognize children's development and movement abilities (CDC, 2007).

Physical activity is bodily movement of any type and may include recreational, fitness, and sport activities such as jumping rope, playing soccer and lifting weights, as well as daily activities such as walking to the store, taking the stairs or raking leaves. Health benefits similar to those received during a physical education class are possible during periods of physical activity when the participant is active at an intensity that increases heart rate and produces heavier than normal breathing (NASPE, 2002).

Both physical education and physical activity are necessary contributors to the development of healthy, active children. Although the terms are often used interchangeably, they differ in the important ways as described above. Physical education should not be compared to or confused with other physical activity experiences such as recess, intramurals or recreational endeavors.



Rationale

Promoting young people's participation in physical activity is a critical national priority. *Healthy People 2010*, the national health objectives for the decade, identifies physical activity as one of our nation's leading health indicators (U.S. Department of Health and Human Services, 2000). Physical education plays a critical role in helping children learn necessary skills and develop confidence in their ability to be physically active. Appropriate practices guided by competent, knowledgeable and supportive adults influence the extent to which students choose to engage in activities, enjoy physical activity, and develop healthy lifestyles. Schools can help children and adolescents become more physically active and fit by providing age-appropriate, structured instruction and a wide range of accessible, safe and affordable opportunities to be active.

Physical activity can have a positive impact on academic achievement by creating an optimal learning condition for the brain. Studies suggest a connection between physical activity and increased levels of alertness, mental functioning and learning. Research also indicates that physical activity increases blood flow to the brain, allowing more oxygen and glucose to flow through the brain and releasing endorphins, which have a positive impact on mood. A recent California study found that students who did not routinely engage in physical activity and healthy eating habits had smaller gains in test scores than students who regularly engaged in a combination of physical activity and healthy eating (Hanson, 2003). Other research indicates that: schools that offer intense physical activity programs see positive effects on academic achievement (Symons et al., 1997); more opportunity for physical activity leads to increased test scores (Sallis et al., 1999); students participating in daily physical education exhibit better attendance, a more positive attitude toward school, and superior academic performance (NASPE/COPEC, 2001); moderate physical activity has a positive effect on immune function (President's Council on Physical Fitness, 2001); higher achievement is associated with higher levels of fitness (California Department of Education, 2005); and a positive relationship exists between higher fitness levels and academic achievement in mathematics (California Department of Education, 2001).

“NASPE believes that every student from kindergarten through Grade 12 should have the opportunity to participate in quality comprehensive physical education. It is the unique role of quality physical education programs to develop the health-related fitness, physical competence, and cognitive understanding about physical activity for all students so that they can adopt healthy and physically active lifestyles. Quality physical education programs are important because they provide learning experiences that meet the developmental needs of youngsters, which help improve a child’s mental alertness, academic performance, readiness to learn and enthusiasm for learning.”

Source: National Association for Sport and Physical Education, 2004. *What Constitutes a Quality Physical Education Program? NASPE Sets the Standard: A Position Paper*:
<http://www.aahperd.org/naspe/template.cfm?template=qualityPePrograms.html>



The Physically Educated Person

Physical activity is crucial to the development and maintenance of good health. The goal of physical education is to develop physically educated individuals who have the knowledge, skills, and confidence to enjoy a lifetime of healthful physical activity.

NASPE defines a *physically educated* child or adolescent as one who:

- ✧ has learned the skills necessary to perform a variety of physical activities;
- ✧ knows the implications of and benefits from involvement in physical activities;
- ✧ participates regularly in physical activity;
- ✧ is physically fit; and
- ✧ values physical activity and its contribution to a healthful lifestyle

Physical education programs should help children and adolescents obtain the knowledge and skills they need to become physically educated. Six state and national standards and accompanying benchmarks exist for determining whether a child or adolescent has the knowledge and skills needed to be considered physically educated.

The standards are:

1. Demonstrates competency in motor skills and movement patterns needed to perform a variety of physical activities;
2. Demonstrates understanding of movement concepts, principles, strategies, and tactics as they apply to the learning and performance of physical activities;
3. Participates regularly in physical activity;
4. Achieves and maintains a health-enhancing level of physical fitness;
5. Demonstrates responsible personal and social behavior that respects self and others in physical activity settings; and
6. Values physical activity for health, enjoyment, challenge, self-expression, and/or social interaction.

The benchmarks for each of these standards provide goals or targets for assessing the child's or adolescent's learning or achievement, designing instructional units and lessons, and selecting learning experiences and movement activities.

Sources: *Connecticut's Healthy and Balanced Living Curriculum Framework*, 2006; *Moving into the Future: National Physical Education Standards, 2nd Edition*. National Association for Sport and Physical Education, 2004.

This section presents policy recommendations, policy rationale, implementation strategies and resources for physical education.

Policy Recommendations

When children and adolescents do not have access to a wide range of safe and affordable opportunities to be active, they are unlikely to become physically active and fit. Their motivation to be active also depends on the degree to which they find their physical activity experiences to be enjoyable. Enjoyment of physical activity, in turn, will be influenced by the extent to which young people are taught the necessary skills; develop confidence in their physical abilities; are guided by competent, knowledgeable and supportive adults; can choose to engage in activities that are appealing to them; and are supported by cultural norms that make participation in physical activity desirable (Connecticut State Department of Education, 2006).

Policy recommendations for physical education address the following nine areas.

1. **Quality standards-based sequential physical education.** Physical education shall be sequential and standards-based, using national or state-developed standards.
2. **Daily physical education.** All students in Grades PK-12, including students with disabilities, with special health-care needs, and in alternative educational settings, shall receive daily physical education for the entire school year.
3. **Certified teachers.** A certified, highly-qualified physical education teacher shall teach all physical education.
4. **Daily recess.** All elementary school students shall have at least 20 minutes a day of supervised recess, preferably outdoors, during which schools should encourage moderate to vigorous physical activity.
5. **Physical activity opportunities before and after school.** All elementary, middle, and high schools shall offer extracurricular physical activity programs, such as physical activity clubs or intramural programs.
6. **Physical activity and punishment.** Teachers and other school and community personnel shall not use physical activity or exercise (e.g., running laps and doing pushups) or withhold opportunities for physical activity (e.g., recess and physical education) as punishment.
7. **Safe routes to school.** The district shall work with local public works, parks and recreation, public safety, and police departments to make it safer and easier for students to walk and bike to school.
8. **Use of school facilities outside of school hours.** School spaces and facilities shall be available to students, staff, and community members before, during and after the school day, on weekends and during school vacations.
9. **Incorporating physical activity into the classroom.** Students shall be provided with opportunities for physical activity in addition to physical education.

Policy Rationale and Implementation Strategies

1. **Standards-based sequential physical education.** Physical education shall be sequential and standards-based, using national or state-developed standards.

Standards specify what students should know and be able to do. The National Association for Sport and Physical Education (NASPE) recommends that quality, daily physical education that is developmentally and instructionally appropriate be available to all children. Quality physical education incorporates practices, derived from current research and documented teaching experiences, into a method of instruction that maximizes opportunities for learning and success. According to NASPE guidelines, a high quality physical education program is developed and led by qualified teachers and includes (1) opportunity to learn, (2) meaningful content, and (3) appropriate instruction. See “Components of a Quality Physical Education Program” on Page 64 and “An Overview of Connecticut’s Healthy and Balanced Living Curriculum Framework” on Page 33 of Section 1 Comprehensive School Health Education.

Implementation strategies include:

- ✧ Refer to NASPE’s publication *Appropriate Practices for Elementary School Physical Education* (2000) to identify appropriate instructional practices for physical education that recognizes children’s development and movement abilities.
- ✧ Use nationally developed standards as set forth in NASPE’s *Moving into the Future: National Physical Education Standards: A Guide to Content and Assessment* and *Moving into the Future: National Physical Education Standards, 2nd Edition* and Connecticut’s *Physical Education - A Guide to K-12 Program Development* and *Healthy and Balanced Living Curriculum Framework* (see Resources at the end of this section).
- ✧ Ensure that instruction is sequential, building from year to year.
- ✧ Provide content that includes movement, personal fitness, and personal and social responsibility.
- ✧ Determine whether students are able to demonstrate competency through application of knowledge, skill and practice.
- ✧ Provide individualized instruction to meet the needs of children and adolescents whose abilities and backgrounds vary.
- ✧ Offer a variety of learning experiences in games, fitness, and sports.
- ✧ Devote a high proportion of time to learning and skill practice.
- ✧ Support varied learning styles.
- ✧ Provide authentic and meaningful formative and overall assessment.
- ✧ Include all children and adolescents in meaningful and challenging learning experiences.
- ✧ Incorporate scientific principles and movement concepts into classroom instruction.
- ✧ Offer children and adolescents systematic, specific feedback based on their acquisition of skills.
- ✧ Do not use physical activity as punishment.
- ✧ Engage in grouping practices that do not embarrass or discriminate against particular children or adolescents.

- ✧ Give appropriate assignments and tasks that are challenging yet obtainable.
- ✧ Conduct developmentally appropriate student assessments that are relevant and meaningful to the learning opportunities provided.

Teachers also need to be caring, positive role models who are dedicated to helping children and adolescents lead active, healthy lives. The following suggestions can help teachers and other adults serve as role models and encourage physical activity for students:

- ✧ Join in children's games on the playground or gymnasium
- ✧ Talk about the physical activities you like to do outside of school
- ✧ Ask the librarian to prepare a book display about various physical activities
- ✧ Send home physical activity homework that parents and children can do together
- ✧ Use physical activity as a reward rather than a form of punishment

Components of a Quality Physical Education Program

Opportunity to Learn

- ✧ Instructional periods totaling 150 minutes per week (elementary) and 225 minutes per week (middle and secondary school) during the school day for the entire school year
- ✧ Qualified physical education specialist providing a developmentally appropriate program
- ✧ Teacher-to-pupil ratio no greater than 1:25 for optimal instruction
- ✧ Adequate and safe equipment and facilities
- ✧ A comprehensive curriculum that reflects national/state physical education standards
- ✧ Appropriate facilities, equipment and materials

Meaningful Content

- ✧ Instruction in a variety of motor skills that are designed to enhance the physical, mental, and social/emotional development of every child
- ✧ Fitness education and assessment (e.g., Second Generation Physical Fitness Assessment, Connecticut State Department of Education) to help children understand, improve, and/or maintain their physical well-being
- ✧ Development of cognitive concepts about motor skill and fitness
- ✧ Opportunities to improve their emerging social and cooperative skills and gain a multicultural perspective
- ✧ Promotion of ongoing appropriate physical activity throughout life

Appropriate Instruction

- ✧ Full inclusion of all students
- ✧ Maximum practice opportunities for class activities
- ✧ Well-designed lessons that facilitate student learning
- ✧ Out-of-school assignments that support learning and practice
- ✧ No use of physical activity for punishment
- ✧ Regular assessment to monitor and reinforce student learning

Source: *National Association for Sport and Physical Education, Council on Physical Education for Children*, 2004. <http://www.aahperd.org/naspe/template.cfm?template=qualityPePrograms.html>

2. *Daily physical education.* All students in Grades PK-12, including students with disabilities, with special health-care needs, and in alternative educational settings, shall receive daily physical education for the entire school year.

Implementation strategies include:

- ✧ Provide elementary students with 150 minutes of physical education per week and middle and high school students with 225 minutes per week.
- ✧ Do not substitute student involvement in other activities involving physical activity (e.g., interscholastic or intramural sports) for meeting the physical education requirement.
- ✧ Ensure that students spend at least 50 percent of physical education class time participating in moderate to vigorous physical activity.

Physical Activity Guidelines for Children and Adolescents

NASPE's physical activity guidelines for elementary school-aged children recommend the following:

- ✧ Elementary school-aged children should accumulate at least 60 minutes of age-appropriate and developmentally appropriate physical activity from a variety of activities on all, or most, days of the week.
- ✧ An accumulation of more than 60 minutes, and up to several hours per day, of age-appropriate and developmentally appropriate activity is encouraged.
- ✧ Some of the child's activity each day should be in periods lasting 15 minutes or more and include moderate to vigorous activity. This activity will typically be intermittent in nature, involving alternating moderate to vigorous activity with brief periods of rest and recovery.
- ✧ Children should not have extended periods of inactivity (two hours or more).

The International Consensus Conference on Physical Activity Guidelines for Adolescents recommends the following:

- ✧ All adolescents should be physically active daily, or nearly every day, as part of play, games, sports, work, transportation, recreation, physical education, or planned exercise in the context of family, school, and community activities.
- ✧ Adolescents should engage in three or more sessions per week of activities that last 20 minutes or more at a time and that require moderate to vigorous levels of exertion.

3. *Certified teachers.* A certified, highly-qualified physical education teacher shall teach all physical education.

It is critical to have highly qualified physical education teachers delivering a standards-based curriculum that will assist children in adopting and maintaining healthy lifestyles. Highly qualified physical education teachers possess the skills and knowledge to facilitate improved teaching practices, strengthen the quality of physical education instruction, and empower students to achieve and maintain healthy, active lifestyles. At a minimum, physical education teachers will be qualified to teach by virtue of having completed an accredited physical education teacher education program.

Highly qualified physical education teachers possess the skills, knowledge, and values outlined in the NASPE *National Standards for Beginning Physical Education Teachers* (NASPE, 2003) and *Connecticut's Common Core of Teaching: Discipline-Based Professional Teaching Standards for Teachers of Physical Education and Foundational Skills and Competencies*.

Highly qualified beginning physical education teachers will have completed a program of preparation that included substantial pedagogical and content knowledge bases, afforded many opportunities for pre-service participation in an array of field experiences where they interacted with veteran teachers and diverse students at all grade levels while seeing the application of classroom principles, and developed specific professional behaviors that facilitate student learning.

Highly qualified physical education teachers base their teaching on the *Connecticut Healthy and Balanced Living Curriculum Framework* (2006) and the *National Standards for K-12 Physical Education* (NASPE, 2004) in order to provide students a foundation of skills and knowledge that can apply to many activities so that students are willing, able, and interested in seeking a lifetime of physical activity. Highly qualified physical education teachers understand the importance of meeting the needs of all types of learners and will use the outcomes provided in the national standards to elicit ideas for a variety of instructional strategies to do so. By relating the national standards to developmentally appropriate physical activities, highly qualified teachers give a purpose to their curriculum and illustrate that physical education has meaningful, educational, and significant content.

Implementation strategies include:

- ✧ Review Connecticut physical education certification regulations (<http://www.sde.ct.gov/sde/lib/sde/PDF/Cert/regulations/regulations1.pdf>).
- ✧ Review *Connecticut's Common Core of Teaching: Discipline-Based Professional Teaching Standards for Teachers of Physical Education and Foundational Skills and Competencies* (<http://www.sde.ct.gov/sde/cwp/view.asp?a=2618&q=320862>).
- ✧ Review the NASPE *National Standards for Beginning Physical Education Teachers* (http://www.aahperd.org/naspe/template.cfm?template=ns_beginning.html).
- ✧ Establish a practice of hiring only certified teachers who are highly qualified to teach physical education.
- ✧ Establish a practice of supporting and providing discipline-specific professional development for district physical educators.

- ✧ Establish a practice of basing the evaluation of all physical education teachers on the *Connecticut's Common Core of Teaching: Discipline-Based Professional Teaching Standards for Teachers of Physical Education and Foundational Skills and Competencies*.

4. Daily recess. All elementary school students shall have at least 20 minutes a day of supervised recess, preferably outdoors, during which schools should encourage moderate to vigorous physical activity.

Daily recess along with physical education is a necessary component of the school curriculum that enables students to develop physical competence, health-related fitness, self-responsibility, and enjoyment of physical activity so that they can be physically active for a lifetime. Recess is unstructured playtime where children have choices, develop rules for play, and release energy and stress. It is an opportunity for children to practice or use skills developed in physical education class. NASPE recommends that children ages 6-11 participate in at least one hour and up to several hours of physical activity each day. This activity may occur in periods of moderate to vigorous activity lasting 15 minutes or more. Recess may provide some of this activity time. Students who play before they eat have improved behavior on the playground and in the cafeteria and classroom. They waste less food and drink more milk, leading to increased nutrient intake. The cafeteria atmosphere is improved during mealtime, and children are more settled and ready to learn upon returning to the classroom. A good example is Recess Before Lunch: A Guide to Success (Montana Office of Public Instruction, 2003) provides schools with strategies for promoting and implementing recess before lunch (<http://www.opi.state.mt.us/schoolfood/recessBL.html>).

Implementation strategies include:

- ✧ Develop schedules that provide for supervised, daily recess in pre-kindergarten through Grades 5 or 6.
- ✧ Provide space, equipment and an environment that is conducive to safe and enjoyable activity. NASPE's *Guidelines for Facilities, Equipment and Instructional Materials* outlines developmentally appropriate equipment.
- ✧ Regularly check equipment and facilities for safety.
- ✧ Ensure that students with special physical and cognitive needs have equal physical activity opportunities with appropriate assistance and services.
- ✧ Discourage extended periods (i.e., periods of two or more hours) of inactivity.
- ✧ Give students periodic breaks during which they are encouraged to get up from their chairs and be moderately active when activities, such as mandatory schoolwide testing, make it necessary for students to remain indoors for long periods of time.
- ✧ Prohibit the withholding of recess or the use of exercise as punishment and develop alternative practices for promoting appropriate behavior.
- ✧ Do not allow use of facilities for recess activities to interfere with instructional classes, i.e., provide separate locations for each activity.
- ✧ Do not schedule recess back-to-back with physical education classes.

- ✧ Encourage and facilitate periods of moderate physical activity while recognizing that recess should provide opportunities for children to make choices.
- ✧ Teach children positive skills for self-responsibility during recess.
- ✧ Intervene when a child's physical or emotional safety is an issue. Do not allow bullying or aggressive behavior and enforce all safety rules.
- ✧ Schedule recess before lunch as a strategy for increasing meal consumption and promoting better behavior.

5. *Physical activity opportunities before and after school.* All elementary, middle, and high schools shall offer extracurricular physical activity programs, such as physical activity clubs or intramural programs.

Physical activity programs help prepare children and adolescents for lifelong physical activity. Physical activity in school is important, but opportunities for children and adolescents to participate in regular physical activity should extend beyond the school day. There are two types of physical activity, lifestyle and structured (or systematic). Lifestyle physical activity consists of activities such as walking, climbing stairs, doing chores and playing. Structured physical activity consists of programs (e.g., sports and instructional programs in dance, gymnastics, swimming) designed to increase the quality or intensity of physical activity. Structured physical activity helps children and adolescents acquire muscle strength and endurance, flexibility and cardiovascular fitness, as well as obtain and maintain a healthy weight.

The way in which professionals present physical activity programs to children and adolescents can greatly influence their levels of participation. Thus, in addition to physical education teachers, it is important for all professionals who provide care that may include physical activity for children and adolescents to become familiar with the basics of physical education programs. Partnerships between and among schools, community groups and municipal agencies, such as youth networks and parks and recreation departments, can offer access to resources, programs and facilities beyond those that schools alone can provide.

Implementation strategies include:

- ✧ Ensure that all schools—elementary, middle and high—offer extracurricular activities that provide ample physical activity, and that high schools, and middle schools as appropriate, offer interscholastic sports programs.
- ✧ Offer a range of activities that meet the needs, interests and abilities of all students, including boys, girls, students with physical and cognitive disabilities, and students with special health care needs.
- ✧ Ensure that after-school, childcare and enrichment programs provide and encourage—verbally and through the provision of space, equipment and activities—daily periods of moderate to vigorous physical activity for all participants.
- ✧ Encourage school personnel to work closely with parks and recreation departments and other community organizations to extend access to structure, support and implementation of programs that offer additional opportunities for physical activity.

Characteristics of Quality Extracurricular Physical Activity Programs for Children or Adolescents

Philosophy

- ✧ The program has a written philosophy or mission statement that incorporates skill development, educational focus, fair play, and enjoyment.
- ✧ Fun is a priority.
- ✧ Performance and success are based on developmentally and age-appropriate standards.
- ✧ Fair play, teamwork and good sportsmanship are taught and reinforced.

Administration and Organization

- ✧ There are published guidelines for child, adolescent, parent, coach and spectator involvement.
- ✧ Coaches are carefully selected and trained, undergo a background check, meet certification requirements, and are monitored by qualified administrators. Coaches who do not meet certification requirements are provided with additional training or are removed.
- ✧ Sufficient and appropriate safety equipment is available for all program participants.
- ✧ All aspects of children's and adolescents' growth and development (e.g., size, emotional development, skill level) are considered when practice groups or teams are selected.

Safety

- ✧ Facilities are clean.
- ✧ Equipment and practice and competition areas are safe and in good condition; regular inspections are conducted, and maintenance and replacement policies are enforced.
- ✧ Appropriate safety equipment (e.g., mats, helmets, and wrist, elbow and knee guards) is provided.
- ✧ Coaches and staff are trained in injury prevention, first aid, cardiopulmonary resuscitation (CPR), and automatic emergency defibrillator (AED).
- ✧ The ratio of coaches and staff to children and adolescents is appropriate. The ratio allows for adequate instruction and supervision and ensures safety at all times. (Ratios vary depending on the physical activity and on the age and skill levels of children and adolescents.)

Child's or Adolescent's Readiness to Participate

- ✧ The group or team's interest level, desire to have fun, skill level and emotional development match those of the child or adolescent.
- ✧ The program's level of intensity and competitiveness matches the child's or adolescent's needs.
- ✧ All children and adolescents are treated with respect and are given meaningful opportunities to learn skills and participate fully.

Source: *Characteristics of Excellent Physical Activity Programs for Children and Adolescents*, 2001. National Center for Education in Maternal and Child Health, Georgetown University:
<http://www.brightfutures.org/physicalactivity/tools/d.html>

6. ***Physical activity and punishment.*** Teachers and other school and community personnel shall not use physical activity or exercise (e.g., running laps and doing pushups) or withhold opportunities for physical activity (e.g., recess and physical education) as punishment.

A primary goal of physical education programs, exercise and opportunities to engage in physical activity is to provide students with positive experiences that will motivate them to pursue and develop active lifestyles. Using physical activity (e.g., running laps and doing calisthenics) as punishment develops student attitudes contrary to this objective. Teachers do not punish children with reading and then expect them to develop a joy for reading. Neither should teachers punish with exercise and expect children to develop a love of activity. Withholding recess or other opportunities for physical activity should not be used to enforce completion of academic work. Appropriate alternative strategies should be developed as consequences for negative or undesirable behaviors.

Implementation strategies include:

- ✧ Review district and school policies regarding physical activity and punishment to ensure that exercise is not being used as punishment and that opportunities for physical activity are not being withheld (e.g., not being permitted to play with the rest of the class or being kept from recess or physical education class as a consequence for behavior or incomplete assignments). Include policies for athletic and intramural programs in this review.
- ✧ Develop purposeful, educationally sound strategies that provide teachers and other school personnel, as well as coaches and supervisors, with appropriate actions and measures that are consistent with district philosophy to reinforce positive behaviors and messages while discouraging undesirable behaviors.

7. *Safe routes to school.* The district shall work with local public works, parks and recreation, public safety and police departments to make it safer and easier for students to walk and bike to school.

Implementation strategies include:

- ✧ Explore the availability of federal “safe routes to school” funds, administered by the State Department of Transportation, to finance improvements.
- ✧ Establishing a walking club.
- ✧ Initiate a community “walking school bus” (<http://www.walkingbus.org/>).
- ✧ Organize neighborhood watch groups or cooperatives to take turns walking children to the bus stop or to school.

Several websites contain additional ideas, strategies and resources. These include:

- ✧ *Pedestrian and Bicycle Information Center.* A clearinghouse for information and resources regarding pedestrian and bicycle issues (<http://www.bicyclinginfo.org> and <http://www.walkinginfo.org>).
- ✧ *Safe Routes to School Programs.* Tips to improve the health of kids and the community by making walking and bicycling to school safer, easier, and more enjoyable (<http://www.saferoutesinfo.org/>).
- ✧ *International Walk to School Week.* Information about a worldwide program to promote physical activity (<http://www.walktoschool-usa.org/>).



8. *Use of school facilities outside of school hours.* School spaces and facilities shall be available to students, staff and community members before, during and after the school day, on weekends and during school vacations.

Schools that function as centers of their communities must be accessible to the people who can benefit from them. Well-planned school facilities can address the specific needs of diverse community members as well as support the teaching and learning process. Recommendations to increase physical activity in communities include the creation or enhancement of access to places for physical activity combined with informational outreach activities. This approach aims to change the local environment by creating opportunities for physical activity. Such interventions are highly effective in increasing physical activity and improving physical fitness among children and adults. Adequate facilities and equipment are critical to support the success of physical activity programs. Programs may be modified and adapted to meet the budget and space available.

Implementation strategies include:

- ✧ Ensure that facilities meet the needs, interests and number of participants.
- ✧ Ensure that the amount of equipment, depending on the program, meets the needs of participants so that programs can serve the maximum number of participants under established safety standards.
- ✧ Ensure that safety standards are considered and met for each activity in the program.
- ✧ Repair or discard damaged equipment.
- ✧ Modify equipment according to age, size and physical ability of the participants.
- ✧ Conduct regular inspections to ensure safety for all activities.
- ✧ Create or enhance access to places for physical activity by building trails or facilities and by reducing barriers (e.g., reducing fees or changing operating hours).
- ✧ Make spaces and facilities available to community agencies and organizations offering physical activity and nutrition programs.
- ✧ Ensure that school policies concerning safety apply at all times and that users are aware of the policies. Policies should include procedures for injury prevention, management and reporting of injury situations, and notification of parents or guardians in the event of an emergency.

Model policies for use of schools as centers of community activities can be found in the following resources:

- ✧ *Recommended Policies for Public School Facilities:* <http://www.21csf.org/csf-home/publications/modelpolicies/PlanningSectionMay2005.pdf>
- ✧ *Recommendations to Increase Physical Activity* (National Guideline Clearinghouse): <http://www.guideline.gov/search/searchresults.aspx?Type=3&txtSearch=physical+activity&num=20>

Guidelines for assessing and organizing school and community programs to promote physical activity for children and adolescents include:

- ✧ *Guidelines for School and Community Programs to Promote Lifelong Physical Activity Among Young People* (Centers for Disease Control and Prevention, 1997): <http://www.cdc.gov/HealthyYouth/physicalactivity/guidelines/>
- ✧ *Guidelines for After-School Physical Activity Intramural and Sport Programs* (National Association for Sport and Physical Education, 2005): http://www.aahperd.org/naspe/pdf_files/pos_papers/intramural_guidelines.pdf

9. Incorporating physical activity into the classroom. Students shall be provided with opportunities for physical activity in addition to physical education.

For students to receive the nationally recommended amount of daily physical activity (at least 60 minutes per day) and fully embrace regular physical activity as a personal behavior, students need more opportunities for physical activity than a physical education class can provide. Physical activity can easily be incorporated into the classroom, either as part of the learning process or as an energizing break. See “Physical Activity Breaks” on Page 74.

Implementation strategies include:

- ✧ Design classroom health education to complement physical education by reinforcing the knowledge and self-management skills needed to maintain a physically active lifestyle and to reduce time spent on sedentary activities, such as watching television.
- ✧ Incorporate opportunities for physical activity into other subject lessons.
- ✧ Use physical activity as reinforcement, reward and celebration for achievement, positive behavior and completion of assignments.
- ✧ Provide short physical activity breaks between lessons or classes, as appropriate.
- ✧ Incorporate schoolwide physical exercise in which each classroom participates in exercise as a collaborative activity. Allocate a set time or lead classroom exercise with announcements over the intercom.

The following resources provide ideas for physical activity breaks in the classroom setting.

- ✧ *ABC for Fitness: Activity Bursts for the Classroom*, Dr. David Katz: <http://www.davidkatzmd.com/abcforfitness.aspx>
- ✧ *Brain Breaks: A Physical Activity Idea Book for Elementary Classroom Teachers*. Michigan Department of Education, 2005: <http://www.emc.cmich.edu/brainbreaks/>
- ✧ *Energizers*. East Carolina University: <http://www.ncpe4me.com/energizers.html>
- ✧ *Mind and Body: Activities for the Elementary Classroom*. Montana Office of Public Instruction, June 2003: <http://www.opi.state.mt.us/PDF/health/Mind&Body.pdf>
- ✧ *TAKE 10!™*. International Life Sciences Institute (ILSI) Center for Health Promotion. Ordering information at: <http://www.take10.net/whatistake10.asp>

Physical Activity Breaks

The ideas below demonstrate how easily one can incorporate physical activity into the classroom. Even 10-minute periods of physical activity can enhance learning. All the ideas can be adjusted for developmental appropriateness.

Math

- ✧ Have students measure their jumping skills by measuring the distance covered when jumping, leaping and hopping.
- ✧ Call out a math problem. If the answer is less than 20, have students give their answer in jumping jacks or other gross motor movements.
- ✧ Have students calculate and graph their resting heart rate and elevated heart rate.

Science

- ✧ Test the shapes of movement equipment and analyze why they are shaped as they are.
- ✧ Take nature walks.

Language Arts

- ✧ Ask students to record in their journals the amount of time they spend watching television and being physically active, and which activities they enjoyed the most.
- ✧ Read health-related books to students as a reward.

Spelling

- ✧ Host a spelling bee with a physical activity theme. Ask students to act out verbs such as skip, hop and jump.
- ✧ Have students spell health-related words using their bodies to form letters.

Geography

- ✧ Rhythmic Activity: “Body Mind Map” uses the body as a model of the globe. North Pole: touch head, South Pole: touch toes, Equator: hands around waist, America: Left hand, Europe: nose, etc.
- ✧ Have students research and demonstrate physical activities done in other countries.

Source: *Action Guide for School Nutrition and Physical Activity Policies*, Connecticut State Department of Education, 2006: <http://www.state.ct.us/sde/deps/Student/NutritionEd/index.htm#Action>

Legislation Pertaining to Physical Education and Physical Activity

Connecticut General Statutes Section 10-221a. High school graduation requirements.

Diplomas for veterans of World War II. (a) For classes graduating from 1988 to 2003, inclusive, no local or regional board of education shall permit any student to graduate from high school or grant a diploma to any student who has not satisfactorily completed a minimum of twenty credits, not fewer than four of which shall be in English, not fewer than three in mathematics, not fewer than three in social studies, not fewer than two in science, not fewer than one in the arts or vocational education and not fewer than one in physical education.

(b) Commencing with classes graduating in 2004, and for each graduating class thereafter, no local or regional board of education shall permit any student to graduate from high school or grant a diploma to any student who has not satisfactorily completed a minimum of twenty credits, not fewer than four of which shall be in English, not fewer than three in mathematics, not fewer than three in social studies, including at least a one-half credit course on civics and American government, not fewer than two in science, not fewer than one in the arts or vocational education and not fewer than one in physical education.

(c) Any student who presents a certificate from a physician stating that, in the opinion of the physician, participation in physical education is medically contraindicated because of the physical condition of such student, shall be excused from the physical education requirement, provided the credit for physical education may be fulfilled by an elective.

(d) Determination of eligible credits shall be at the discretion of the local or regional board of education, provided the primary focus of the curriculum of eligible credits corresponds directly to the subject matter of the specified course requirements. The local or regional board of education may permit a student to graduate during a period of expulsion pursuant to section 10-233d, if the board determines the student has satisfactorily completed the necessary credits pursuant to this section. The requirements of this section shall apply to any student requiring special education pursuant to section 10-76a, except when the planning and placement team for such student determines the requirement not to be appropriate. For purposes of this section, a credit shall consist of not less than the equivalent of a forty-minute class period for each school day of a school year except for a credit or part of a credit toward high school graduation earned at an institution accredited by the Department of Higher Education or regionally accredited. <http://www.cga.ct.gov/2007/pub/Chap170.htm#Sec10-221a.htm>

Connecticut General Statutes Section 10-16b. Prescribed courses of study. (a) In the public schools the program of instruction offered shall include at least the following subject matter, as taught by legally qualified teachers, the arts; career education; consumer education; health and safety, including, but not limited to, human growth and development, nutrition, first aid, disease prevention, community and consumer health, physical, mental and emotional health, including youth suicide prevention, substance abuse prevention, safety, which may include the dangers of gang membership, and accident prevention; language arts, including reading, writing, grammar, speaking and spelling; mathematics; physical education; science; social studies, including, but not limited to, citizenship, economics, geography, government and history; and in addition, on at least the secondary level, one or more foreign languages and vocational education. For purposes of this subsection, language arts may

include American sign language or signed English, provided such subject matter is taught by a qualified instructor under the supervision of a teacher who holds a certificate issued by the State Board of Education.

(c) Each local and regional board of education shall on September 1, 1982, and annually thereafter at such time and in such manner as the Commissioner of Education shall request, attest to the State Board of Education that such local or regional board of education offers at least the program of instruction required pursuant to this section, and that such program of instruction is planned, ongoing and systematic. <http://www.cga.ct.gov/2005/pub/Chap164.htm#Sec10-16b.htm>

Connecticut General Statutes Section 10-221o. Lunch Periods and Recess. Each local and regional board of education shall require each school under its jurisdiction to (1) offer all full day students a daily lunch period of not less than twenty minutes, and (2) include in the regular school day for each student enrolled in grades kindergarten to five, inclusive, a period of physical exercise, except that a planning and placement team may develop a different schedule for a child requiring special education and related services in accordance with chapter 164 and the Individuals With Disabilities Education Act, 20 USC 1400 et seq., as amended from time to time. In the event of a conflict with this section and any provision of chapter 164, such other provision of chapter 164 shall be deemed controlling. <http://www.cga.ct.gov/2005/pub/Chap170.htm#Sec10-221o.htm>.

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