



Physically Active Kids: How to Grow Healthy, Active Adults

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Key Points

Optimize Existing Physical Education Times in Schools

- Reduce waiting/observation time
- Use of sports/activities that involve more students and less instruction, and can be played outside of school
- Consider packaged curricula such as SPARK or CATCH

Reinforce Activity throughout School Day

- Instruct in optimal use of playground equipment
- Encourage extracurricular and intramural sport participation
- Deliver specific messages of physical fitness

Integrate Activity throughout the Child's Day

- Promote activity across environments, in and out of school
- Encourage children to be outdoors.
- Incorporate the family and social/peer network
- Help children identify activities that they enjoy
- Promote a sense of self-efficacy in physical activity

To satisfy this recommendation, children must have opportunities to achieve moderate to vigorous physical activity in a variety of settings. This issue brief reviews the research pertaining to the following programmatic objectives:

- Increase physical activity in physical education class
- Increase physical activities at school but outside of physical education class
- Increase physical activities outside of school
- Increase child's willingness to participate in moderate to vigorous physical activity.

Optimize Existing Physical Education Time

The length and frequency of physical education classes in the school week are not easily adjusted, but a number of strategies can optimize minutes spent being physically active within the time frame of physical education class.³ Managerial efficiencies within the class structure might have students do warm-ups while the teacher takes attendance. Curriculum adjustments focus on time spent in motion as opposed to waiting for a turn or listening to technical instruction. Activities such as soccer allow for participation by more students for an extended period of time with limited technical instruction. Units such as aerobics, jogging and ultimate Frisbee provide skills for life-long activity, can be done in and out of class, and require little or no supervision.⁴

Some studies have focused on the effectiveness of packaged curricula such as SPARK (Sports, Play and Active Recreation for Kids) and CATCH (Child and Adolescent Trial for Cardiovascular Health). The CATCH intervention consists

of school- and family- based components intended to improve the health of school children. Trials on this program have concluded that CATCH is effective in increasing MVPA and the intensity of physical education classes.⁵ Such programs, however, may require a financial commitment on the part of the school or school district.

Reinforce Activity throughout the School Day

Students can also benefit from opportunities to participate in physical activity outside of physical education class. Depending on the age level and school, these opportunities can include recess and extracurricular activities such as sports.

Effective practices focus on challenging students and encouraging activity during recess time. Strategies include the provision of game equipment⁶ and instructing students on proper use of playground equipment.⁴

Most Wisconsin youth report an insufficient amount of physical activity. They need more opportunities and support for physical activity in all environments, in and out of school.

Sports can increase physical activities through a variety of settings and differing levels of competitiveness. School athletics may best serve those interested in more competition. However, a variety of community programs and sports leagues focus on noncompetitive sports and activities to reach all segments of the youth population.⁷

Only 35% of Wisconsin students grades 9 through 12 get proper exercise to maintain health, according to Wisconsin's Youth Risk Behavior Surveillance System. This minority of children report that they were "physically active for a total of 60 minutes or more per day on five or more of the past seven days,"¹ which is the recommended level of moderate physical activity for children and adolescents.²

Children respond to messages they receive in the structured and educationally focused classroom environment.⁸ The effectiveness of the instructional message depends, in part, on its specificity. That is, a focus on the value of exercise and athletics proves more effective than teaching on general health behaviors.⁹ Beyond this, programs can use a student's network of friends and family to support and reinforce physical activity. For example, school-based activity clubs and classroom lessons can involve activities at home.

The Minnesota Heart Health Program, for example, used the social cognitive theory as it relates to aerobic activity. Students in 8th grade were challenged to do the equivalent of 250 miles of aerobic activity. They were educated on elements of aerobic activity in classes outside of physical education, led in part by fellow students, and were reinforced in their activities through competition with other classes in the city. Follow-up research ending in the 11th grade found that the students in these communities maintained higher levels of physical activity compared to the comparison community, which did not receive the programming. While the authors could not determine whether the classroom-based or community activities led to the increased activity levels, they asserted the importance of utilizing many of the different environments encountered on a regular basis to encourage long-term positive health behaviors.

Environmental Opportunities beyond School

A majority of the time that children spend being physically active occurs outside of school. Time spent outdoors, in particular, promotes physical activity and averts sedentary behaviors.¹⁰ A child's environment, the opportunities for physical activity and the support and reinforcement for it, will significantly influence the degree of physical activity.¹¹

Families act as the largest component of a child's environment and are a significant determinant of health behaviors.¹² Family habits regarding and attitudes toward physical activity will increase or negatively affect participation in physical activity.

Enjoyment and Self-Efficacy

A child's enjoyment of an activity will strongly influence his/her participation in physical activity, both in and out of a classroom setting.¹³ Students, when having fun in the activity, are more likely to participate with higher levels of intensity and continue that participation outside of class.

Beyond this, however, much evidence suggests that a child's sense of self-efficacy in an activity heavily influences the willingness to participate.¹⁴ When children believe in their abilities to do what is expected of them, they are more willing to participate, do so with higher intensity, and are motivated to achieve.¹⁵

Improving School Health in Wisconsin

The State of Wisconsin has been promoting school-based health programs through the Wisconsin Department of Public Instruction (DPI). The Governor's School Health Award recognizes schools with gold, silver, and bronze awards, based on their policies and practices related to physical activity, nutrition and health education. Schools' participation in this award opportunity allows schools to assess and find the strengths and gaps within their programming and on how they promote a healthy environment.

The Wisconsin DPI, in partnership with WEA Trust (the insurance plan for the statewide teachers' union), has also sponsored "Movin' and Munchin' Schools" for the past eight years. This program focuses on increasing physical activity and on healthy eating. Participating schools can receive financial awards to be used for their physical education and nutrition programs. Criteria for the awards include the content of the program(s) implemented along with community involvement and participation from students, students' families and faculty/staff.

A Culture of Physical Activity

The programming, structure, and messages in a child's environment can promote and reinforce physical activity in school and at home. Children require opportunities to be active and reinforcement for doing so. But this extends beyond specific programming.

Schools boards and local governments can make decisions about infrastructure

that promotes physical activity not only as a conscious activity choice, as is the case with entering an exercise facility, but in more indirect and naturally occurring ways throughout a child's day. For example, schools and communities can enable walking or biking to school.¹⁶ Also, safe sidewalks, paths, and playgrounds invite use at all hours.

School, community, and family structures— in a multi-sector public health approach— create the culture, the environment, and the conditions in which children can grow into healthy physically active adults.

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