THINK ABOUT THE LINK

WHOLE CHILD

ACADEMIC • SOCIAL • EMOTIONAL • PHYSICAL • BEHAVIORAL

PHYSICAL ACTIVITY

Version 4. Updated June 2025

Physical Activity: Evidence-Informed Practice Brief

WHAT DO WE MEAN?

As outlined by the WSCC model, *Physical Education and Physical Activity* (referred to as *Physical Activity*) is designed to integrate physical activity into multiple facets of students' lives through knowledge, skills, engagement, and shared responsibility among students, school staff, families, and the community. This includes: (a) physical education curriculum, (b) physical activity before, during, and after school, (c) and engagement of key groups.[1] This is derived from the Comprehensive School Physical Activity Program (CSPAP) framework, which provides guidelines and resources designed to facilitate the organization, implementation, and evaluation of school-based physical activity programs.[1]

Physical education (PE) curriculum is designed for students to develop the motor skills, knowledge, behaviors, and physical literacy necessary for maintaining a physically active lifestyle.[2,3] Instruction should focus on learning opportunities to enhance students' knowledge about the benefits of exercise (e.g., improved social and emotional well-being), physical fitness, good sporting behavior, self-efficacy, and emotional regulation.[1] Effective interventions typically address multiple health behaviors in addition to physical activity, such as nutrition.[4,5,6] The weekly recommended amount of physical education is 150 minutes for elementary school students and 225 minutes for middle and high school students.[7] Additionally, students should be engaged in moderate-to-vigorous physical activity for at least 50 percent of PE class time.[8] To ensure important topics are addressed, PE programs should use a sequential K-12 curriculum based on the national standards for physical education. PE teachers delivering instruction should be certified or licensed according to state guidelines.[1]

In addition to PE, it is recommended that opportunities for physical activity be integrated throughout the school day, using specific classroom-based movement breaks.[1] The CDC recommends that in-class activity breaks (a) last between five and 15 minutes and (b) are provided several times each day.[2] These activity breaks can include stretching, jumping, dancing, or other short movements that can be completed safely within the classroom.[9] Before and after school times can also provide opportunities for children to be physically active, such as walking or biking to and from school and participating in extracurricular activities.[10] In addition to school personnel, family and community members can help increase opportunities that encourage students to engage in the recommended 60 minutes of physical activity each day.[11]

WHY IS IT RELEVANT TO CHILD OUTCOMES?

Physical Health Outcomes

Physical activity is associated with numerous health benefits for children and adolescents. For example, increased rates of physical activity are associated with healthier blood pressure and body mass index.[12,13,14] Research suggests that even 10 minutes of moderate-to-high impact physical activity can have positive health effects for students.[13] Further, consistent physical activity is associated with a lower likelihood of developing various health problems, including cardiovascular disease, diabetes, obesity, and cancer.[15,16] Physical activity can also help students build strong bones,[14,17] muscles, and increase coordination and overall muscle movement (i.e., motor proficiency).[17,18] This is important as students spend the majority of the day sitting, which may result in musculoskeletal pain due to poor posture and lack of movement – the introduction of physical activity and reminders to maintain healthy posture can combat the risk of injury.[19]

Social, Emotional, and Behavioral Outcomes

Physical activity has also been linked to students' social, emotional, and behavioral health. For example, consistent engagement in physical activity is associated with reduced symptoms of depression, anxiety, and psychological distress among students.[13,20,21] Children and adolescents who regularly engage in physical activity are also less likely to experience internalizing (i.e., anxiety) and externalizing (i.e., conduct and/or behavioral problems) difficulties.[20,22] Additionally, increased rates of physical activity are associated with positive impacts on students' self-esteem, well-being, and resilience.[20,23,24] The introduction of physical activity has been associated with changes in self-perceptions of appearance, physical self-concept, and perceived competence.[24] Research has reported that incorporating yoga-based programs into physical activities can improve mental health, mental ability, and memory.[25] Finally, research demonstrates that students enjoy their classrooms more when teachers incorporate physical activity into normal school day activities.[26,27]

Academic Outcomes

Consistent engagement in physical activity can also strengthen students' cognitive abilities (e.g., thinking, reasoning, and problem-solving), resulting in increased attentiveness and academic achievement.[18,24,28] Physical activity is also associated with an increase in performance on academic assessments particularly when speed and accuracy are measured.[26,28] Additional PE is associated with increased cognitive functioning and academic achievement even when core academic instructional time is decreased.[29] There are also relationships between physical activity and classroom behavior.[20] For example, when classroom instruction incorporates opportunities for physical activity, students are more likely to be engaged and on-task.[26,30,31] Increased participation in physical education and recess is also associated with improved classroom behavior, including increased student attentiveness.[32] By consistently engaging in physical activity, students can be more prepared to learn in the classroom.

PHYSICAL ACTIVITY: EVIDENCE IN ACTION

The strategies provided here summarize a review of available evidence and best practice recommendations in this domain. Strategies are grouped by anticipated resource demand (e.g., funding, time, space, training, materials).*

Level 1: Low resource demand

Avoid physical activity as a disciplinary consequence

- Administering or withholding physical activity (e.g., taking minutes away from recess or movement breaks) as a form of punishment or behavior management can negatively influence students' attitudes towards activity.[33]
- School administrators should ensure that all students have equal access to participation in physical activity. Students who engage in physical activity are more likely to be attentive and on-task in the classroom,[20,31,34] which can reduce the need for disciplinary consequences.

Promote employee involvement in physical activity

- Teacher involvement in student opportunities for physical activity has been associated with increased rates of student physical activity.[35]
- Schools can provide opportunities for personnel to lead recess activities, participate in physical activity breaks, and serve as healthy role models.[35]

Level 2: Moderate resource demand

Encourage family involvement in physical activity

- Physical activity interventions are more likely to be effective when family members are involved.[4,10,36]
- Schools can provide families with information about how to be physically active at home, about physical activity events, and about programming in the community through homework, leaflets, or family events.[37]

Incorporate physical activity into existing curricula

- Students are more likely to engage in physical activity when instruction related to maintaining a physically active lifestyle is integrated into the core academic curriculum (as opposed to only physical and health education).[38,39]
- Instruction related to physical activity (i.e., physiological processes and health benefits) and self-regulatory behaviors (i.e., self-monitoring, goal setting, and action planning) can be integrated into related science, environmental, and biology classes.[38,40] Physical activity can also be incorporated into other related (i.e., acting out the meaning of a word) or unrelated (i.e., jumping to solve a math problem) academic content.[26]
- School-based interventions are more likely to be effective when classroom and PE teachers are provided with informational trainings and classroom materials.[10,38,41,42] School leaders can offer teacher trainings and provide materials (e.g., posters, activity booklets, equipment) to promote physical activity in the classroom. [26,27,38,42]

Level 3: High resource demand

Provide opportunities for and choices of physical activity throughout the day

- Teachers should provide breaks lasting between five and 15 minutes throughout the day that include activities such as stretching, jumping, or dancing that can be done safely in the classroom.[2,9,10] Activities should be adapted to fit student interests, needs, and abilities.[43]
- To the extent possible, schools should increase PE time.[10,18] For example, activities such as yoga can be incorporated as a supplemental activity throughout the day or offered as a choice of activity during a PE class.[23]
- Physical activity should also be incorporated into before and after school programs.[30,44] Schools can use a freely available program, such as BOKS, to increase student activity during out-of-school time programs.

Develop a Comprehensive School Physical Activity Program (CSPAP) plan

- Developed by the CDC and Shape America, the CSPAP helps schools coordinate all components of physical activity before, during, and after school to help students increase their daily physical activity levels and develop the knowledge, skills, and confidence to maintain a physically active lifestyle.[30,44]
- Schools can use the CSPAP to evaluate, develop, or revise physical education programs and curriculum by using the provided examples, activities, action plans, objectives, goals, and important points to consider during program development and improvement.[44]

For more information about the systematic review process we used to identify evidence-based practices, please refer to our overview brief which can be found **here.*

ADDITIONAL RESOURCES

Note: The WellSAT WSCC allows users to evaluate district policy alignment with 'best practices' in policy associated with Physical Activity and other WSCC model domains.

Active Academics

Learning on the Move

This website includes ideas and strategies for helping teachers integrate physical activity into their classrooms.

CDC

Classroom Physical Activity

This webpage provides strategies and information for school staff and caregivers about how to support physical activity at their child's school.

Physical Education Curriculum Analysis Tool (PECAT)

This webpage helps schools evaluate and enhance their physical education programs based on the national physical education standards.

Tips for Teachers: Promoting Healthy Eating & Physical Activity in the Classroom

This document includes ideas and information for teachers to help their students engage in a more physically active lifestyle.

Youth Physical Activity: Guidelines Toolkit

This document provides resources, materials, and information to help educators and other community leaders promote physical activity in children and adolescents.

Eat Smart, Move More

Energizers for School

This website provides short classroom-based activities for elementary and middle school students that can be used to increase physical activity during the school day.

SHAPE America

National Physical Education Standards

These standards provide a comprehensive framework for educators to deliver physical education instruction.

CSPAP

This webpage explains the Comprehensive School Physical Activity Program (CSPAP) framework and provides resources and information to help schools increase physical activity opportunities before, during, and after school.

Strategies for Recess in Schools

This 2017 document provides information and strategies for providing recess in schools to increase participation in physical activity.

SNAP-Ed

Physical Activity

This webpage links to many physical activity resources for all ages that can be used both at school and at home.

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