



# Recommendation and Research on Recess and Physical Activity: Impact on Student Health and Academic, Social and Emotional Development May 5, 2008

# I. Background

Play, both structured and unstructured, has been shown in an extensive body of research to have positive benefits for physical, social, emotional, and cognitive domains of child development (see examples of research that follow). Benefits of physical activity and play have also been demonstrated in the areas of academic achievement, problem-solving skills, social skills, student engagement and physical health.

Senate Bill 530 (80th Session-Texas Legislature) requires the following:

"A school district shall require a student enrolled in kindergarten or a grade level below grade six to participate in moderate or vigorous daily physical activity for at least 30 minutes throughout the school year as part of the district's physical education curriculum or through structured activity during a school campus's daily recess. A school district shall require students enrolled in grade levels six, seven and eight to participate in moderate or vigorous daily physical activity for at least 30 minutes for at least four semesters during those grade levels as part of the district's physical education curriculum."

Senate Bill 530 further requires the following:

"The local school health advisory council shall consider and make policy recommendations to the district concerning the importance of daily recess for elementary school students. The council must consider research regarding unstructured and undirected play, academic and social development, and the health benefits of daily recess in making the recommendations. The council shall ensure that local community values are reflected in any policy recommendation made to the district under this subsection."

### II. Purpose

The purpose of this document is to assist local school health advisory councils (SHACs) across the state to meet the requirements of SB 530, by providing research resources for local review. As the law emphasizes, local SHACs must take the responsibility to review the research and to include local community values as they make recommendations to their school districts about daily recess for elementary students.

## **III.** Recommendation

Given the increasing incidence of obesity, diabetes, and other health concerns (including mental health issues) among children and youth, and considering a review of the existing research concerning the benefits of physical activity for all domains of child development, TSHAC acknowledges the following:

• Research supports the positive benefits of physical activity and play on the cognitive, physical, social, and emotional health and development of children and youth;

- Due to societal factors such as lifestyle issues, well-intentioned over-scheduling of enrichment activities, more single-parent families, increased pressure within schools to focus on academic issues, more options for passive entertainment available to children and youth, and in many communities, the lack of safe play areas outside the home, the opportunities for children and youth to engage in physical activity and play has gradually been reduced;
- The increases in the societal and academic factors listed above have resulted in increased stress for our young people;
- There is a need to inform communities, parents, educators and young people about the benefits of engaging in regular physical activity and the dangers of not doing so;
- Providing recess and physical education classes has been shown to have a positive impact on students' academic performance, including test scores;
- Parents have a significant role to play in striking balances for their children between structured activities and free play, between passive and active entertainment, and between physical and sedentary activities;
- Schools have significant roles to play in providing opportunities for students to engage in physical activity on a regular basis, to teach young people about lifelong physical activity habits for all people regardless of competitive skill levels, and to educate parents and employees in these same areas; and
- Communities have a significant role to play in providing the infrastructure of playgrounds, parks and athletic facilities; security measures and supervision; and financial support to allow all citizens to develop physically healthy habits.

TSHAC recommends every local SHAC review the research cited here as well as other sources to promote change or to affirm existing policies in school districts and in communities across Texas.

### IV. Research

(1). Ginsberg, K.R. and the Committee on Communications and the Committee on Psychosocial Aspects of Child and Family Health of the American Academy of Pediatrics. **The importance of play in promoting healthy child development and maintaining strong parent-child bonds.** *Pediatrics.* 2007; 119(1), 182-191.

Available at http://aappolicy.aappublications.org/cgi/content/full/pediatrics;119/1/182?eaf

Play is essential to development because it contributes to the cognitive, physical, social and emotional well-being of children and youth. A comprehensive review of the research on the benefits of play and the repercussions of reduced play are included. Play also offers an ideal opportunity for parents to engage fully with their children. Despite the benefits derived from play for both children and parents, time for free play has been markedly reduced for some children. This report addresses a variety of factors that have reduced play, including a hurried lifestyle, changes in family structure, and increased attention to academics and enrichment activities at the expense of recess or free child-centered play. The dangers of over-scheduling for children and adolescents are discussed. Guidelines are offered for pediatricians to advocate for children by helping families, school systems, and communities consider how best to ensure that play is protected to create the optimal developmental milieu.

(2). Robert Wood Johnson Foundation. **Recess Rules: Why the undervalued playtime may be America's best investment for healthy kids and healthy schools.** Report produced by the Robert Wood Johnson Foundation, Princeton, NJ. 2007. Available at <a href="https://www.rwjf.org/files/research/sports4kidsrecessreport.pdf">www.rwjf.org/files/research/sports4kidsrecessreport.pdf</a>

After reviewing research that supports the benefits of recess for the physical, emotional and social development of children and documenting that students from minority and low income families are being the most shortchanged when it comes to access to recess, the monograph makes a case for "structured play" at recess. Structured play means games and physical activities that are taught and led by trained adults. Structured play provides instruction in healthy play, following rules, and resolving conflicts for students in communities where those may not be common knowledge. Structured play also ensures that all children participate and are engaged, rather than having some become marginalized or excluded. Positive effects were found for students' feelings of safety, engagement and classroom productivity. The researchers argue for more funding for recess and structured play programs, especially for low income communities.

(3). National Association of Early Childhood Specialists in State Departments of Education Recess and the importance of play: A position statement on young children and recess. 2002. Available at <a href="http://naecs.crc.uiuc.edu/position/recessplay.pdf">http://naecs.crc.uiuc.edu/position/recessplay.pdf</a>

This position statement asserts that recess is an essential component of education and preschool and elementary students must have the opportunity to participate in regular periods of active, free play with peers. Research is reviewed that supports positive connections between physical activity and academic improvement, stress reduction, attention to academic tasks, classroom behavior, physical, social, emotional, and cognitive development. The statement makes recommendations to support policies that require recess to be part of the preschool and elementary curriculum, support further research on the effects of recess on the developmental domains (physical, social, emotional and cognitive), develop policies and resources to support an awareness of the importance of recess and active free play, support research on the benefits of recess for children with attention disorders, and support research and professional development for educators in the observation and assessment of developmental growth through the play process.

(4). National Association for Sport and Physical Education. **Recess in Elementary Schools:** A position paper from the National Association for Sport and Physical Education. *Council on Physical Education for Children*. 2001. Available at www.aahperd.org/naspe/pdf\_files/pos\_papers/current\_res.pd

This position paper asserts that the benefits of recess in elementary schools include improvements in physical, social, emotional, stress management, problem-solving, and cognitive skills. Recommendations are made for how recess should be implemented, how it should not replace physical education, and that recess should not be used as a consequence for behavior.

(5). Montana Team Nutrition Program, Office of Public Instruction School Nutrition Programs. **Recess Before Lunch: A Guide For Success**, 2003. Available at www.opi.mt.gov/schoolfood/recessBL.html

The Web site includes an implementation guide, PowerPoint presentation, transparencies, brochures and handout from the Montana Team Nutrition Program and School Nutrition Program staff. The *Recess Before Lunch* program helps:

- Improve student behavior on the playground, in the cafeteria and classroom.
- Students waste less food and drink more milk, leading to increased nutrient intake.
- Improve the cafeteria atmosphere.
- Children be more settled and ready to learn upon returning to the classroom.
- (6). Viadero, D. Exercise seen as priming pump for students' academic strides. *Education Week.* 2008; 27 (23): 14-15.

This news article reports on action research in schools that links exercise during PE classes with academic gains on standardized tests. When students with low test scores participated in early morning PE sessions, followed closely in time by learning support classes, their subsequent test scores increased significantly more than similar students who had the learning support classes only. In another reported study children were assigned to 40-minute after school daily workouts, 20-minute after school workouts, or no workouts. After 14 weeks, those in the 40-minute sessions made twice the gains that those in the 20-minute sessions made. In a third study reviewed in the article, children who got good marks on an aerobic fitness measure and a measure of body mass index had higher scores on state exams in reading and math. Connections are made between physical activity and recent research on brain development, especially the link between exercise and the brains production of brain-derived neurotrophic factor (BDNF). BDNF encourages development and connections between brain cells considered critical for learning.

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