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PHYSICAL ACTIVITY

Program Proves More Recess Improves Academic Performance and Behavior

Issue: According to a long-accepted U.S. educational paradigm, schools have been cutting down on breaks to squeeze in more instructional time in the classroom, believing it improves academic performance. But instead of yielding the desired result, students are fidgeting, failing to stay on task, or zoning out completely. Testing reveals progressively lower scores in reading, math, and science for the past 20 years, and the U.S. remains in the middle of the pack on national and global assessments.

Program Team

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SHAPE America - Society of Health and Physical Educators is the nation's largest membership organization of health and physical education professionals. The organization sets the standard for health and physical education in the U.S., and its National Standards for K-12 Physical Education serve as the foundation for well-designed physical education programs across the country. SHAPE America was also a proud member of the coalition that developed the National Health Education Standards, and is a founding partner of the Presidential Youth Fitness Program, Let's Move! Active Schools and the Jump Rope For Heart/ Hoops For Heart programs.



Big Idea: For SHAPE America member Debbie Rhea, Ed.D., a physical educator and associate dean of the Harris College of Nursing and Health Sciences at Texas Christian University (TCU), the "lightbulb moment" came while reading a 2011 article in Smithsonian magazine about Finland's school system, which approached education quite differently. Finnish educators had found that adding more recess time had completely transformed students' academic performance, with scores consistently at or near the top in international education rankings. Rhea decided to take a sabbatical in Finland and observe the process firsthand. During six intensive weeks arranged by the University of Helsinki, she talked to dozens of educators, watched students, and observed many noteworthy differences. Strong research in Finland shows that children who engage in more physical activity and play do better academically than children who are sedentary. From

kindergarten through eighth grade, students in Finland spend 15 minutes of every hour in recess, enjoying unstructured outdoor play. During that time, they love to make up games, expanding their imaginations and creativity.

Takeaway: "Kids are built to move, and having more time for unstructured, outdoor play is essentially like a reset button," says Rhea. "It not only helps to break up the day, but it allows kids to blow off steam and apply what is taught in the classroom to a play environment where the mind-body connection can flourish." She explains: "When humans sit for longer than about 20 minutes, the physiology of the brain and body changes, robbing the brain of needed oxygen and glucose, or brain fuel. The brain essentially just falls asleep when we sit for too long. Movement and activity stimulate the neurons that fire in the brain. When we sit, those neurons aren't firing."



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The physically literate individual:

- Demonstrates competency in a variety of motor skills and movement patterns.
- Applies knowledge of concepts, principles, strategies and tactics related to movement and performance.
- Demonstrates the knowledge and skills to achieve and maintain a healthenhancing level of physical activity and fitness.
- Exhibits responsible personal and social behavior that respects self and others.
- Recognizes the value of physical activity for health, enjoyment, challenge, self-expression and/or social interaction.

Implementation:

Ignited by a passionate desire to test her theory in U.S. schools, Rhea returned to Texas to launch a pilot program in 2013 with kindergarteners and first-graders on two private school campuses. The program continued as cohort (school cluster) 1 was launched in 2015-2016 with K-1 classes in

four public schools. Through Rhea's LiiNK Project (Let's Inspire Innovation 'N Kids), students received four 15-minute recess breaks each day (two before lunch and two after) and took part in "Positive Action," a character-building curriculum taught three times a week. The 20-minute lessons, designed to curb bullying and help improve self-esteem, were woven into the existing curriculum. As part of this longitudinal cohort study, the LiiNK students will be observed over many years, and other grade levels are being added.

Results: Two years of data collection revealed that the LiiNK students were more disciplined and focused in the classroom (improving 30 percent on attentional focus), and demonstrated social growth and development through



a change in peer interactions. Off-task behaviors like fidgeting decreased by 25 percent (compared to the controlschool students, who maintained higher percentages of off-task behaviors). The pilot schools reduced "transition time" (putting things away and lining up to leave the classroom) from three to four minutes each way to less than one minute, and the time spent redirecting off-task behaviors. Academic performance on reading and math significantly improved. The characterbuilding curriculum reduced discipline issues and bullying, increased respect for self and others, improved honesty and self-concept, and heightened students' sense of school-connectedness.

The four 15-minute recesses also corresponded with positive changes in

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kids' after-school activities. "Instead of coming home exhausted and watching TV or playing video games, parents reported that their kids were out riding bikes and playing with other kids," said Rhea. "They were motivated to complete their homework in 30 minutes."

LiiNK has expanded to six Texas public and private schools, with 10 scheduled to participate in fall 2016, and Rhea is working with administrators to implement the program in Kansas and Ohio.

Fast Facts:

- Schools: Six in 2015-2016 (pilot plus cohort 1); 10 new schools starting in fall 2016 (cohort 2); and expanding nationally in 2017 (cohort 3)
- Students Reached: 1,310 through 2016; 3,500 through 2017; and 22,000+ through 2018

Challenges Still Faced:

- Overcoming the predominant belief that more classroom time yields improved academic performance
- Obtaining funding for teachertraining and evaluation of the project longitudinally through the grade levels
- Ensuring that sufficient characterbuilding classes each week remain an integral part of the program

Additional Resources

Links to more information about this program can be found at shapeamerica.org/casestudies.



50 Million Strong by 2029 is SHAPE America's commitment to empower all children to lead healthy and active lives through effective health and physical education programs.