

# BOSTON, MA: Movement Breaks in the Classroom



This brief summarizes a CHOICES Learning Collaborative Partnership model examining a strategy to integrate movement breaks into school classrooms in Boston, MA. This strategy incorporates five-to-10-minute classroom physical activity breaks during class time in kindergarten to fifth grade classrooms.

## The Issue

One in three first-graders in Boston has overweight or obesity.<sup>1</sup> Being physically active can support children in growing up at a healthy weight, though not all schools provide students with the recommended 150 minutes of physical activity per week or 30 minutes per day.<sup>2,3</sup> Regular physical activity can boost brain health, including improved cognition and reduced symptoms of depression.<sup>4</sup> Students who are physically active also tend to have better grades, attendance at school, and stronger muscles and bones.<sup>4</sup>

Experts suggest that schools provide opportunities for classroom physical activity,<sup>5</sup> but few schools offer it.<sup>6</sup> Movement breaks supplement other critical school physical activity opportunities, like recess and physical education, and help children meet recommendations for physical activity.<sup>5</sup> Providing all students with opportunities to be physically active will ensure more students are growing up at a healthy weight and ready to learn.

## About the Movement Breaks in the Classroom Strategy

We can provide healthier opportunities for all children by initiating strategies with strong evidence for effectiveness. To implement the Movement Breaks strategy, teachers, Wellness Champions, and staff would receive training, equipment, and materials to incorporate short activity breaks in the classroom to help children move more.<sup>7,8</sup> Initiating strategies with strong evidence for effectiveness like Movement Breaks in the Classroom helps fulfill Boston Public School's (BPS) Physical Education and Physical Activity Policy requirements for schools to offer physical activity opportunities during the school day.<sup>3</sup> This strategy also aligns with BPS' Whole School, Whole Community, Whole Child approach, which supports students' holistic health by promoting positive classroom environments that foster physical activity and learning.

## Comparing Costs and Outcomes

A CHOICES cost-effectiveness analysis compared the costs and outcomes over a 10-year time horizon (2020-2030) of implementing movement breaks with the costs and outcomes associated with not implementing them. We assumed that elementary schools in Boston Public Schools serving grades K-5 would receive training, equipment, and materials to implement movement breaks. The model assumes that 56% of those trained would implement the movement breaks in classrooms.

**Implementing movement breaks in the classroom is an investment in the future. By the end of 2030:**



**29,400 STUDENTS REACHED**

over 10 years

**\$1.74**

**COST PER CHILD**



**25 ADDITIONAL MINUTES OF MODERATE-TO-VIGOROUS PHYSICAL ACTIVITY**

per student per school week

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## Conclusions and Implications

If movement breaks were incorporated into classrooms, we project that over 10 years, 29,400 students would benefit. The students would increase their moderate-to-vigorous-physical activity levels by 25 minutes per school week, helping them meet wellness goals of 150 minutes of physical activity per week.<sup>3</sup> This strategy would also prevent 37 cases of childhood obesity (in 2030) and save \$35,300 in health care costs related to excess weight over 10 years. The average annual cost to implement this program in every public elementary school (Grades K-5) in Boston would be \$1.74 per student, or just over \$1,000 per school per year.

In addition to promoting a healthy weight, classroom physical activity benefits students in other important ways. By training and equipping over 600 teachers and other school staff yearly to incorporate movement breaks in the classroom, this strategy could help all Boston Public Schools cultivate a positive school climate and improve social emotional learning.<sup>9</sup> Participation in movement breaks are associated with students spending more time on task,<sup>5</sup> and teachers report that students are more engaged, supportive of each other, and responsive to teacher instructions after participating in a movement break.<sup>10</sup>

Childhood is a crucial period for developing healthy habits. Many preventive strategies can play a critical role in helping children establish healthy behaviors early on in life. Providing movement breaks in the classroom is an easy and relatively low-cost way to increase physical activity and support the overall health and wellness of all Boston students.

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