

# Classroom-based Physical Activity Interventions



Widely implemented classroom-based physical activity interventions are built around teacher-implemented academic lessons that are designed to incorporate 10–15 minutes of continuous physical activity as a compliment to daily lessons. Several programs have been developed that combine moderate-to-vigorous physical activity with the teaching and review of academic content across the United States and globally.

## MAKE THE CASE: Why Is This A Health Equity Issue?

The issues below highlight the need for implementation strategies that advance health equity:

- **Despite policy changes and increased funding to improve child health in schools, low-resource schools provide fewer supports for physical activity.** In response to the current inactivity and obesity epidemic, the United States Congress passed legislative policies mandating the establishment of local school wellness policies. More recently, the reauthorization of Every Student Succeeds Act provides increased funding for health education and PE programs. Despite these efforts, low-resource schools are less likely to offer structured recess, have a certified PE teacher, or provide after-school sports programming compared to high-resource schools. As such, targeting classrooms, where children spend the majority of their school day in seated instruction, is a promising minimal cost approach to increase youth physical activity.
- **Classroom interventions work to increase activity but few programs have been tailored for low-resource schools.** Classroom-based interventions have demonstrated tremendous success in improving in-class activity in elementary school children and help schools achieve their local wellness policies. Yet, in-class interventions are rarely delivered with fidelity in low-resource schools. For example, Texas I-CAN, a classroom-based intervention that was implemented in three low-resource elementary schools reported less than 25% of teachers met the goal of implementing activity lessons on a daily basis. In addition, teachers noted many barriers to implementation despite their enthusiasm for the program. Proactively developing disparities-reducing implementation strategies are critical for the feasibility, acceptability, fidelity, and sustainment of classroom activity breaks in these environments.
- **Low-resource schools face notable challenges to implementing activity breaks as they often have limited capacity for program delivery, which undermines program implementation and effectiveness.** These challenges include time constraints of teachers, space constraints of classrooms, and student participation in activity breaks. In-class programs in low-resource schools must be complemented by effective implementation strategies in order to achieve clinically significant increases in health-enhancing physical activity.

Adapted from Centers for Disease Control and Prevention - Division of Community Health. *A Practitioner's Guide for Advancing Health Equity: Community Strategies for Preventing Chronic Disease* Atlanta, GA: US Department of Health and Human Services; 2013.

## Design and Implement with Health Equity in Mind

To maximize health impact and advance health equity, consider these factors and others when designing, and implementing classroom-based physical activity intervention to promote health-enhancing physical activity in schools:

KEY FACTORS	BARRIERS OR UNINTENDED CONSEQUENCES	OPPORTUNITIES TO MAXIMIZE IMPACT
<p><b>Program Packaging</b></p> <p>Work with stakeholders which includes principals, teachers, and students to identify key areas for tailoring (e.g., improving usability of program packaging) and integrate proposed changes into the program packaging.</p>	<p>Insufficient tailoring of program packaging to account for relevant school contexts, capacity, and dynamics will result in a lower likelihood of the program benefitting low-resource schools. By engaging stakeholders prior to implementation, disparities-reducing strategies can be developed to maximize fidelity.</p>	<ul style="list-style-type: none"> <li>• Work with school principals to build capacity for classroom activity breaks and maintain a culture of health in the school</li> <li>• Work with teachers to identify and/or develop activity breaks that do not require a lot of out-of-school prep time</li> <li>• Add game design elements to activity breaks to motivate behavior change and enhance student buy-in for classroom activity</li> </ul>
<p><b>Teacher Training</b></p> <p>Provide professional development to teachers to help them effectively implement activity breaks in their classrooms while simultaneously empowering them to potential overcome barriers to implementation. Professional development can be delivered in-person or using videos.</p>	<p>The <b>Top 5</b> barriers to implementations as reported by teachers include:</p> <ol style="list-style-type: none"> <li>1. Lack of time</li> <li>2. Disruptive student behaviors (perceived)</li> <li>3. School activities (e.g. assemblies, field trips)</li> <li>4. Curriculum requirements (e.g. stress of student test results)</li> <li>5. Rotating classrooms (e.g. 5<sup>th</sup> grade moving classrooms for different subjects)</li> </ol>	<ul style="list-style-type: none"> <li>• Train teachers on how to effectively integrate activity breaks into their class curriculum and daily schedules</li> <li>• Develop classroom management procedures to help teachers efficiently implement activity breaks, and reduce disruptive behavior</li> <li>• Train teachers on how they can modify their classrooms to increase space for children to safely exercise</li> </ul>
<p><b>Technical Assistance</b></p> <p>Provide ongoing technical assistance to help teachers troubleshoot any problems that may arise and maintain a culture of support throughout the intervention.</p>	<p>Daily stressors experienced by teachers can create a value-action gap where teachers' intentions (wanting to implement activity breaks) may not always align with their behavior (actually implementing activity breaks). Technical assistance can help to bridge this gap.</p>	<ul style="list-style-type: none"> <li>• Develop weekly newsletters that provide additional implementation strategies and links to activity break videos</li> <li>• Hold monthly meetings with teachers to help adapt the intervention to their particular teacher style</li> </ul>

## Build the Team: Partnership for Success

Successful efforts to implement classroom-based physical activity interventions to increase physical activity opportunities for children in low-resource school environments depend on bringing a diverse set of partners to the table early, consistently, and authentically. These partners may include the following:

Superintendents  
Principals  
Classroom teachers

Physical education teachers  
Parents  
Students

School nurses  
School staff  
Community partners