Classroom Physical Activity: An Implementation Guide for Elementary Schools

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Introduction

Providing Classroom Physical Activity (CPA) means adding opportunities for students to be physically active (i.e., not sitting) while in the classroom setting. Activities can either be integrated with academic lessons or provide a “break” from the typical lesson. Many academic studies provide evidence demonstrating the beneficial effects of CPA for children.

The purpose of this implementation guide is to briefly summarize the evidence for using CPA, including evidence gathered from a research partnership between Boise State University’s College of Education and elementary schools in Idaho called Physically Active Classrooms Energize! This guide can be used by school/district personnel, administrators, teachers, community leaders, and parents in supporting CPA.

The schools that participated will not be named to maintain anonymity. This project was funded by Institute of Education Sciences, U.S. Department of Education, through Grant R305A150277 to Boise State University. The opinions expressed are those of the authors and do not represent views of the Institute or the U.S. Department of Education.

This guide can be used to…

- Share evidence of CPA benefits to people within your school community
  - Much of the evidence presented comes from Idaho teachers and students
- Identify strategies to increase CPA use in your school
  - Strategies are tailored based on roles within the school and your school’s readiness to implement CPA
- Find resources for teachers that are interested in using CPA

We would like to gratefully acknowledge the schools that participated in this research partnership. Thank you for everything that you do, and your commitment to the wellness of children in Idaho!
Why Adopt Classroom Physical Activity as a School-Wide Practice?

The benefits of physical activity for all people, but particularly children and youth under the age of 18, have become increasingly clear over the last several decades. While physical activity can improve physical health, it can also impact a number of other components of healthy development, such as mental and emotional health. For students, this can translate into better academic performance in the short and long term. Maintaining a school environment which supports both the physical and emotional health of children is integral for supporting and educating the whole child.

Classroom Behavior. A student’s ability to pay attention and complete in-class work with minimal distraction, sometimes referred to as a student’s time on task, is an important predictor of academic success. Studies have shown that students engaged in classroom physical activity during the school day have improved on-task behavior compared to traditional seated instruction. This increased attention span can have a positive influence on classroom management and student learning.

Academic Achievement. The regular use of classroom physical activity can support positive gains in academic achievement over time. Classrooms that integrate physical activity have shown improvements in achievement both in short and long term; studies with shorter duration interventions improved progress monitoring assessment scores, while interventions longer than 1 year revealed greater standardized test scores. Therefore, physically active classrooms can provide a boost to achievement that is both immediate and long-lasting.
Meeting Physical Activity Guidelines. Providing classroom physical activity increases the overall amount of physical activity that students get during the day. Studies have shown that students in physically active classrooms consistently increased their total time spent engaged in light and moderate physical activity,\textsuperscript{5–7} contributing to the ultimate goal for all children to accrue the recommended 30 minutes of daily physical activity during school\textsuperscript{8} and 60 minutes of total daily physical activity.

Skill Development and Health. Physical activity fosters crucial life skills such as self-regulation, cooperation, and motor development. Physical activity also improves cardiovascular and muscular fitness, supports healthy weight maintenance, and reduces symptoms of depression.\textsuperscript{1} Active children are also more likely to grow into successful adults.

Lessons from Idaho Schools\textsuperscript{9}

<table>
<thead>
<tr>
<th>When teachers used classroom physical activity:</th>
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<tr>
<td>• Students reported high enjoyment of the activities</td>
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<tr>
<td>• Students took 200 more steps per school day</td>
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<tr>
<td>• Girls and boys participated equally in classroom physical activity, which is positive since boys tend to be more active than girls during PE and recess</td>
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The effects of CPA on student behavior were clear from teacher testimonies. The most frequent positive remark from teachers was that the students loved the opportunities to be active in the classroom. They also stated that the students’ ability to focus was improved after CPA. One teacher summed up this sentiment: “My classroom management is easier when I use classroom physical activity, because they’re not so wiggly, they’re not so wild afterward.”
The Important Role of School Administrators

Both teachers and parents view the school principal as holding the key to shaping the school’s priorities, including those around health. The implementation of school health programs and initiatives like CPA depends on the school staff and to some extent on the support of the school board and community, but the school principal is the gatekeeper.

Big Picture: Supporting Academics though Educating the Whole Child. Learning is not only academic, but also social, emotional and physical. Schools are educating the whole child if they are providing support for students across all of these domains of wellness. Fostering practices that support the whole child will encourage students to be more engaged with the school and with their own learning. Part of creating a culture of health in a school is making healthy, positive behaviors the norm. Actions that the principal takes can show direct or indirect support of a culture which enables and encourages healthy behaviors like physical activity. Even something as simple as leading a school-wide stretch during morning announcements or walking the track at lunch show staff and students that the principal supports being active.

To address the multi-dimensional needs of children in the U.S., the ASCD and Centers for Disease Control and Prevention released the Whole School, Whole Community, Whole Child Model (above)

https://www.cdc.gov/healthyschools/wsc/index.htm
How Administrators Can Promote Classroom Physical Activity. Classroom physical activity is an important part of comprehensive school-wide physical activity programming. Though the implementation of classroom physical activity will depend on the individual teachers' preferences, principals can also influence how comfortable teachers feel using it. Here are some actions that principals can take to increase classroom PA (see pages 10-13 for more strategies):

- Show teachers that CPA is a highly valued part of the culture at the school
- Schedule trainings that increase staff awareness and efficacy in using CPA
  - These should focus on how and why concepts, and allow teachers time to practice, share, and collaborate with their peers
- Send out reminders via email to teachers to use CPA
- Verbally acknowledge when teachers do a good job using CPA, either informally or formally (such as during evaluations)
- Share resources with teachers that make CPA easy to use and integrate with classroom lessons, such as Go Noodle® (see Resources section on page 14)

How Administrators Can Promote Other Physical Activity Practices. Administrators hold the key to policy and program implementation within their school. Other best-practice strategies to increase school-day physical activity include:

- Ensure that all students spend at least 60 minutes per week in physical education
• Offer all students 20 minutes of recess daily (not withholding recess as punishment)
• Host physically active fundraisers like walk-a thons
• Provide before and after-school activities that include physical activity

Lessons from Idaho Schools

Surveys from over 170 elementary school classroom teachers in Idaho showed that teachers wanted to choose how and if they incorporate physical activity in their classroom. They also wanted to feel supported by their administrator. One teacher said about their principal:

“During my observation this year my class was flat, and so I did a brain break during the observation, and she put in the notes, ‘nice read of your class, good job using a brain break here.’ ...she showed a very positive reaction to seeing that happen in the class.”

Teachers who felt their principal supported the use of CPA felt more freedom to provide CPA, perceived fewer barriers to implementing CPA, and had stronger intentions to use CPA.

Teachers said that administrators can show support for CPA by:

• Clearly communicating that physical activity is valued in the school
• Rewarding teacher and student participation in CPA
• Sending out reminders to teachers to use CPA, such as in announcements or emails
The Role of Wellness Leaders within the School or Community

Creating and sustaining a healthy culture in the school is not the responsibility of any single person, but an enthusiastic member of the school community can take small actions that support health. This might be a school staff member, such as a physical education teacher or a classroom teacher. Parents and community members can also be involved by expressing their support at school functions and volunteering their time. Partnerships between schools and outside organizations (such as Boys & Girls Clubs, sports clubs, or faith-based organizations) are a great way to expand healthy programming or get the word out about the school’s priorities surrounding health.

Promoting Classroom Physical Activity. The following are actions that individuals in the school or local community can take to promote classroom physical activity within their school (see pages 10-13 for more strategies):

- Promote available CPA resources to teachers in the school (suggested activity resources are provided on page 14)
- Suggest an all-school training on using CPA
  - The school champion can conduct this training, or an external trainer can be brought in (e.g., from the health department)
- Share the benefits of CPA for improving student behavior in the classroom, learning, and academic performance
• Create communication networks among teachers for sharing experiences with CPA (e.g., favorite activities, success stories, challenges encountered)

• Incentivize teachers for providing CPA, such as rewarding classrooms that accomplish a specific CPA benchmark with a party

• Help form or join a school wellness committee that promotes CPA and other school health practices

Lessons from Idaho Schools

Examples of CPA Champions:

• A PE teacher that volunteered to demonstrate a Go Noodle® lesson at a staff-wide training

• A teacher that shared with her grade-level peers what activities worked well in her class

• A principal that gave positive praise to a teacher using CPA

PE Teachers as CPA Champions. Interviews with 27 physical education (PE) teachers from 33 different schools across southwestern Idaho explored their opinions on their role in school-wide physical activity promotion, including CPA.

PE Teachers saw the value in using comprehensive strategies to promote PA throughout the school day, but many thought they did not have the buy-in from school staff or the resources to implement PA initiatives outside of their own PE classes. In schools where PA was seen as part of the culture of the school, PE teachers had more school-wide initiatives related to physical activity. One PE teacher described the feeling of working toward a common goal: “It’s like the old ‘It takes a village to raise a child.’ But it’s really true, and however you can help out with that, you just pitch in and do it …We’re a school, we’re a family.”
Assessing Your School’s Readiness for Implementing Classroom Physical Activity

To identify what classroom physical activity strategies might work best for your school, it is helpful to know what stage of implementation your school is in. You can use the following guide to assess what types of CPA strategies and resources would be most helpful for your school. The stages are explained below.

Stage 1: Pre-Adoption – Teachers at your school have not begun practicing in CPA widely or at all (jump to next page)

Stage 2: Adoption and Early Implementation – Your school has just identified a goal of using more CPA or has just started to adopt CPA as a desired practice (jump to page 11)

Stage 3: Maintenance – Your school has been using CPA widely for at least a year (jump to page 13)

The following categories might help you further define what stage your school is in regarding CPA implementation. Once you have identified a stage, jump to the page listed for stage-specific strategies for supporting CPA.

<table>
<thead>
<tr>
<th>Stage 1: Pre-Adoption</th>
<th>Stage 2: Adoption and Early Implementation</th>
<th>Stage 3: Maintenance</th>
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</thead>
<tbody>
<tr>
<td>CPA is not currently being regularly implemented at the school</td>
<td>CPA has been adopted as a new practice at the school and implementation is being planned or recently started</td>
<td>CPA implementation is widespread and consistent, but has not been used very long</td>
</tr>
<tr>
<td>No/few teachers regularly use CPA</td>
<td>Some but not all teachers are implementing CPA</td>
<td>Assessment and/or monitoring of CPA is taking place</td>
</tr>
<tr>
<td>CPA has not yet been established as a priority by school leadership</td>
<td>CPA use may be more sporadic than consistent</td>
<td>School has a policy regarding CPA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>School/district has a wellness committee or team</td>
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Strategies for Schools in Stage 1: Pre-Adoption

For schools in the Pre-Adoption Stage, the focus should be on exploring the benefits of CPA and how they fit with the values of teachers and leaders at the school. The key people to involve at this stage include the school principal, other administrators (e.g., vice principal), and a CPA champion(s). The overall goal of these strategies is to support school-level adoption of CPA where appropriate.

Strategies for teachers, district staff, and community and state-level partners:

- Engage with leaders at the school, including the principal, to provide education on the benefits of CPA
- Access funding to support CPA, such as through small grants from community foundations (may not be essential, but can be useful)
- Engage parents to become advocates for CPA using similar engagement strategies as used with school leaders
- Identify a champion at the school who is passionate about CPA. This champion can help get the principal and teachers excited about CPA and support the Pre-Adoption exploration process
- Focus on the benefits of CPA that are most direct to the school, its potential for improving student behavior and academic performance
- Use exemplary schools in the local community that have fully integrated CPA as a model for Pre-Adoption schools to follow
  - Set up meetings or visits among school leaders and present data or stories that demonstrate benefits experienced locally

Strategies for school principals:

- Engage with community partners who have expertise in CPA, such as from academic institutions, health departments, and community organizations
Community partners can provide education on benefits of CPA and help the school explore whether CPA fits overall values and objectives

- Identify one or more champions to help with the process of exploring CPA
  - A champion is someone who will be a strong advocate for creating a culture of CPA at the school and could be a PE teacher, classroom teacher, or other staff member
- Learn from schools already implementing CPA
  - Hearing firsthand experiences from other principals and teachers can help with planning how CPA can be integrated throughout the school
- Attend a CPA demonstration
  - Visit another school or solicit a teacher or other champion within the school to hold a demonstration, join students in the activities to share their enjoyment

**Strategies for Schools in Stage 2: Adoption and Early Implementation**

Schools in the Adoption and Early Implementation Stage would like to or have started to use classroom physical activity within the school, so the focus should now be on supporting successful implementation. School leaders including the principal and CPA champion are important to involve at this stage, as are all classroom teachers. The overall goal of these strategies is to support regular delivery of CPA by most teachers in the school, leading to a widespread program that will reach large numbers of students and create noticeable impacts.
Strategies for teachers, CPA champions, principals, district staff, and community and state-level partners:

- Select and share activities to guide CPA
  - Many resources are available to help teachers use CPA, such as instructions on how to lead an activity or videos that can lead the activity for the teacher (see page 14)
- Deliver or request an all-school training for teachers on using CPA to share the available resources and troubleshoot classroom management issues, teachers generally report that CPA is fun for students and simple to use
- Promote the benefits of CPA for improving student behavior in the classroom, learning, and academic performance
- Set implementation goals (e.g., 50 minutes of CPA per week) and monitor progress towards meeting goals
  - When goals are not met, engage in problem solving to identify and overcome barriers
- Encourage administrators or teachers to integrate CPA reminders into daily routines, such as by mentioning CPA in the morning announcements and including scheduled time for CPA
  - Schedules can be school-wide or tailored for individual classes
- Facilitate sharing of best practices between teachers
  - Sharing can support teachers to learn from and motivate each other to help make CPA a part of the school culture
- Provide incentives for teachers (e.g. a class visit from the principal to lead an activity) and verbal positive acknowledgement for using CPA

Additional strategies for school principals:

- Make it clear to teachers that CPA is a priority at the school
  - Communicate the importance of CPA during all-staff meetings, acknowledge/recognize teachers who are using CPA, and formalize recommendations for CPA use in school policy
Strategies for Schools in Stage 3: Maintenance

For schools in the Maintenance Stage, many teachers are delivering CPA, potentially some delivering CPA more often than others, and the focus should now be on supporting widespread, frequent, and long-term delivery of CPA. The stakeholders are the same as for the previous Stage and some schools may move from Stage 2 to Stage 3 more quickly than others. This transition requires patience and can benefit from use of the strategies listed below.

Strategies for teachers, CPA champions, principals, district staff, and community and state-level partners:

- Create a process in which the CPA champion or another oversight member conducts periodic check-ins with teachers to better understand their use of CPA and assist with barriers they may face
  - Teachers can share lessons learned that could support others, and offer problem-solving support
- Repeat all-school trainings once per year to “re-energize” teachers and show that CPA is still important
  - Each subsequent training can incorporate examples from teachers at the school
- Continue to value CPA as part of the school culture by mentioning it in announcements, newsletters, events, and other ongoing activities, and incentivizing CPA use
- Collect data/information on the impacts of CPA use over time to inform adaptations and communicate these impacts
  - Document CPA-related changes in classroom behavior, learning and academic performance, attendance, and students’ health and fitness
Additional Resources

**Springboard to Active Schools** hosts several resources, including implementation tips, infographic materials, and a large repository of hands-on activity resources and webinars for school community members.

- [https://schoolspringboard.org/classroomphysicalactivity/](https://schoolspringboard.org/classroomphysicalactivity/)

The **Centers for Disease Control and Prevention** provides several resources on the research behind classroom physical activity, as well as links to popular activity resources.

- [https://www.cdc.gov/healthyschools/physicalactivity/classroom-pa.htm](https://www.cdc.gov/healthyschools/physicalactivity/classroom-pa.htm)

**Go Noodle®** is perhaps the most widely popular resource for classroom physical activity, as it houses hundreds of educational movement-based videos which can be accessed for free.

- [https://www.gonoodle.com/](https://www.gonoodle.com/)

References


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https://doi.org/10.1016/j.jsams.2019.10.008


Our Contact Information

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College of Education
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