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Comprehensive School Physical Activity Programs: Roots and Potential Growth

ELOISE ELLIOTT, THOMAS MCKENZIE , AMELIA MAYS WOODS, AARON E. BEIGHLE, BRENT HEIDORN AND KENT A. LORENZ 

Calls to increase the amount of daily physical activity among school-aged children across the United States from national education, health and professional organizations have been made across numerous decades (e.g., American Academy of Pediatrics, 2006; Centers for Disease Control and Prevention [CDC], 1997, 2001; National Association of State Boards of Education, 2000; National Physical Activity Plan, 2016; “Supporting the National Physical Activity Plan,” 2012). They were initiated at a time when the trajectory of physical activity among youth and others was decreasing and sedentary behaviors were on the rise (Bassett et al., 2015). The calls included an appeal for schools to take a more active role in the promotion and programming of physical activity opportunities for all students.

In 2008, the National Association for Sport and Physical Education (NASPE) released a position statement outlining a framework that provided structural guidelines to help school stakeholders increase school-based physical activity. The purpose of the current article is to introduce background factors that preceded the development of the comprehensive school physical activity program (CSPAP) framework and to provide the rationale, research, recommendations and evolution of the CSPAP framework after its initial publication in 2008.

Key Actions Prior to 2008

An increase in the prevalence of chronic diseases sparked the attention of health professionals in the early 1980s (Mokdad et al., 1999; Powell et al., 1989). As trends in overweight and obesity among U.S. youth progressed from crisis to epidemic levels (Flegal et al., 2010; Ogden et al., 2016), an abundance of new evidence indicating a relationship between sedentary living and obesity prompted organizations to increase their focus on promoting physical activity (CDC, 1997; U.S. Department of Health and Human Services [USDHHS], 1990, 1996). Early on, schools were identified as optimal settings for improving child and adolescent health, and this was evidenced in Allensworth and Kolbe’s (1987) conceptualization of comprehensive school health to support the development of the whole student.

In 1997 and again in 2001, the CDC released landmark documents in the *Morbidity and Mortality Weekly Report* that emphasized the significance of physical activity and the importance of it being promoted in schools and communities. During the early 2000s, leading educational, medical and public health organizations also documented the physical, mental and social benefits of physical activity and made recommendations for children based on those benefits (American Academy of Pediatrics, 2006; Kaplan et al., 2005; NASPE, 2004; National Association of State Boards of Education,

2000; Strong et al., 2005; USDHHS, 1996). Within those recommendations, schools were asked to take a leadership role in promoting children’s physical activity. Further, national interest in promoting physical activity among youth prompted scholars such as Sallis and McKenzie (1991) to explicitly explore the role of physical education in public health.

Nearly a decade later, *Healthy People 2010* was released, outlining the need to reduce physical inactivity among Americans and it included specific objectives for physical education (USDHHS, 2000). This heightened attention contributed to physical activity advocacy from policy leaders that supported the passing of the Child Nutrition and WIC Reauthorization Act of 2004 (2004), which required federally funded schools to develop school wellness policies that included goals for improving physical activity. Meanwhile, several other documents also identified the need for implementing a broad, systematic approach to improving quality physical education and school-based physical activity across diverse school levels (CDC, 2006, 2009; Lee et al., 2007; Pate et al., 2006). Additionally, the 2006 School Health Policies and Programs Study conducted by the CDC further identified the need to implement a comprehensive approach to enhance physical education and physical activity at the state, district and school levels (Lee et al., 2007).

Though physical education is likely to have the largest impact on youth daily physical activity (Brusseu & Kulinna, 2015), and despite the efforts of physical education teachers to provide quality physical education programs, there is generally insufficient physical activity taking place during lessons (McKenzie & Smith, 2017; Scruggs et al., 2003). Thus, additional opportunities beyond structured physical education classes are needed to meet physical activity guidelines. The CSPAP model formalized this intention by creating a framework based on including schools within broader public health initiatives to increase physical activity (CDC, 1997; Lee et al., 2007; Sallis & McKenzie, 1991).

Development of the CSPAP Position Statements

Officials within NASPE quickly understood their role in advocating for schools to take a leadership role in promoting physical activity among children and youth (Pate et al, 2006). In concert, NASPE, the largest of the five national associations comprising the American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD), now SHAPE America, began releasing guidelines and position papers among its 15,000+ members. For example, NASPE published *Physical Activity for Children: A Statement of Guidelines for Children Ages 5–12* (2004) and released other guidelines related to quality physical education (NASPE, 2003), after-school physical activity (NASPE, 2002b), recess (NASPE 2006) and co-curricular physical activity and sport programs for middle school students (NASPE, 2002a).

In 2005, a team of four physical education and physical activity researchers and school-based program experts came together to brainstorm a position statement to address a more comprehensive approach to providing physical activity in schools, throughout the day and beyond. That team included Eloise Elliott, Aaron Beighle, Thom McKenzie and Amelia Woods along with Francesca Zavacky, the program manager for AAHPERD/NASPE, who oversaw the project through a cooperative agreement with the CDC. The team, guided by a decade of related studies and evidence-informed recommendations, produced the first draft (called *Comprehensive*

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School-Based Physical Activity), which included three focus areas: physical education, classroom physical activity and recess, and out-of-school programs that occurred on-site before or after school. As the team explored important components and concepts further, they recognized that physical education should be identified as the foundation of the program because physical education teachers were best positioned to serve as physical activity directors for schools to promote physical activity both within and beyond the school environment. The importance of parent and community involvement also came to the forefront, as well as the importance of school staff involvement. The final components identified in the first CSPAP position paper were (a) quality physical education, (b) school-based physical activity opportunities, (c) school employee wellness and involvement, and (d) family and community involvement. The final draft was submitted to the NASPE board of directors for approval in April 2007, and the final version was released to the public in January 2008 (NASPE, 2008).

The initial team identified some aspects of a successful CSPAP that were not presented in the first position statement, including suggested strategies for implementing the components. Time allocations to complete various strategies to reach the recommended 60 min of daily moderate to vigorous physical activity were developed, but these were deleted from the final version (USDHHS, 2008).

A second CSPAP position statement on *Comprehensive School Physical Activity Programs* was released in 2013 (SHAPE America – Society of Health and Physical Educators, 2013). This resulted from NASPE’s policy to revise all position papers within 5 years of publication. Francesca Zavacky, the NASPE program manager, led the process with writers Brent Heidorn, Eloise Elliott, Heather Erwin and Tina Hall. This team considered recent documents such as the *U.S. Physical Activity Guidelines for Americans* (USDHHS, 2008), the National Physical Activity Plan (“Supporting the National Physical Activity Plan,” 2012) and Healthy People 2010 (USDHHS, 2000). Considerations were also given to emerging support for school-based physical activity as a catalyst for positive academic performance (USDHHS, 2000) and the importance of physical activity in decreasing the childhood obesity epidemic (U.S. White House Task Force on Childhood Obesity, 2010).

The second edition was presented for approval to the NASPE board in April 2013. After approval, the position statement (*Comprehensive School Physical Activity Programs: Helping All Students Log 60 Minutes of Physical Activity Each Day*) was released for public comment to association members in May 2013. AAHPERD, NASPE’s parent organization, marketed the release of the second edition of the CSPAP document as providing major

changes that were in alignment with the recently released Let’s Move! Active Schools national initiative (Let’s Move Active Schools, 2013).

Changes in the second edition included a review of current literature to support CSPAP and a revision to include five components that remain in use today: (1) physical education, (2) physical activity during school, (3) physical activity before and after school, (4) staff involvement and (5) family and community engagement. The statement dove deeper into the five components, providing additional information documenting support by researchers and national organizations related to strategies for implementation and factors identified by schools that helped them be successful.

Additional documents were published to further confirm the needs for CSPAP and to disseminate the recommendations to schools, families and communities, as well as public health policymakers and university physical education teacher education programs (Erwin et al., 2013). Researchers suggested further inquiry to ensure CSPAP fidelity among all of these entities (Erwin et al., 2013). The need for policy adoption to support CSPAP implementation was identified as a key “call to action.”

CSPAP: Meeting the Evolving Educational Landscape

The CSPAP framework (see Figure 1) serves as a unifying model based on the social–ecological model and has two broad goals: promoting quality physical education and meeting the daily physical activity recommendations (Carson et al., 2014). The context and perceived concerns for physical activity and physical education in schools have changed considerably since the 1990s and early 2000s. CSPAP is now recognized as the national framework for physical activity and physical education in school systems (CDC, 2013, 2015, 2019) and has steered the dialogue to focus on school-based physical activity promotion policy and practice.



Figure 1.
SHAPE America’s CSPAP national framework
Modified from SHAPE America (2021).



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Shortly after the second CSPAP position statement's release in 2013, many national agencies and societies strongly endorsed the implementation of the five-component model. For example, the CDC announced the Whole School, Whole Community, Whole Child (WSCC) model (CDC, 2014) in which trainings for teachers were developed, specifically the director of physical activity (DPA) and physical activity leader (PAL) programs, and SHAPE America paired CSPAP with the 50 Million Strong by 2029 initiative. Many schools now embrace physical activity integration approaches that include academic learning, problem solving, critical thinking, social and emotional learning and equity, diversity and inclusion. An early major initiative to use the CSPAP model was former First Lady Michelle Obama's Let's Move! Active Schools released in 2013, which evolved into the current national Active Schools movement (activeschoolsus.org). During this time, AAHPERD/NASPE (now SHAPE America) created Let's Move in Schools and the National Football League rolled out Play 60 (nfl.com/causes/play60). Further, CSPAP became a component of the National Physical Activity Plan's Education Sector's strategies for increasing physical activity among youth (National Physical Activity Plan, 2016). CSPAP was also included in special issues in the *Journal of Teaching in Physical Education* (Castelli et al., 2014) and *JOPERD*. Additionally, CSPAP spread rapidly by way of task forces, special interest groups (e.g., research SIGs), updated position statements and collaborations within nearly 100 supporting organizations.

Contextual shifts, where "beliefs about what is important in education vie to secure a foothold on a slippery surface of constantly changing policy" (Webster, Rink, et al., 2020, p. 112) changed rapidly. Regardless of the ever-changing political and contextual foci (e.g., equity, diversity and inclusion; social-emotional learning; trauma-informed practices; and health and physical literacy), a strength of CSPAP lies in its adaptability to fit the dynamic nature of education. As student needs become more apparent, CSPAP provides a framework to address the "overlapping synergies and practical influences of national policies (i.e., *Every Child Succeeds Act*), broader healthy school models (i.e., WSCC) and the education standards that schools tend to prioritize" (Carson & Webster, 2020, p. 331).

Inclusion in Public Health Priorities

The importance of physical activity is well documented. Physical activity "fosters normal growth and development and can make people feel better, function better, sleep better, and reduce the risk of a large number of chronic diseases" (USDHHS, 2018, p. 6). Lack

of physical activity leads to increased levels of heart disease, type 2 diabetes, high blood pressure, high blood cholesterol, certain types of cancer, overweight and obesity and billions of dollars spent annually on increasing health care costs.

From a public health perspective, schools are the most prominent place to provide health-enhancing physical activity opportunities because they are designed to be equitable for all and to mitigate health disparities (e.g., race/ethnicity, gender, disability, socioeconomic status and geographic differences). Participation in physical activity opportunities in a K–12 learning environment can provide significant, meaningful and long-lasting outcomes for students.

The development and implementation of a CSPAP can provide a significant amount of physical activity opportunities for children and adolescents. However, a CSPAP is more than simply building programs and hoping students participate. CSPAPs can identify (i.e., among students, faculty, staff and community members) the health concerns of sedentary living and the benefits of regular physical activity participation and embrace the school's role in public health (Sallis & McKenzie, 1991). The ultimate goal of a CSPAP and a quality physical education program is to help constituents become physically active for a lifetime (SHAPE America, 2014).

Following the *Physical Activity Guidelines for Americans* (USDHHS, 2008, 2018), school-based programs should provide opportunities for aerobic, muscle-strengthening and bone-strengthening activities at least 3 days each week as part of an accumulated 60 min or more of daily physical activity. School leaders should help participants understand the risks and benefits of participation; the various types of activities available; the importance of gradual progression to meet the guidelines and health-related goals; the necessity of having safe, reliable equipment and facilities; and any signs/symptoms of chronic conditions or health disparities related to the types and amounts of appropriate physical activity (USDHHS, 2018). The five components of the CSPAP framework can include various modalities for incorporating these concepts.

It is also important for school leaders and stakeholders to recognize the public health concerns facing their local communities and to adhere to available recommendations based on sound research. Collaboration among multiple societal sectors can enable a greater impact to improve physical activity participation both during and beyond the school day. For example, a collaborative team could include leaders from local schools, parks, community programs, and health care providers.

Conclusion/Final Thoughts

At the inception of the initial CSPAP position statement, the long-term widespread adoption of the framework could not have been imagined. Since 2008, the CSPAP "movement" has become solidified. Though major acceptance is by physical educators, CSPAP has also spread to other fields, including general education, medicine and public health.

The CDC has supported and advocated for CSPAP since its beginning. With CDC support, CSPAP has become a fundamental component of public health that targets schools as a primary location for physical activity promotion (CDC, 2019). Recently, CSPAP has been identified as the core of the physical education and physical activity component of the WSCC framework used by the CDC to emphasize the roles that schools and communities play in supporting health. As a result of its evolution, CSPAP has become an integral framework for many programs and policies aimed at promoting child and adolescent physical activity. Many prominent practical

Table 1.

Current CSPAP Implications: Practical Applications and Recommendations for Teachers and School Administrators, University Teacher Education Programs and Other Practitioners

For teachers and school administrators

- CSPAP is now considered the national framework guiding the integration of physical activity throughout the school day (Castelli et al., 2017).
- Classroom teachers have assumed the role of promoting movement and supporting more physical activity throughout the school day, but more professional development opportunities are needed to gain procedural knowledge, encourage collaborative efforts with peers, and encourage incorporation of movement with specific subject areas (Dinkel et al., 2016).
- Professional development opportunities to gain new information on CSPAP implementation and leadership roles in schools have become more prevalent for physical education teachers.
- Schools with administrators who support CSPAP create policies to provide physical activity throughout the school day and beyond through collaboration between key stakeholders, including teachers, wellness teams, district officials, students, parents, community leaders and others (Webster, Glascoe, et al., 2020).
- Daily quality physical education should be at the core of all CSPAPs and requiring daily physical education can have a significant impact on the amount of physical activity students accumulate during the school day (Bassett et al., 2013).
- The physical education teacher and/or the physical activity leader helps to provide resources and training to academic teachers to lead activity breaks.
- Teachers, parents and other physical activity leaders can seek out virtual and interactive physical activity options now available to integrate into the school environment, at home or in the community.
 - CDC's Virtual Healthy School (<https://www.cdc.gov/healthyschools/vhs.htm>)
 - Technology-based resources such as Fuel Up to Play 60 (<https://www.fueluptoplay60.com/>), Go Noodle (<https://www.gonoodle.com/>), Active Academics (<https://activeacademics.org/>) and the Walking Classroom (<https://www.thewalkingclassroom.org/>).

For other practitioners involved in child and youth physical activity

- Daily quality physical education has been identified as the number 1 public health intervention strategy for increasing PA in schools (CDC, 2019).
- Interactive tools are available to explore implementation tactics:
 - CDC's Virtual Healthy School (<https://www.cdc.gov/healthyschools/vhs.htm>)
- CSPAP encourages schools and physical educators to involve families and communities in school physical education and physical activity promotion beyond the school day (Cipriani et al., 2012).
- CSPAP provides a framework to address national policies and recommendations such as the Every Child Succeeds Act, CDC's Whole School, Whole Community, Whole Child model, and the U.S. National Physical Activity Plan.
 - CSPAP is identified as the core of the "physical education and physical activity" component of the CDC's Whole School, Whole Community, Whole Child framework.
 - The National Physical Activity Plan has CSPAP as one of the guiding documents for the Education Sector's strategies and tactics.
 - The Every Child Succeeds Act identifies physical education as a part of a student's "well-rounded education."
- Policymakers, school administrators and teachers have become more supportive of physical activity integration throughout the school day and beyond and to encourage professional development opportunities for teachers (Chen & Gu, 2018).

For teacher education programs

- University courses that include CSPAP content, assignments and applications are increasing in prevalence within physical education teacher education programs (Kulinna et al., 2017).
- CSPAP courses or other university courses that include CSPAP content are designed to enhance new skills such as social marketing, advocacy and policy change (Centeio & McCaughy, 2017; Ciotto & Fede, 2017; van der Mars et al., 2017), leadership (Karp et al., 2017), becoming a physical activity leader within and beyond school (Erwin et al., 2017), and assessing needs of a school to provide physical activity (Heidorn & Mosier, 2017).
- Physical education preservice teachers are now being trained to be directors of physical activity in the school to implement the components of CSPAP (Rink, 2012).
 - Example: The physical activity leader learning system (SHAPE America).
- CSPAP-related service-learning experiences for preservice teachers are being incorporated into physical education teacher education existing field experiences (Webster et al., 2017).

applications and recommendations have been created for teachers, school administrators, university teacher education programs and other practitioners interested in children's physical activity promotion since the inception of CSPAP (see Table 1).

As use of the CSPAP framework grows, so does interest in policies that target various settings. Moore and colleagues (2020) provided an in-depth discussion of the "Emerging Policy Landscape

Surrounding CSPAPs." Their chapter focuses on the use of policy in education at local, state and national levels and identifies the importance of community-based policies. Meanwhile, though the CSPAP movement has expanded widely, more work around policy and advocacy are warranted (Erwin & Centeio, 2020).

In the early stages of CSPAP scholarship, research focused primarily on the physical education and before- and after-school

physical activity components (Chen & Gu, 2018; Erwin et al., 2013; Hunt & Metzler, 2017). Although more research has been conducted in the last few years related to the individual components, further efforts in research and practice around all five CSPAP components are needed.

Since its inception, the CSPAP model has been a steady fixture that helped advance the conceptual, empirical and professional implementation required to address youth physical inactivity. Notwithstanding the often politically charged educational setting, the adoption and implementation of CSPAPs have been shown to support youth meeting daily physical activity recommendations (Brusseau & Kulinna, 2015). The framework and goals of CSPAP have remained constant over a decade of challenges. Quality physical education remains the core of a successful CSPAP, and advocacy efforts to include daily physical education are needed to ensure that all students become physically literate and find enjoyment in physical activity participation. Overall, the model supports alternative philosophical perspectives, curricular positions and varying school contexts. In the end, this multicomponent approach will continue to shape the direction for physical activity engagement and promotion into the distant future.

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