CHAPTER 2 Comprehensive School Physical Activity Programs

Overall Chapter Outcome

To develop understanding of the key features of Comprehensive School Physical Activity Programs (CSPAPs), develop the skills and knowledge to help schools maximize physical activity opportunities for all students throughout the school day, and make school campuses a hub for physical activity for not just students on campus but also the school's staff, parents, and the surrounding community members

Learning Outcomes

The learner will:

- Demonstrate understanding of the five components of CSPAPs and how they are related
- Demonstrate understanding of why the school environment is a central setting for promoting physical activity for children and youth
- Understand the underlying factors that have given rise to CSPAPs
- Articulate the role of physical educators as Physical Activity Leaders and the various associated roles and responsibilities
- Explain the evidence supporting the implementation of CSPAPs
- Identify and develop skills and knowledge needed for implementing a CSPAP
- Understand and be able to employ CSPAP implementation strategies
- Explain how CSPAPs are part of the broader societal efforts to improve public health

"The future of physical education will depend on our ability to provide programs perceived to be of public importance."[1]

In this chapter, we will focus on a relatively new trend that is signaling a fundamental shift in how school physical education is being conceptualized in several different countries, namely the **Comprehensive School Physical Activity Program (CSPAP)**. In virtually all developed countries, opportunities for physical activity beyond physical education lessons lie beyond the school's campus in the form of sport clubs. People of wide-ranging ages and skill levels can join a club and participate at a level of competition where they can be successful. It is common for most sport clubs to have more than one team compete within each age bracket. This is regarded as an inclusionary model of delivering organized sport experiences. It is common as well for adults to continue playing well into their 40s.

In the United States, the physical education program historically has been composed of regular physical education lessons, intramurals, and interscholastic after-school sport programs. The intramural program provides opportunities for students to hone their skills and engage in competitive activities beyond the regular physical education program but within the confines of school campus. Siedentop and van der Mars (2012) noted that in contrast to the rising popularity of intramural and club sport programs on college and university campuses (with their expansive recreational facilities), in most post-primary schools the intramural program has all but disappeared. This can be attributed to various factors including schools lacking the resources to hire personnel to oversee such programs, and full-time teachers viewing intramurals

[1] Reproduced from Sallis, J. F., & McKenzie, T. L. (1991). Physical education's role in public health. *Research Quarterly for Exercise and Sport, 62*, 124–137. Permission conveyed via Copyright Clearance Center, Inc.

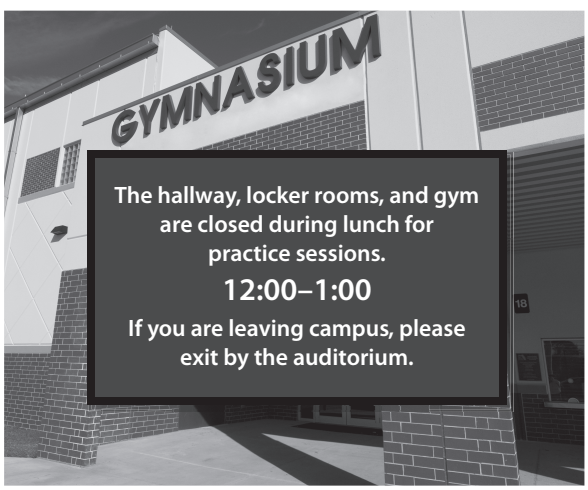
BOX 2.1 Key Terms in This Chapter

- *Academic achievement:* Performance on a formal test covering academic content (e.g., math, science, social studies).
- *Classroom activity break:* Time allocated for physical activity during instruction of academic subjects in classrooms, with the goal of increasing total daily physical activity and/or integrating physical activity into academic content.
- *Common content knowledge (CCK):* Knowledge needed to perform an activity (e.g., soccer, dance). Typically acquired in the process of learning to play and playing a game/performing an activity.
- *Comprehensive School Physical Activity Program (CSPAP):* A program, overseen and directed by the physical education teacher, aimed at maximizing physical activity opportunities for all students, school staff members, and students' families and members of the surrounding community.
- *Employee fitness/wellness programs:* Programs developed for improving employees' health and wellness in a school system. Program sessions are typically held during after-school hours. Participation may involve incentive programs that result in a reduction in employees' health insurance premiums.
- *Health-optimizing physical activity:* Any physical activity that requires the energy equivalent to or more than that needed for a brisk walk.
- *Recess:* Time during the school day allocated for free play by students. Typically scheduled during mid-morning and mid-afternoon.
- *Sedentary behavior:* Time spent lying down, sitting, or standing still.
- *Shared-use agreements:* Formal agreements between a school (or school system) and an outside organization that stipulate the use of a school's physical activity facility during nonschool hours (i.e., evenings and/or weekends).
- *Social marketing:* Use of commercial marketing strategies with the goal to change people's health behavior to improve personal welfare and that of society.
- *Specialized content knowledge (SCK):* Knowledge needed to teach an activity (e.g., aerobics, strength conditioning). Typically not acquired through playing/performing.

as an excessive workload. Transportation has also become a significant barrier to participation in intramurals for many students today because over the last few decades the distance to and from school has increased substantially. This example is but one that shows how school environments often will include barriers that suppress or prevent physical activity opportunities for many students.

Conversely, the interscholastic sport program has grown into arguably the most dominant and recognizable feature of U.S. post-primary schools. Interscholastic sport programs focus on fostering the highly talented athletes in the school. Consequently, if a student is "not good enough," she or he is excluded from participation. Thus, interscholastic sport programs reflect an exclusionary model of delivering sport opportunities. With the increased emphasis and dominance, today's teacher/coaches experience significant pressure, which often results in role conflict. A common consequence of this role conflict is that teacher/coaches focus more on their coaching responsibilities. As part of this, they may become more aggressive in controlling the use of and access to the school's various activity venues. Teacher/coaches may actually encroach on the instructional spaces during the school day by scheduling team practices during lunch periods, thereby restricting other students from accessing such venues (see **Figure 2.1**).

Yet, schools have enormous potential for increasing physical activity opportunities for all students. In 2013, the Institute of Medicine published a report that included several recommendations that would support school-based physical



(photo) © Jesse Kunerth/Shutterstock, Inc.

FIGURE 2.1 Physical activity venue restricted during regular school hours.

activity and physical education. The first recommendation called for a "whole-of-school approach" toward accomplishing this:

> *District and school administrators, teachers, and parents should advocate for and create a whole-of-school approach to physical activity that fosters and provides access in the school environment to at least 60 minutes per day of vigorous or moderate-intensity physical activity more than half (> 50 percent) of which should be accomplished during regular school hours.*
>
> - *School districts should provide high-quality curricular physical education during which the students should spend at least half (≥ 50 percent) of the class-time engaged in vigorous or moderate-intensity physical activity. All elementary school students should spend an average of 30 minutes per day and all middle and high school students an average of 45 minutes per day in physical education class. To allow for flexibility in curriculum scheduling, this recommendation is equivalent to 150 minutes per week for elementary school students and 225 minutes per week for middle and high school students.*
> - *Students should engage in additional vigorous or moderate-intensity physical activity throughout the school day through recess, dedicated classroom physical activity time, and other opportunities.*
> - *Additional opportunities for physical activity before and after school hours, including but not limited to active transport, before- and afterschool programming, and intramural and extramural sports, should be made accessible to all students. (IOM, 2013, p. 8-2)*

In this chapter we highlight key information and strategies for gradually building a CSPAP that directly target this recommendation by describing the following:

- Main features of CSPAPs
- Reasons for the rise of CSPAPs
- Redefined role of physical educators as Directors of Physical Activity
- Emerging evidence supporting the implementation of CSPAPs
- Skills, knowledge, and strategies for implementing a CSPAP
- Selected resources in support of creating a CSPAP

Comprehensive School Physical Activity Programs: A Global Trend

CSPAPs constitute a fundamental reconceptualization of the role that school physical education programs play in the broader societal efforts to improve the health of school-aged children and youth, and directly target such national health objectives. The overarching goal of CSPAPs is the development of the skills and understanding necessary for long-term physically active living. This, in turn, can have improved or sustained health as a by-product (e.g., Metzler et al., 2013a). It is not a coincidence that in the United States, the National Physical Activity Plan (see www.physicalactivityplan.org) and Healthy People 2020's physical activity–related health objectives target increased access to school physical activity spaces during nonschool hours for all persons (i.e., before school, after school, and on weekends). It is equally important to understand that the trend towards building CSPAPs is a global trend beyond the United States. Programs with a similar "whole-of-school" approach have been initiated in Ireland, Germany, Switzerland, Finland, France, Poland, and Australia.

For example, in Ireland (see www.activeschoolflag.ie), primary and post-primary schools can apply for *Active School Flag* status (valid for 3 years), by showing that they have: (1) provided the correct physical education timetable provision as per Department of Education and Skills Guidelines, (2) informed and invited the school community to participate in the Active School Flag program, (3) planned and implemented improvements that will enhance physical education and physical activity provision for all students, and (4) committed to conducting formal self-evaluation and reviewing current provisions across 15 performance areas. Following the application, an outside accreditation agent visits the school campus and reviews the quality of the program in place.

In Finland (one of the few countries where the government has mandated increased time for school physical education), the *Schools on the Move* program was started in 2010, with the main goal to increase physical activity levels of Finnish students throughout the school day. The central goal of Schools on the Move is to ensure that physical activity is and remains " . . . a natural part of a young person's life and to ensure that all young people participate in the recommended amount of daily physical activity" (Heikinaro-Johansson, Lyyra, & McEvoy, 2012, p. 291). Physical activity is now being integrated into the lessons of various classroom subjects, recess, daily transportation to and from school, and extracurricular (i.e., after-school) activities.

In Australia's State of Queensland, the state government initiated *Smart Moves* in 2007. Again (much like in Finland), different government agencies (e.g., Department of Education, Training and Employment; Department of Communities; Sport and Recreation; and Queensland Health) came together to develop this program, which has similar features as CSPAPs. Smart Moves programs include six components (Queensland Government, n.d.):

1. Allocate required time for physical activity
2. Improve access to resources for physical activity
3. Increase capacity to deliver physical activity
4. Provide professional development in physical activity
5. Build community partnerships to enhance physical activity
6. Be accountable for physical activity

Smart Moves programs are assessed using three basic criteria: (1) an increase in the overall amount of physical activity in schools, (2) the embedding of physical activity across the curriculum, and (3) an increase in access to school facilities by the community.

In France, a partnership among school board members, teachers, recreation professionals, and medical staff, among others, resulted in the development of Intervention Centered on Adolescents' Physical Activity and Sedentary Behavior (ICAPS). The focus of ICAPS is on physical activity promotion with a major emphasis on minimizing barriers during after-school hours. As a result of the program, participating students increased their activity levels and reduced the amount of time they spent in sedentary activities such as watching television and playing computer games (Simon et al., 2004).

Finally, in Germany, the *Bewegte Schule* ("Moving Schools") program has been implemented in various places (Schmidt-Millard, 2003). In Switzerland, the University of Basel has initiated the *Bewegungsfreundliche Schule* ("Activity-Friendly Schools") program (Zahner, Furger, Graber, & Keller, 2012).

Importantly, school physical education programs will likely have difficulty implementing such comprehensive school-based physical activity programs. In Finland, numerous government agencies and other outside groups support these efforts, including the Ministry of Education and Culture; the Ministry of Social Affairs and Health; the National Board of Education; various national sport federations; municipal sport associations; the Center for Economic Development, Transport, and the Environment; and the University of Jyväskylä, among others.

Thus, the common threads in most of these initiatives are (1) the central focus of creating school campuses that promote and support physical activity for all students throughout the full school day, (2) ongoing professional development to support teachers, and (3) support from and collaboration with government and other outside agencies. This does not mean that without the added outside support, CSPAP is completely impossible. We have seen many individual teachers being creative in building at least certain portions of CSPAP. However, being able to connect with supportive outside groups and agencies will improve the odds of building and sustaining such programs.

Key Features of a Comprehensive School Physical Activity Program

A CSPAP is a framework by which school systems and/or individual schools aim to accomplish two goals. First, it seeks to maximize the use of all possible school times and physical activity venues on the school campus for all students to engage in a wide variety of physical activities. By doing this, schools make significant contributions to having students meet the recommended **health-optimizing physical activity** levels. Second, CSPAPs form the foundation for developing students' understanding, skillfulness, confidence, and affinity for physical activity so that they are more likely to continue to engage in it as they move into adulthood. In the United States, the National Association for Sport and Physical Education (NASPE, 2008a, 2011d) first unveiled the basic CSPAP framework. As shown in **Figure 2.2**, a CSPAP is composed of five components:

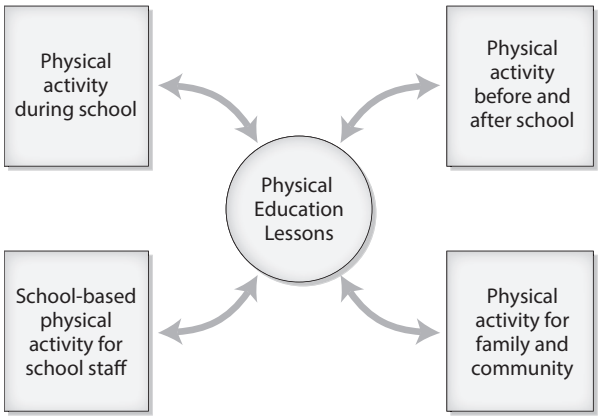


FIGURE 2.2 Comprehensive School Physical Activity Program framework.
Adapted with permission from www.aahperd.org/letsmoveinschool/about/overview.cfm

- Physical education
- Physical activity during school
- Physical activity before and after school
- School-based physical activity for school staff
- Family and community involvement

The American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD, 2011) reported that few primary and post-primary schools have implemented the full CSPAP model, although a substantial number of schools have started up at least some of its features.

Physical Education Lessons

Physical education lessons continue to be the centerpiece component and foundation of a CSPAP. A quality physical education program is one delivered by certified professional physical educators who can provide students with well-planned, sequential, and developmentally appropriate learning experiences that allow all students to meet national and/or local (state)-level physical education standards/outcomes. Consequently, such a program would be expected to develop

the needed knowledge, skills, and dispositions in students to make physical activity an integral and natural part of daily life well into adulthood. However, in order for students to become truly "physically educated," the physical education program alone is not enough to provide the needed depth and breadth of physical activity opportunities. To that end, CSPAPs create additional opportunities.

Physical Activity During the School Day

Beyond physical education lessons, there are multiple ways in which physical activity can be made part of the entire school day. They include: (1) building physical activity breaks into academic subject lessons that allow for increased physical activity and possibly integrate academic concepts specific to academic subjects (e.g., language arts, math), (2) morning and afternoon recess in primary schools, and (3) the opportunity for physical activity prior to or after eating lunch. When present in the school, each of these approaches (together with the physical education lessons) can make significant contributions to students accumulating the recommended 60-plus minutes of daily moderate to vigorous physical activity.

Classroom Physical Activity Breaks

Classroom physical activity breaks (also known as "brain breaks") offer an important way of increasing students' physical activity levels. One example of how this is being done in an Irish primary school is that the student body and even teachers are taught a dance (e.g., the Macarena) in the yard/playground at the beginning of each week. Then, every time the Macarena music comes on the school loudspeaker, everyone in the school gets up and does the dance. The dance changes every month.

There is evidence that building physical activity breaks into classroom instruction has multiple benefits. They not only contribute to increasing the overall daily physical activity levels of students but also help students be more focused on academic tasks and less distracted. Moreover, students are less likely to engage in off-task/disruptive behavior (Mahar, 2011; Mahar et al., 2006; Stewart, Dennison, Kohl, & Doyle, 2004).

The importance of periodic classroom physical activity breaks (also called "brain breaks") cannot be underestimated. For this culture of "moving classrooms" to develop, school managers/principals and classroom teachers must come to understand the multiple benefits of physical activity breaks. **Classroom activity breaks** may help increase physical activity levels, but for classroom teachers it is more important that they recognize how such short breaks can help produce higher levels of on-task behavior (i.e., engagement in academic tasks). This is likely a higher priority for them. That such physical activity breaks can contribute to improving academic performance may be the more powerful selling point to school managers and classroom teachers; otherwise, they may not be willing to give up valuable class time to only help increase students' physical activity levels. Understanding these related benefits may help them become more receptive.

Physical educators are the premier professionals in schools who can develop buy-in from both school managers and classroom colleagues. Getting the support from the school manager is perhaps the most important barrier to overcome. If/when the school manager is on board, he or she becomes a key ally in persuading classroom teachers to employ physical activity breaks. Using time during staff meetings held before and/or during the school year, physical educators can develop this buy-in by offering short tutorials on the multiple benefits of classroom activity breaks, followed by additional tutorials on selecting appropriate activity breaks, and how to organize and manage them. With each staff meeting, physical educators can introduce and model one or two new examples of activity breaks. The short tutorials can, in fact, be used as activity breaks for staff meetings. A brief introduction on how to do the activity break would be followed by having the teaching staff do the activity.

A question often asked about trying to convince classroom teachers to incorporate physical activity breaks is, "How do I get the reluctant classroom teachers motivated to start using physical activity breaks?" As with every effort to change existing teaching practices, there are always those who are excited to try something new, those who approach it with some hesitation, and those who may outright refuse to change. Our suggestion is that you focus on those classroom colleagues who are willing to try activity breaks. With some practice and support, they are likely to find success in the form of seeing more focused and on-task students in their classrooms. They then become powerful advocates for implementing physical activity breaks with their classroom colleagues.

Recess Periods

Historically, in primary schools in the United States, **recess** periods have been an integral part of each school day. In the 1950s, it was not unusual for schools to have three recess periods (morning, post-lunch, and afternoon). The unstructured play during recess is generally viewed as a critical time for students not only to be physically active for health reasons but also to develop social skills, creativity, conflict resolution skills, and the like. Even today's school managers generally view recess periods as having multiple important benefits. **Box 2.2** shows some of the key finding from a recent survey by the Robert Wood Johnson Foundation (2010) of U.S. school managers' views on school recess.

BOX 2.2 School Managers' Views on the Role and Importance of School Recess

Of the over 1,950 school managers surveyed:

- 80 percent reported that recess has a positive impact on **academic achievement**.
- 66 percent reported that students listen better after recess and are more focused in class.
- 96 percent noted that recess has a positive impact on students' social development.
- Virtually all (97%) believe recess has a positive impact on students' general well-being.
- Almost 8 out of 10 report taking recess away as a form of punishment.

When asked what school managers would like to improve about recess at their particular school, they prioritized the following strategies:

1. Increasing the number of staff to supervise recess periods
2. Obtain better equipment for student use
3. Provide playground management training

Data from Robert Wood Johnson Foundation. (2010). *State of play: Gallup survey of principals on school recess*. Princeton, NJ: Author.

Learning Experience 2.1

Visit a primary school, and observe the recess periods of both lower and higher grades. Review the following questions, and answer them based on your observations.

- What are the typical activity patterns of the students in terms of the more prevalent activities in which they engage?
- What activities tend to be more active from an intensity perspective?
- What differences are there in activity choices between boys and girls?
- What activities tend to result in greater amounts of more vigorous student engagement?
- Which students tend to be drawn to certain activities?
- Which students tend to be more sedentary?
- What, if any, conflict emerges among students, and how do they resolve it?
- What possible differences in play patterns are there between the lower and upper grades at that school?
- What is the predominant pattern of behavior among the adult playground supervisors? Who do they interact with?
- Should recess periods be more structured or left up to the students? What is the basis for that position?

Numerous professional organizations and other agencies have published formal position statements strongly advocating for recess to be a regular part of each school day. Most recently, the American Academy of Pediatrics (2013) published a formal policy statement in which it (1) summarized the cognitive/academic, social/emotional, and physical benefits of recess; (2) addressed the emerging issue of whether recess periods should be composed of more structured activities or activities that are children-designed; (3) the timing and duration of recess; and (4) provided six key recommendations for parents, teachers, school managers, and policy makers pertinent to school recess (see **Box 2.3**).

Physical Activity Before and After School

There are several ways in which students' physical activity can be increased during before- and after-school hours. They include:

- *Active commuting to and from school:* If the neighborhood in which students live is located within 1 mile of the school grounds, walking or using their bicycle should be encouraged.
- *Informal recreation or play on school grounds:* Similar to recess periods during the school day, providing access and equipment during informal play time offers significant physical activity opportunities.
- *Physical activity in school-based after-school programs:* Many schools today offer after-school programming, especially for students whose parent(s) work. Traditionally, such programs have focused primarily on developing academic skills, life skills, and arts and crafts, rather than physical activity.
- *After-school activity clubs and intramural sports:* In many post-primary schools, students may participate in faculty-sponsored clubs across a wide variety of interests (e.g., photography, art). Relative to physical activity–based clubs, students may organize a ballroom dance, table tennis, or salsa club.
- *Interscholastic sports:* There is no other country on the globe where school sport is as important a cultural phenomenon as in the United States. Especially in smaller rural communities, the sport programs in postprimary schools are a binding force.

Learning Experience 2.2

Develop a plan for how you would go about maximizing the use of all physical activity venues and equipment during after school hours (i.e., approximately between 3 p.m. and 6 p.m.) in ways that makes the participation enjoyable for the greatest number of the school's students. Explain what resources you would seek to use.

BOX 2.3 Recommendations for School Recess Periods

From the perspective of educating the whole child, the American Academy of Pediatrics (AAP) made the following recommendations:

- Recess is a necessary break in the day for optimizing a child's social, emotional, physical, and cognitive development. In essence, recess should be considered a child's personal time, and it should not be withheld for academic or punitive reasons.
- Cognitive processing and academic performance depend on regular breaks from concentrated classroom work. This applies equally to adolescents and to younger children. To be effective, the frequency and duration of breaks should be sufficient to allow the student to mentally decompress.
- Recess is a complement to, but not a replacement for, physical education. Physical education is an academic discipline. Whereas both have the potential to promote activity and a healthy lifestyle, only recess (particularly unstructured recess) provides the creative, social, and emotional benefits of play.
- Recess can serve as a counterbalance to sedentary time and contribute to the recommended 60 minutes of moderate to vigorous activity per day, a standard strongly supported by AAP policy as a means to lessen risk of overweight.
- Whether structured or unstructured, recess should be safe and well supervised. Although schools should ban games and activities that are unsafe, they should not discontinue recess altogether just because of concerns connected with child safety. Environmental conditions, well-maintained playground equipment, and well-trained supervisors are the critical components of safe recess.
- Peer interactions during recess are a unique complement to the classroom. The lifelong skills acquired for communication, negotiation, cooperation, sharing, problem solving, and coping are not only foundations for healthy development but also fundamental measures of the school experience.

From American Academy of Pediatrics (2013). Policy statement: The crucial role of recess in school. *Pediatrics, 131*, 186. DOI: 10.1542/peds.2012-2993.

Each year, millions of post-primary school students participate in organized sport programs. Eitzen and Sage (2003) noted some of the benefits of such involvement. They include:

- Improved grades
- Stronger self-concept
- Higher aspirations to further education
- Greater sense of personal control
- Increased likelihood of adopting healthier eating habits
- Lower likelihood of using banned substances (e.g., drugs)

Sport programs, notably basketball and American football, are increasingly year-round programs in that even when a team is not in season, coaches will keep the teams engaged in various summer leagues and conditioning regimens. Students are expected to specialize in a certain sport and positions within a sport. With this intense level of sustained engagement comes the increased risk of overuse injuries (Siedentop & van der Mars, 2012).

School-Based Physical Activity/Wellness Programming for School Staff

Using the "ounce of prevention is worth a pound of cure" perspective, there is a distinct trend in the healthcare delivery industry to move beyond the traditional reactive/illness treatment–oriented medical model toward providing a more proactive and wellness-oriented healthcare services system, through **employee fitness/wellness programs** (Loeppke, 2008). Much like private companies, schools could offer a similar program for their teachers and support staff because students are not the only ones who spend 7–8 hours a day at school. Over the course of their careers, the millions of primary and post-primary schoolteachers, administrators, and all support staff also spend a large portion of each school day on the school campus. Thus, their health matters as much as that of their students. Especially in post-primary schools, expansive physical activity venues are already in place. These facilities are publicly funded, and thus teachers and all other staff should be able to access them at some point during the workday.

Not unimportant is that school staff members are also important role models for students when they regularly engage in physical activity. Students who see adults being active are more likely to come to see that physical activity is "not just for kids." This positive modeling is thus an important stimulus for school-aged youth. Needless to say, implementation of this particular CSPAP component is dependent on school manager support.

Questions raised when discussing the possibility for after-school staff programs might include:

- After a long workday, will teachers even want to stay after school and do an exercise session?
- Who will deliver/teach the after-school sessions?

- How many and which days of the week would such a program be held?
- Where would such a program be held?

Recently, one of the authors conducted an informal survey targeting staff members (i.e., teachers, school managers, and support staff) at three post-primary schools to gauge their interest and preferences in participating in an after-school physical activity and wellness program to be held at the school site. Respondents reported a high level of interest, with Wednesdays, Thursdays, Tuesdays, and Mondays being the preferred days, in that order. The preferred length and number of sessions per week was between 30 and 60 minutes, twice a week. Staff members were mostly "very interested" and "interested" in session topics such as aerobics, strength conditioning, yoga, and group walks. Not surprisingly, the least preferred activities were team sports. There was also considerable interest in screening opportunities for health markers such as blood pressure, mobile mammography, and body mass index (BMI). The Alliance for a Healthier Generation (see www.HealthierGeneration.org) offers an expansive Employee Wellness Toolkit to assist Physical Activity Leaders in developing a school employee wellness program (Alliance for a Healthier Generation, 2012). With the rising cost of health care in many countries, it is becoming more common to find incentives built into employees' health insurance plans, where regular and sustained involvement in employee fitness programs with a corresponding improvement in health outcomes would result in reductions in health insurance premiums.

Physical educators would not need to deliver such after-school staff health/wellness programs themselves. Rather, they would serve as the facilitator or liaison that brings together the needed expertise from outside, promotes the availability of such programs, and coordinates scheduling of campus and other nearby facilities. Laying the groundwork for after-school programs targeting school staff does require investment of time and energy by physical educators. For example, it includes making connections with local programs, agencies, and healthcare facilities in the community to garner support in the form of providing outside expertise and equipment, coordinating school facility use with others in the school, and promoting the after-school program to the target audience.

Local health/fitness clubs, YMCAs, parks and recreation departments, university programs in physical education/exercise and wellness/exercise science, and local hospitals are powerful partners for schools because they can provide instructors/presenters who can deliver activity sessions and/or present on topics as varied as safe exercise, nutrition, relaxation, and wellness during after-school hours. Group exercise instructors could be recruited from local health clubs to come to the school and lead participating staff members through exercise sessions. Thus, being keenly aware of local community resources places physical educators in a much stronger position to help build after-school programs. Once this groundwork is laid and colleagues in the school start to benefit from such programs, the credibility of the physical educator and the overall program is greatly enhanced.

Physical Activity Involvement by Families and Community

School campuses (especially those located in neighborhoods) are a critical resource in creating opportunities for children, youth, and families to engage in physical activities. In more rural communities and economically disadvantaged neighborhoods, the school is often one of only a few venues for physical activity. In many countries, the taxpayers fund schools, and thus it stands to reason that when schools are not in session, their physical activity venues become an important resource for the members in the surrounding community.

One example of how a well-equipped school campus is an invaluable resource for the surrounding community is Mountain Pointe High School in Ahwatukee, Arizona (a metropolitan area near Phoenix). The school has indoor facilities that include a large gym (14,364 sq. ft.), a smaller second gym (7,676 sq. ft.), two dance studios (2,000 sq. ft. each), a weight room (6,745 sq. ft.), and a wrestling room (5,005 sq. ft.). The outdoor venues include an all-weather 400 m track around a lighted football field, a practice field, two full-sized baseball fields, two full-sized softball fields, eight 4-wall racquetball courts, and eight tennis courts. Although there are several logistical and legal issues to overcome, this school is a precious resource for all in the surrounding neighborhood. **Figure 2.3** shows the density of community members living in close proximity to the school campus. Regardless of how well schools and school systems are outfitted with activity venues, there is no reason why their accessibility and use cannot be maximized.

In most countries, it is common to have outside groups such as sport clubs and other community organizations rent activity spaces in schools for use during after-school hours and weekends. At the heart of such arrangements lie **shared-use agreements** (e.g., Spengler, Connaughton, & Carroll, 2011). Shared- or joint-use agreements are formal agreements between a school (or school system) and an outside organization that stipulate the use of a school's physical activity facility during nonschool hours (i.e., evenings and weekends).

From the perspective of wishing to protect its facilities, many school managers and school systems may be reluctant to let outside groups use the school's facilities, citing legal and logistical barriers such as possible misuse, liability issues, vandalism and crime, and cost incurred for repairs and maintenance (Spengler, 2012). This is evidenced by the fact that between 2:30 and 4:00 p.m., most sport facilities at post-primary schools are largely vacant (Bocarro et al., 2012).

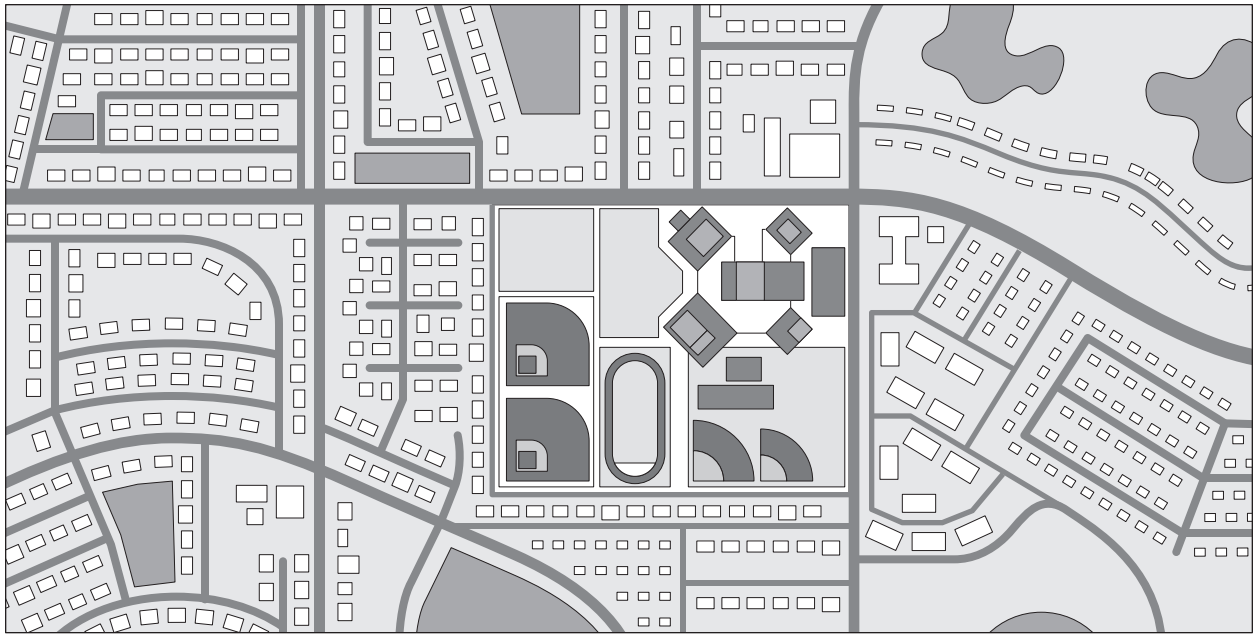


FIGURE 2.3 Population density surrounding a neighborhood school.

Well-designed shared-use agreements can be an excellent means of ensuring that the responsibilities for both parties relative to time and days of use, cleaning, repairs, and the like are stipulated.

Similar to community parks, school physical activity venues that are accessible on weekends are an invaluable resource for promoting physical activity among children, youth, adults, and older adults. We cannot overstate the importance of younger generations seeing adults and older adults modeling health-optimizing physical activity engagement. Moreover, family members can support a CSPAP by participating or volunteering in special evening or weekend events such as after-school fun runs, family fitness and wellness nights, open houses, and/or physical activity–based fundraisers such as walk-a-thons, jog-a-thons, or basketball free-throw challenges. These are vital opportunities to educate adults about the importance and role of the physical education program, active living, and the benefits of healthy choices.

Why Comprehensive School Physical Activity Programs?

The question about what prompted the emergence of the CSPAP model brings together multiple factors, including: (1) the traditional objectives of school physical education programs, (2) the emergence of physical activity behavior as a legitimate program outcome, (3) the status of school physical education programs relative to other school subjects, and (4) the relationship of physical activity (along with physical education) to students' academic achievement. The following sections highlight these topics as they offer an important historic and evidentiary context for CSPAPs.

The Traditional Objectives of School Physical Education Programs

For well over a century, school physical education programs have purported to target multiple objectives/outcomes. A close look will reveal that each time a country has waged war, the fitness levels of its defenders were found to be below acceptable standards. Invariably, school physical education programs received increased attention and were charged with improving the fitness levels of youth (Siedentop & van der Mars, 2012).

Beyond improving students' physical fitness levels, school physical education has also targeted physical skills and cognitive and social outcomes throughout much of the twentieth century (Siedentop & van der Mars, 2012). Even today, learning outcomes internationally continue to clearly reflect the four main foci (i.e., organic education, psychomotor education, character education, intellectual education) of the "new physical education" as proposed by Clark Hetherington back in 1910 (Weston, 1962). However, as Corbin (2002) argued, the field of physical education has tried to be too many things to too many people.

One related issue of this broad focus has been the field's inability to demonstrate that it accomplished what it claimed it could accomplish. A second is how school physical education programs will get students to seek out physical activity for not only health benefits, which Kretchmar (2008) referred to as a utilitarian view of physical education's goals but also find joy and a deeper appreciation in movement itself. Learning to do the latter will improve the odds that young people will come to make physical activity truly a part of daily life.

Physical Activity Behavior as a Central Program Outcome

There is now overwhelming evidence that engaging in health-optimizing physical activity has multiple physical health, mental health, cognitive health, and economic benefits (e.g., Bouchard, Blair, & Haskell, 2012; Gettman, 1996; Landers, 1997; Murtrie & Parfitt, 1998; Strong et al., 2005; U.S. Department of Health and Human Services [USDHHS], 2008). However, most children and youth do not meet the recommended levels of daily health-optimizing physical activity (e.g., Fairclough & Stratton, 2005, 2006; Lee, Burgeson, Fulton, & Spain, 2007; Troiano et al., 2008; USDHHS, 2013; World Health Organization [WHO], 2010). Consequently, this has become a major national health objective in most developed countries (USDHHS, 2000, 2010; WHO, 2010).

Don't Judge People by Their Appearance

A person's fitness level has long been assumed to be closely related to his or her physical activity level. However, at least for school-aged youth (ages 8–17) the two variables barely correlate (e.g., Huang & Malina, 2002; Katzmarzyk, Malina, Song, & Bouchard, 1998; Morrow & Freedson, 1994). It is not until adulthood that physical activity levels impact fitness levels more directly. The key message here is some youngsters who do really well on fitness tests may not be as active in reality as one would think. Conversely, certain youngsters who may be quite active may not do well at all on certain fitness test components. Performance on fitness tests is determined by influential factors other than just physical activity, including other lifestyle behaviors (e.g., dietary habits), one's environment, and heredity. Bouchard (1993) showed that some people will do better on cardiovascular endurance and muscular strength tests than others on account of their genetic makeup, and they do not all respond in the same way to "training." Some may improve little from baseline levels no matter how hard they try, whereas others improve by as much as tenfold (e.g., Bouchard & Rankinen, 2001; Timmons et al., 2010).

This recognition has given rise to a shift away from focusing on improving performance on physical fitness tests (a "product" orientation) to promoting physical activity behavior (a "process" orientation). Corbin, Pangrazi, and Welk (1994) noted that the former had its roots in the exercise physiology research literature (using adults as participants in most cases) and became known as the *Exercise Prescription Model* (EPM). The problem is that this well-evidenced approach to exercise prescription was then generalized to children and youth.

The EPM can be contrasted with the *Lifetime Physical Activity Model* (LPAM), which has a clear health focus. It is defined around promoting activity that results in accumulating sufficient caloric expenditure that has been shown to reduce the risk of chronic diseases. This model is based on two landmark findings that showed how (1) shifting from being sedentary to physical activity at moderate levels of intensity significantly reduced people's risks of dying prematurely, and (2) that the risk reduction in going from moderate to more vigorous levels of activity (i.e., greater caloric expenditure) was smaller than moving from being sedentary to moderate intensity activities (e.g., Blair, 1993; Blair & Bouchard, 1999). In addition, although there is a multitude of environmental, social, economic, and psychological factors that influence people's physical activity behavior, Malina (2001) reported that longitudinally, physical activity patterns track reasonably well from childhood into adulthood; that is, children who are physically active during childhood are more likely to maintain that level as they move through adolescence, young adulthood, and so on.

Learning Experience 2.3

Given the findings discussed in this section, what do you see as the appropriate practices in designing and delivering physical activity experiences? Address the following:

- What types of activities are more likely to attract students to being active beyond your program?
- What can you do to help students of different body types?
- What do you think are highly effective ways of encouraging your students when interacting with them?

Physical Activity Versus Sedentary Behavior

The flip side of the physical activity coin is a person's time spent in **sedentary behavior**. In recent years, there has been extensive interest in determining the consequences of spending excessive time in sedentary behavior (i.e., too much sitting). In today's environment, people may spend many of their waking hours in sedentary behavior such as driving a car, working at a computer, watching television, playing computer games, and the like. Booth and Chakravarthy (2002)

referred to sedentary living as a silent enemy, and reported that sedentary lifestyles contributed to the worsening of 23 health conditions (e.g., selected cancers, high blood cholesterol, osteoporosis, type 2 diabetes, depression). Even those who build in a 1-hour period of exercise in the middle of their work, but are largely sedentary throughout most of the rest of the day, are at an increased risk. Owen, Healy, Howard, and Dunstan (2012) refer to them as *active couch potatoes*, and summarized the findings on the consequences of sedentary lifestyles as follows:

> *There is now substantial evidence . . . that higher levels of sedentary time are adversely associated with several adverse functional and clinical health outcomes in the general adult population. These include the presence of risk factors for chronic disease such as large waist circumferences; unhealthy levels of blood glucose, insulin, and blood fat; lower measures of physical functioning; and increased risk for mortality from all-causes, cardiovascular disease, and some cancers. (p. 4)*

Learning Experience 2.4

Over the next 7 consecutive days (not counting your time spent sleeping at night), record the total amount of time that you spent in sedentary activities (e.g., watching television, driving your car, working at a computer). Collect the information so that you can determine the duration of each sedentary episode. Answer the following questions:

- On what days were you more sedentary?
- What was the average amount of consecutive minutes spent sitting each day?
- How were the weekdays different from weekend days?
- What are some possible minor changes you could make to cut down on the extended periods of being sedentary?

The findings on physical activity and sedentary behavior are pertinent to schools in that students spend a significant portion of their formative years at school (approximately 14,000 hours). They spend much of that time in sedentary behavior. Thus, schools have a responsibility to not only ensure that students develop essential academic skills but also attend to their current and future health and well-being. Schools are prime environments for promoting physical activity (e.g., Centers for Disease Control and Prevention [CDC], 2001; National Association of State Boards of Education [NASBE], 2012; Pate et al., 2006; Sallis et al., 2012). Thus, the discoveries discussed regarding physical fitness and physical activity have important implications for how physical educators go about promoting physical activity both during physical education lessons and at other times throughout the school day.

Learning Experience 2.5

Using the evidence presented on physical fitness, physical activity, and sedentary behavior, what specific implications do you see as a physical educator for what content to select, how to design activities, how to differentiate instruction for groups of individual students, what to assess and how to assess it, and what you can do within physical education classes to encourage students' physical activity beyond the lessons?

Status of School Physical Education Relative to Other School Subjects

The notion of school physical education serving an important role in public health has received widespread support within government agencies, professional societies, and the public health community in the form of national guidelines, recommendations, and position statements (e.g., American Heart Association [Pate et al., 2006], CDC [2011], Institute of Medicine [Koplan, Liverman, & Kraak, 2005], International Council of Sport Science and Physical Education [2010], American Academy of Pediatrics [2006], the World Health Organization [2011]). A comprehensive review of the research on the efficacy of multiple interventions aimed at increasing physical activity levels showed school physical education as one of only six interventions to have sufficient evidence (CDC, 2001). Importantly, the parents of youth have also voiced strong support for increasing time allocation for physical education, recess, and interventions targeting other health behaviors in students (see **Figure 2.4**).

Unfortunately, school physical education programs globally continue to be marginalized, with Hardman (2004) noting that:

> *The evidence presented in this Report indicates that many national governments have committed themselves through legislation to making provision for physical education but they have been either slow or reticent in translating this into action i.e. actual implementation and assurance of quality of delivery at the national level. Deficiencies continue to be apparent in curriculum time allocation, subject status, financial, material and human resources (particularly in primary school teacher preparation for physical education teaching), the quality and relevance of the physical*

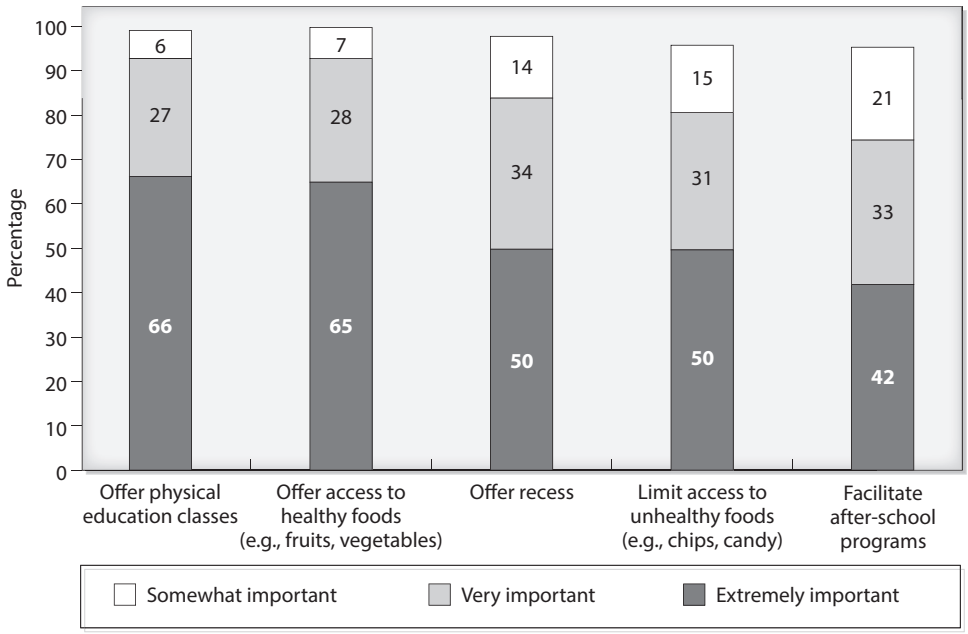


FIGURE 2.4 Parental views on students' access to and opportunity for physical education, recess, and other health behaviors.

Data from Alliance for a Healthier Generation. Available from www.healthiergeneration.org/uploadedFiles/For_media/HSP%20Parent%20Survey%20Overview.pdf

education curriculum and its delivery and gender and disability issues. Of particular concern are the considerable inadequacies in facility and equipment supply, frequently associated with under-funding, especially in economically underdeveloped and developing countries and regions.[2]

In a more recent update, Hardman and Marshall (2009) reported that, despite improvements in some areas, continuing concerns include:

. . . insufficient curriculum time allocation, perceived inferior subject status, insufficient competent qualified and/or inadequately trained teachers (particularly in primary schools), inadequate provision of facilities and equipment and teaching materials frequently associated with under-funding, large class sizes and funding cuts and, in some countries, inadequate provision or awareness of pathway links to wider community programmes and facilities outside of schools.[3]

Relationship of Physical Activity (and Physical Education) with Students' Academic Performance

For several decades, there has been interest in answering the question of whether and how physical activity (along with physical education) affects students' academic performance.. Given the extensive focus on educational reform efforts aimed at improving academic achievement in recent years, this interest increased even further (Howie & Pate, 2012). There is now a substantial body of evidence form over 150 published studies, from different countries, using various approaches to answering the question: What is the nature of the relationship between students' time spent in physical activity (which would include physical education lessons) and their academic performance? Rasberry and colleagues (2011) reported that in most studies, students with higher physical activity levels also tended to have higher academic scores and improved concentration.

The knowledge base around this relationship will continue to evolve, and, as is the case with all research,

[2] Reproduced with permission from Hardman, K. (2004). An update on the status of physical education in schools worldwide: Technical report for the World Health Organization (p. 11). Available from www.icsspe.org/sites/default/files/Kenneth%20Hardman%20update%20on%20physical%20education%20in%20schools%20worldwide.pdf. Accessed March 13, 2013. © Copyright World Health Organization (WHO), 2013. All Rights Reserved.

[3] Reproduced with permission from Hardman, K., & Marshall, J. (2009). Physical education in schools: A global perspective. *Kinesiology, 40*(1), 5.

there are always limitations. Moreover, how research projects are designed and interpreted must be taken into account (e.g., remembering to not confuse correlation with causation). However, based on their review of studies on the same relationship, Trost and van der Mars (2009, p. 64) offered the following key take-away messages[4]*:*

- *Decreasing (or eliminating) the time allotted for physical education in favor of traditional academic subjects does not automatically lead to improved academic performance.*
- *Increasing the number of minutes students spend per week in physical education will not impede their academic performance.*
- *Increasing the amount of time students spend in physical education may make small positive contributions to academic performance, particularly for girls.*
- *Regular physical activity and physical fitness are associated with higher levels of academic performance.*
- *Physical activity is beneficial to general cognitive functioning.*

More Is Not Always Better

A commonly held assumption is that student performance in classroom subjects (e.g., reading and math) will improve when time allocated to physical education, recess, and other subjects like art and music is reduced (or worse, eliminated). Wilkins and colleagues (2003) found that time shifted from physical education (along with art and music) to math and reading did not translate into improved performance in academic subjects. The exact mechanisms that affect this complex relationship are not yet fully understood because there are multiple contextual mediating factors at work (e.g., quality of instruction) that affect this likely curvilinear relationship (see **Figure 2.5**). For example, increased activity helps students concentrate and focus better, which then helps them complete academic tasks with greater success. However, once the amount of time in physical activity increases, students may reach a point of diminishing returns, where it may start to interfere with academic tasks.

The Physical Educator as Director of Physical Activity

Schools have been recognized as a central point of intervention for promoting physical activity to students (e.g., Pate et al., 2006; Wechsler, McKenna, Lee, & Dietz, 2004). Thus, the central question to ask is: Who is better positioned than the physical educator to be the lead person for promoting physical activity for all students in schools? However, the emergence of CSPAPs has important implications for physical educators' day-to-day work. In the United States, to support the implementation of CSPAPs, NASPE launched a Director of Physical Activity (DPA) certification program open only to physical educators that targets the skills and knowledge necessary for planning, implementing, and evaluating CSPAPs (Carson, 2012). To become a certified DPA, physical educators would need to:

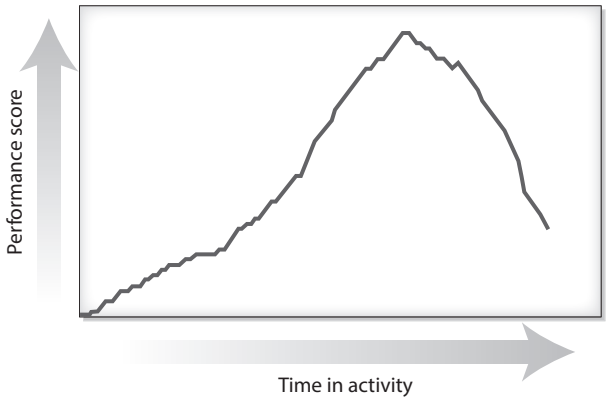


FIGURE 2.5 The relationship between time spent in physical activity and academic performance.

- View and complete three modules: public health, advocacy, and sustainability
- Complete and pass a certification exam of 35 questions
- Develop, upload, and implement a CSPAP action plan
- Submit artifacts that reflect evidence of program implementation

A similar training program, "Physical Activity Leader (PAL)," is under development to support the recently announced *Let's Move!* Active Schools initiative (see www.letsmoveschools.org). The PAL program is expected to launch in August 2013 with an anticipated target of 20,000 trained PALs by 2018. These efforts are part of a large-scale effort to bring together the resources and programs of public and private sectors to maximize opportunities for physical activity by students, staff, and community members in U.S. schools (Carson, in press).

First and foremost, PALs will want to get support from their school managers to introduce physical activity promotion

[4] Republished with permission of *Educational Leadership*, from Trost, S., & van der Mars, H. Why we should not cut PE. p. 64, 2009. Permission conveyed through Copyright Clearance Center, Inc.

strategies to classroom teachers during school staff meetings, support an after-school staff wellness program, recognize those classroom teachers who infuse physical activity breaks in the classroom, and so on. Carson (2012) rightly noted that school managers play a key role as well in helping set up a school wellness council. Typically, this council would include the physical education teacher/PAL, a classroom teacher, and representatives from the school's management team, food services, parents, and students. Where possible, persons with expertise in student health and wellness from the community would also be included. This council is advisory, with the task to ensure that the students' physical activity and nutrition needs are met.

The key for the PAL is to show how each CSPAP component complements the physical education lessons (rather than replacing them). Thus, PALs are the lead persons in schools who, in addition to delivering physical education lessons, plan, coordinate, and manage the other CSPAP components (Beighle, Erwin, Castelli, & Ernst, 2009). One of the most often voiced concerns about physical educators taking on the PAL role is that they cannot do all of this because being "just a physical educator" is already a full-time job. As we will show, many of the strategies used to build a CSPAP include recruiting help from others who can assist and take the lead on organizing and delivering the other CSPAP components. Moreover, as with everything, building a successful full-fledged CSPAP takes time. And in certain cases, one particular component may simply not be a reasonable option. For example, local contexts (e.g., rural locations with limited outside support resources in the community) may limit or even prevent implementation of after-school activity/wellness programming for the school's teaching and support staff.

Supporting Evidence for Implementing CSPAP

Increasingly, teachers and school managers are urged to employ evidence-informed practices in order to improve students' learning experiences. Although full-scale implementation of CSPAPs that include all five components is yet to become commonplace (AAHPERD, 2011), there is now substantial empirical evidence on the efficacy of at least some of its individual student-focused components. **Box 2.4** provides a brief overview of the evidence compiled from studies across primary and post-primary grade levels, and from various countries. The full report is accessible at www.activelivingresearch.org/files/Synthesis_Ward_SchoolPolicies_Oct2011_1.pdf.

BOX 2.4 A Summary of the Evidence Base for Various CSPAP Components

1. School physical education programs where teachers employed standardized curricula (e.g., CATCH, SPARK) specifically designed to improve physical activity and supported with sustained/ongoing staff development produced significant increases in students' health-enhancing (i.e., moderate to vigorous) physical activity levels, by as much as 12 minutes per day.
2. Schools that increased opportunities for physical activity across the full school day (i.e., recess, in-classroom physical activity breaks, and after-school activities) saw increased physical activity levels, although differentially between boys and girls.
3. Increased time for supervised recess, coupled with improved access to activity equipment and improvement to play spaces (e.g., playground markings) results in higher physical activity levels among primary school students.
4. In-class physical activity breaks increase students' physical activity, help reduce off-task behavior, increase their on-task behavior, and aid in concentration and focus on learning tasks. This can contribute to improved performance on academic achievement.
5. Well-designed playgrounds and improved open spaces, facilities, and equipment that are available, accessible, and inviting to children encourage more physical activity, both during and after school.
6. After-school programs that include well-designed physical activity opportunities make important contributions to the total day's physical activity levels, and are especially beneficial for students living in economically disadvantaged conditions (e.g., low-income urban and rural environments).
7. Making school grounds accessible through joint-use agreements between schools and communities increases physical activity during after-school hours and weekends, most notably for children and youth whose access to other safe activity spaces and programs are limited.
8. Well-designed policies and/or legislation that require specific daily amounts of time for physical activity in schools can have an important impact on the population of school-aged children.

Data from Ward, D. S. (2011). *School policies on physical education and physical activity: Research synthesis.* San Diego, CA: Active Living Research.

Skills, Knowledge, and Strategies for Implementing CSPAPs

This section focuses on specific strategies that physical educators can employ to bring about the other CSPAP components. From the perspective of "If you build it, will they come? And if they come, will they be active?," certain conditions must be met. Based on extensive observations throughout the school day in 24 schools with early post-primary students, McKenzie, Marshall, Sallis, and Conway (2000) concluded that although access to physical activity venues was not a major barrier, "The provision of more supervision, equipment, and organized activities . . . might lead to more students being more physically active" (p. 75).

It is generally accepted now that teachers require specific content knowledge (CK) and pedagogical content knowledge (PCK) to successfully plan, deliver, and evaluate a physical education program. In physical education, CK focuses on what a teacher knows about the subject matter of physical education. The field has long debated what constitutes the specific subject matter of physical education. We agree with Siedentop (2002) that first and foremost our subject matter is that of *physically active motor play* in all its forms, such as dance, fitness and exercise, games, and other leisure activities (e.g., hiking, skiing). NASPE (2008b) also regards a basic understanding of the scientific foundation of human movement, and principles of social, cognitive, and psychological development specific to school-aged youth as part of the required content knowledge.

PCK constitutes the knowledge teachers develop about how to blend their CK with the pedagogical skills and understanding of how to teach the subject matter. However, developing and delivering a CSPAP requires more. Metzler et al. (2013a) targeted the areas discussed in the following sections.

Coordinate Before-, During-, and After-School Physical Activity Programming

As we have noted, a PAL cannot implement a CSPAP alone. Collaborating with others within the school and the surrounding community is a must. **Table 2.1** shows an action plan for building a CSPAP, with a timeline. It shows that creating a quality CSPAP requires thorough planning and does not happen overnight.

TABLE 2.1 Action Plan for Building a CSPAP

Year	CSPAP Component	Primary Tasks	Potential Outside Support Sources/Expertise Sought	Outcome Indicator(s)
2014–2015	*Laying the CSPAP groundwork*	• Work with physical education staff to divide planning and prep tasks • Develop and present CSPAP plan to school management • Present plan to parent organization • Present plan to the school's wellness council • Present plan to school staff • Develop marketing/promotion plan (i.e., signage, website) • Form student volunteer team/club • Develop/conduct student interest survey on preferred activities, physical activity (PA) barriers • Sample usage of school's PA areas during various parts of the school day	• School management • Parent organization • Physical education teacher • Education program faculty member	• Completed plan presented to various constituents.
2015–2016	Lunchtime PA program	• Recruit supervisory staff • Set up dedicated equipment cart • Create activity zone signage • Train supervisory staff • Hold fundraiser for adding equipment • Market and promote the program • Set up activity rotation schedule to refresh activity menu	• Parent volunteers • Interns from local university program	• Improved access to PA venues • Increased number of students engaging in health-optimizing PA

(*continues*)

TABLE 2.1 Action Plan for Building a CSPAP (*Continued*)

Year	CSPAP Component	Primary Tasks	Potential Outside Support Sources/Expertise Sought	Outcome Indicator(s)
2016–2017	Before-school PA program	• Update marketing plan to include new PA opportunities • Set up supervisory rotation schedule for physical education staff and other adults • Set up activity rotation schedule to refresh activity menu	• Interns from local university program • School wellness council • Parent volunteers • Paraprofessionals	• Improved access to PA venues • Increased number of students engaging in health-optimizing PA
2017–2018	Classroom PA breaks	• Find/develop classroom teacher resources • Work with school manager to schedule time for ongoing staff development for classroom teachers • Develop schedule for introducing and modeling PA breaks to staff • Plan and present rationale for infusing PA breaks to classroom staff • Develop and conduct school staff interest survey about after-school staff wellness/activities program (i.e., features, activity preferences, preferred times and days) • Survey expertise among the school's parents for potential instructional/wellness support	• Classroom teacher colleagues • Physical education teacher • Education program faculty member	• Percentage of teachers using PA breaks at least once a day
2018–2019	School staff wellness program	• Meet with school system's human resources office to determine possibility of designing program participation incentive program for school staff. • Secure/schedule classroom and activity spaces • Develop activity schedule for staff program • Recruit expert activities instructor(s) (e.g., fitness/yoga/strength instructors)	• Community activity experts from health/fitness clubs, etc. • Parents • Local healthcare provider(s) • Interns from university programs in physical education/exercise science	• Percentage of school staff members participating in program at least once a week
2019–2020	Family/community involvement	• Survey school's families on level of interest in having PA program(s) access on school campus, and preferred program types • Determine percentage of families who live within 2 miles of school • Plan calendar of special family events (e.g., family activity night, family fun run, family hike on local mountain trails) • Develop announcement messaging for each event • Schedule busing for off-campus transportation to hiking trailhead • Work with local community program (e.g., parks and recreation) for use of gymnasium on Saturdays and Sundays • Develop shared-use agreement	• Student council members • Parent organization • Classroom colleagues • Community organizations	• Improved access to school's PA venues during nonschool hours and weekends • Delivery of three family events during nonschool hours

Before school, recess, lunch periods, and immediately after school are times when the focus is primarily on promoting physical activity levels of students. For safety and liability reasons, adult supervision is required at all times from when students arrive at school until they leave the school at the end of the school day. Thus, recruiting and training adults to assist with overseeing the various activity venues and time outside of physical education lessons is essential. Support staff, volunteers (i.e., custodians, paraprofessionals, parents), and classroom colleagues can contribute in various ways. For example, classroom teachers and paraprofessionals typically will have scheduled playground supervision duties during recess and lunch periods (on a rotating basis). Moreover, parent volunteers in primary schools may also be available and asked to assist.

As PAL, the physical educator can organize short professional development training sessions to help the adults take on a new role as physical activity facilitator while supervising. The adults can be shown how and where to move equipment carts at the onset of recess or before-school time, and set up the activity zones with signage. Getting the adult volunteers/paraprofessionals engaged in some of the activities and showing them how to play each activity during the professional development sessions enables them to help students get started. As Kretchmar (2012) recently argued, genuine play is something that may be increasingly foreign to many of today's children and youth, to the point where they could be described as having a play disability. They may lack the needed knowledge, skill, and interest in playing even the most common games (e.g., hopscotch, four-square, jump rope games) that historically have been part of the play landscape. Adults can also be trained to help diffuse any conflicts between students that might arrive. Beyond reminding students about overall conduct, they can also offer simple conflict resolution strategies when minor activity-specific problems occur (e.g., rock-paper-scissors, do-over).

Recess and lunch periods are generally regarded as times for free play with minimal adult direction. However, adult supervisors can be activity facilitators as well; that is, they can be encouraged to move about the playgrounds and/or gymnasium to approach students and "prompt/encourage" them to come play, and even briefly participate or assist periodically in the students' activity (e.g., turning a long jump rope). In many cases, simply walking over to a group of students with a jump rope or ball and suggesting an activity is all that is needed. Related to this, the adult facilitators are also a powerful source of social reinforcement, by verbally and nonverbally recognizing both "good play" and appropriate conduct by students. The PAL can help the adult facilitators by providing them with 4" by 6" index cards that have multiple examples of verbal and nonverbal positive reinforcement (see **Figure 2.6**). The overarching goal here is not to have highly structured recess but rather a highly active recess.

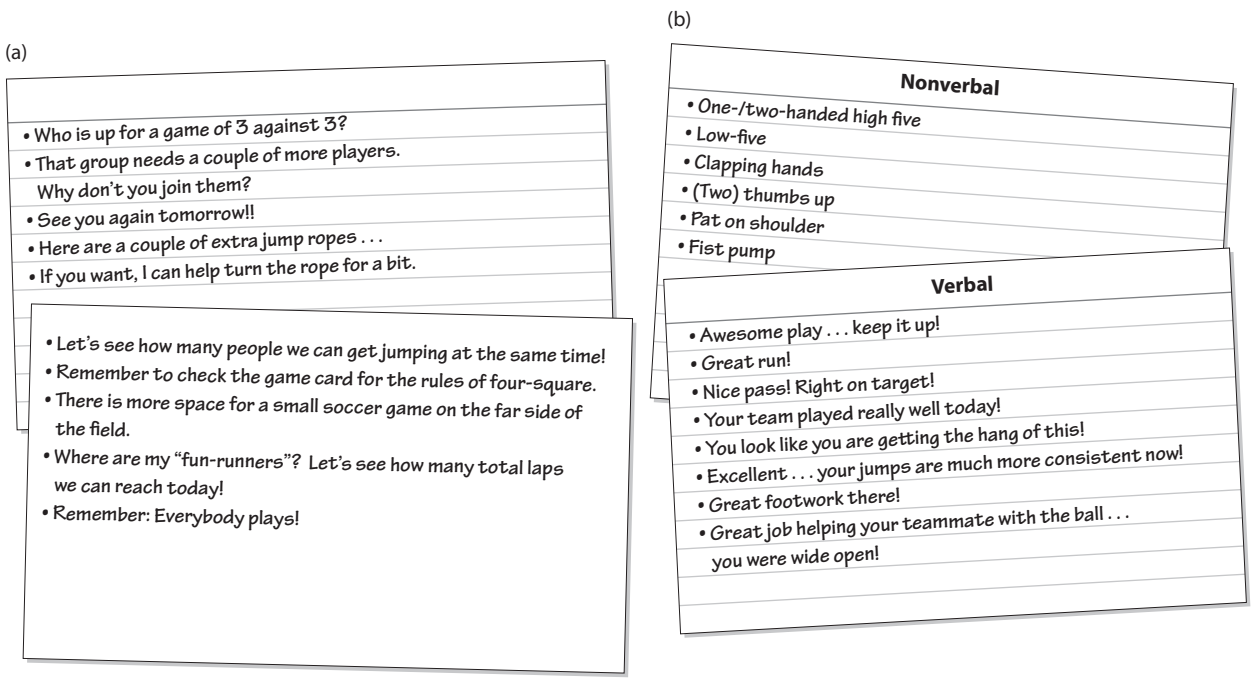


FIGURE 2.6 Sample cue cards for adult facilitator. (a) Sample prompts to encourage students to physical activity. (b) Sample verbal and nonverbal social reinforcement statements.

Courtesy of Leslie Hicks.

FIGURE 2.7 Two recess equipment carts with activity cards.

Providing appropriate equipment along with having clean and attractive activity venues can help increase students' physical activity levels. For example, there is good evidence that adding playground markings on primary school playgrounds can significantly increase students' activity levels (e.g., Ridgers, Stratton, Fairclough, & Twisk, 2007; Stratton & Mullan, 2005). In Chandler, Arizona, through grant support, the school district has funded the purchase of equipment and equipment carts dedicated solely for use during recess periods (see **Figure 2.7a**). Having activity cards located on the equipment cart during recess can help encourage game play engagement (see Figure 2.7b). Especially when introducing new games, students can be directed to review these cards to familiarize themselves with the various activities.

Depending on the size of the school's student population, the type and size of its activity venues, and the number of students present in the venues (i.e., gymnasiums, grass fields, and hardtop areas) the areas may need to be divided into different activity zones. This not only provides students with activity choices but also provides boundaries that will help keep students from interfering with the activity in adjacent areas. By way of clear signage, students will learn to differentiate between the areas designated for different activities. Students will have certain activities that will always be mainstays (e.g., soccer, basketball). However, we suggest that the activity choices be rotated periodically to maintain student interest. Student favorites can be determined by way of a quick informal survey of a sample of the school's students, administered with assistance from classroom teachers.

Relative to before- and after-school times, programs that are developed and organized by the school itself will have "first right" to the use of the facilities. During afternoon and evening hours, the gymnasium may also be used for other already scheduled activities. Thus, working with those who schedule such activities will help ensure that any out-of-class programming finds a place on the schedule.

After-school programs are a potentially large source for physical activity. Many after-school programs may be delivered by outside agencies or private companies that have contracted with the school (or school system). The outside group provides the service of delivering the after-school program in exchange for the use of the school's facility. When connecting with the personnel from the after-school program, the physical educator can first determine the overall focus of the program and the extent to which physical activity is a built-in program component. Based on that assessment, the physical educator can offer guidance and suggestions for how physical activity can be built into the schedule more prominently.

Collaborate with Outside Experts, Organizations, and Agencies

Implementing CSPAPs cannot be successful without tapping into the resources and expertise in the community/

region surrounding the school. Knowing what human and programmatic resources/programs are available and recruiting this expertise is critical for at least two reasons. First, it helps in promoting/encouraging physical activity beyond the school campus to upcoming physical activity–based events and other programs available in the surrounding community. For example, physical educators can announce an upcoming 5K–10K walk–run event, encourage students to join a nature hike with their families in a local nature preserve, or announce the availability of local physical activity–based programs scheduled during the school's vacation periods. One example is the KidSpirit program at Oregon State University. For a nominal fee, KidSpirit offers programs ranging from sessions held on 1-day school holidays to 4-week summer day camps held at the university. Traditionally, most sessions are centered on physical activities; in recent years, however, KidSpirit has infused sessions focusing on related health behaviors (e.g., healthy eating, cooking, nutrition). Similarly, the Sports Arena at the University of Limerick (Ireland) offers activity opportunities for children and youth after school, on weekends, and during school holidays.

Second, it can help the physical educator with recruiting people with the needed qualifications and expertise who can help deliver workshops or classes, or organize special events at the school during after-school hours. For example, if a teacher lacks the content background and/or equipment to teach golf or tennis, local instructors might be interested to offer instruction through workshops for either students or school staff. A parent or fitness instructor at a local club might be interested in offering a weekly fitness activity to the school's teachers and support staff as part of the school's staff wellness program. A local healthcare facility might be recruited to provide periodic health screenings to that same staff.

Depending on the local context, physical educators can draw from the local and regional experts and organizations listed in **Table 2.2**. In many ways, physical educators in their role as PALs become brokers of resources. We do not want to fool you: The outlay of time and energy early on in getting a CSPAP started is high. But utilizing the available resources within and beyond the school to the fullest extent possible will help the physical educator reach the point where he or she can increasingly rely on partners and collaborators.

TABLE 2.2 Community and Regional Expertise That Can Support CSPAPs

School-Based and Outside Expertise and Organizations	Possible Assistance
Other subject-/grade-level teachers	Following some training and professional development, classroom teachers can help increase physical activity by infusing brief 3- to 5-minute physical activity breaks. This is especially critical in schools that use 80- to 95-minute block periods.
Paraprofessionals	Promote physical activity during lunch or recess through prompting, encouragement, and facilitation among all students, including those with special needs; transport physical activity equipment to and from activity areas before, during, and after school.
School/parent organizations	Help advocate for CSPAP efforts at school board meetings and opportunities outside of school; fund new initiatives aimed at promoting physical activity (e.g., purchasing pedometers).
Parents/guardians	Especially in primary schools, parents will volunteer in various ways. Depending on their own background, they can help advocate at school board meetings, assist with school-based fundraisers, serve as representative on the school wellness council, recruit other experts, assist on playgrounds during recess period, or facilitate physical activity. Some parents may have the expertise to teach certain types of group exercise activities (e.g., Zumba, yoga, Pilates).
School food services staff	Promote physical activity along with healthy eating habits among students, teachers, and school staff; publicize locations, times, and dates of farmers markets in the community; speak at meetings of policy makers.
School and local media	Help inform the public and promote the school's efforts in supporting students' physical activity through feature articles, interviews, and television.
School health experts and local healthcare providers	Promote healthy behavior practices, through presentations and marketing; offer services such as periodic health screening for school staff, speak at meetings of policy makers, etc. For example, local physicians/medical specialists can speak to the need for physical activity for health, and the risks of being sedentary for extended periods of time. Others might help present to the school's parents about the critical role of physical activity and good eating habits in ensuring a better quality of life, or break down the myths of fad diets.

(*continues*)

TABLE 2.2 Community and Regional Expertise That Can Support CSPAPs (*Continued*)

School-Based and Outside Expertise and Organizations	Possible Assistance
School technology specialists	Publicize and market CSPAP efforts through the school website and social media; help with creating web-based prompts to promote physical activity during nonschool hours and weekends.
Community organizations	Offer after-school programming; make presentations at school during special events and staff meetings.
Coaches and instructors from local sport clubs and other recreation programs	Lend expertise during after-school programs; offer sport-specific clinics at school during holiday breaks; help strengthen content knowledge of the physical educator on specific sports; encourage use of the school's physical activity facilities by offering activity programs during evening hours and on weekends.
Community/state health agencies and physical activity advocates	Provide fact sheets; speak in support of school program at meetings with policy makers.
Local fitness club and recreation center staff	Provide content expertise to broaden the options in programming physical activity for students, teachers, school support staff, and parents.
Registered dieticians	Help work with school food service personnel; develop promotional prompts for use at school to promote healthy eating; optimize food choices at school; assess and counsel students and school staff on eating habits (i.e., type and amounts of food and beverage intake); speak to policy makers on issues related to school's food service (e.g., use of vending machines, pros and cons of competitive food contracts).
Disability sport organizations and adapted physical education (APE) experts	Assist in ensuring that physical activity opportunities of students with special needs are promoted and supported as much as those for typically developing peers; offer training to peer tutors and paraprofessionals to assist students with special needs; help organize physical activity–based special events at school for students with special needs.
Physical education teacher education (PETE) faculty	Provide assistance in setting up before-, during-, and after-school physical activity programming; provide unpaid interns who can deliver activity-based sessions for school's students; assess the impact of extended school-based physical activity opportunities.
Exercise science and exercise and wellness experts (e.g., motor learning/development experts; exercise physiology, exercise psychology)	Provide content knowledge expertise specific to issues related to physical activity; supply unpaid interns who can deliver activity-based information sessions for the school's students, teachers, support staff, and families; speak/advocate for physical activity programming before local and state policy makers.

Learn Sport, Games, Dance, and Other Movement Forms as a Source of Lifelong Physical Activity

Physical educators are expected to have a broad and in-depth knowledge of the subject matter (i.e., physically active motor play). This includes not only the knowledge needed to perform the activities but also the knowledge needed to teach the activities. Ball, Thames, and Phelps (2008) referred to these as **common content knowledge (CCK)** and **specialized content knowledge (SCK)**, respectively. Ward (2011) noted, "While CCK is acquired in the process of learning to play and playing a game; SCK is typically not acquired by playing (i.e., performing)" (p. 64).

Although traditional sports such basketball and soccer may be popular with many students, other students may be interested in learning a host of other games and activities. In order to attract more students to being active physically, teachers must have a sufficient CK background in other activities to help them gain beginning competence so that they are more likely to continue to seek it out. Thus, part of building a CSPAP will require developing a reasonably strong CCK and SCK across the various sports, lifetime activities, fitness content, dance content, and so on. Beyond personal participation, formal coursework, membership in professional organizations, conference attendance, and specialized workshops on today's technology afford physical education specialists ample opportunities to gain important knowledge. Ward (2009) proposed that our field's CK can be classified into the following four domains: (1) rules, etiquette, and safety; (2) technique and tactics; (3) errors; and (4) instructional representations and tasks (i.e., the tasks and progressions used to teach a particular activity). Each of these domains is essential in designing

the appropriate types of activity experiences so that participating children, youth, and adults experience success.

Learning Experience 2.6

Strengthening your subject matter knowledge: Select an activity (e.g., swimming, Tae Bo, Ultimate Frisbee, golf, dance, or weight training) of which you have no common content knowledge. Develop a plan of action to help strengthen your common content knowledge. Describe your sources of information and types of experiences you had in gaining this new knowledge. As you go through the process of learning about this activity, describe your experiences as a learner. How might this help you in terms of instructing others in this new activity?

Promote and Market Out-of-Class Physical Activity Programming

In the face of all the ways in which people in most countries have managed to squeeze physical activity out of their daily lives (i.e., escalators, computer games, remote controls, drive-through restaurants), encouraging children and youth to choose fun and health-optimizing physical activity over more sedentary activities is essential. Effective marketing strategies lie at the heart of promoting commercial products, where the overall goal is to make money for the company that sells the product.

Social marketing employs " . . . commercial marketing technologies to the analysis, planning, execution, and evaluation of programs designed to influence voluntary behavior of target audiences in order to improve their personal welfare and that of society" (Andreasen, 1995, p. 7). Social marketing has been employed to change other health behaviors such as preventing/reducing tobacco use and increasing immunizations, and can be used to change the physical activity behavior of children, youth, and adults. The key difference between commercial and social marketing is that the outcome benefits in the former come to the products' sellers, whereas in the latter the benefits come to the people who engage in the behavior. In the case of physical activity (the product), the "consumer" (and the larger society) benefits from its use.

Social marketing offers physical educators several key strategies to help promote and implement a CSPAP. It is essential for physical educators to understand the physical activity interests and needs of student, teachers, and support staff. Key social marketing principles pertinent for physical educators are product, price, place, and promotion.

Product refers to physical activity in all its various forms that can lead to improved health and well-being, from health-related fitness content to lifetime activities (e.g., biking, hiking, rock climbing, golf), sport (e.g., soccer, basketball, tennis, volleyball), and dance (e.g., hip-hop, ballroom, country and western). Metzler, McKenzie, van der Mars, Barrett-Williams, and Ellis (2013b) reminded us that how we present our product will help students decide whether they want more of it or make every effort to avoid it. Across physical education lessons and beyond, our product in its various forms should appeal to all students; it must be fun, developmentally appropriate, provide for success (i.e., the right level of challenge), be inclusive, and provide choices. The key is for physical educators to make the physical activity product as attractive as possible in the physical education lessons and beyond.

Price refers to costs and barriers involved in engaging in the behavior (e.g., money, time, effort, transportation) relative to its benefits. Times before school, recess, and lunch periods are free to all students. Assuming that transportation is not a barrier, access to quality after-school programs that are free, as opposed to fee-based, may attract more students as well. In many cases, if a school's facility is not an option for after-school programming, nearby community/recreation centers may be a viable alternative. The school could partner with and offer access to the center. Such partnerships are especially critical for economically disadvantaged children and youth.

Place refers to establishing the space and time for students to access the physical activity venues. The goal here is to make these easy to find, usable, and accessible throughout the school day. That is, students who typically arrive at school 45 minutes ahead of the first lesson, prior to the start of the first period, would know where they can come to play. Equipment should be out and ready for use. Importantly, the evidence is overwhelming that girls are less active than boys. Thus, it is especially important to ensure that barriers such as access, opportunity, and activity choice are eliminated. It may be useful to designate certain activity areas as "girls only" areas.

Promotion refers to any efforts to let the students know about all opportunities, types of activities, locations, and times when they can come be active. Options for doing so abound. Just like in commercial marketing, visual "points of decision" prompts that encourage physical activity can be provided throughout the school campus, through strategically placed signage located in high traffic areas (e.g., student drop-off areas, in and near changing rooms, in lunch rooms, at school entrances).

Similarly, naming the school's program for increasing physical activity during out-of-class times allows for it to be "branded." Branding is a key principle in commercial marketing (think of company logos) that helps with product/name recognition. This is a key factor in drawing persons to a product. Thus, all signage should include the activity program's name and/or logo (which could be designed by the students themselves).

Auditory prompts can be provided as well by way of daily announcements through the public address (PA) system, closed circuit school TV, and the like. The entire teaching staff

in the school can help promote participation with frequent end-of-class reminders. School assemblies and other special events (e.g., open houses, family fitness nights, curriculum night) are another opportunity for such promotion. Local print and television media can be invited to do feature stories on the school's efforts to be an activity-friendly place for all.

Finally, attention can be drawn to all of the school's physical activity programming by way of the various types of technologies. For example the school's and CSPAP's website are a key source of information for students and families. A web link like this can include information about the times, locations, and days of the week that the program is held as well as information about what new activities might be included in the upcoming week. Facebook and Twitter also offer a way to publicize the programming.

Increase Administrator and School Staff Knowledge of and Support for Physical Activity

In many countries today, schools appear increasingly fixated on improving students' academic achievement. School managers appear to lack the needed background knowledge about the importance of physical activity as a learned behavior and the central role that schools play (e.g., Lounsbery, McKenzie, Trost, & Smith, 2011; Lounsbery, McKenzie, Morrow, Monnat, & Holt, 2013; Sallis, 2010). They also likely lack a deep understanding of what a quality physical education program can and should look like (let alone a CSPAP). Thus, it is imperative that they become more informed. The question is: Which person is best positioned to educate them? Physical educators are the experts when it comes to promoting and informing the public about the program, and physical activity in general.

Learning Experience 2.7

Develop a short survey that you would give out to all teachers at your school to determine their knowledge of such aspects as: (1) the role and purpose of physical education, (2) physical activity benefits, (3) their own experiences in physical education when a student, and (4) how physical activity might benefit them in the classroom.

Compile/summarize the survey results. What are the key findings? Do the teachers have a solid understanding of our field and its importance? What is lacking in their knowledge and understanding?

A proactive and ongoing approach to doing this would include providing regular updates about topics such as: (1) quality physical education, (2) physical activity and its many health benefits, (3) the relationship of physical education (and physical activity) and academic achievement, and (4) programmatic efforts to maximize physical activity opportunities. The more informed school managers and teaching colleagues are about this, the more likely they are to begin to view the physical educator and the program as a central and indispensable part of the school.

Inform and Educate Parents, Guardians, Other Family Members, and Members of the Community

Much like the adults within the school, the family of the students and the public in the surrounding community can benefit from having a nearby school be a hub for physical activity and related activities. Unless they are informed about what the CSPAP has to offer, however, they are less likely to view it as an essential part of the community, visit the campus and enjoy the access and opportunity for physical activity, and support it.

Periodic events held at the school that target students and adults are more likely to attract them to the campus. In addition to word of mouth from students to parents, website announcements, school newsletter announcements, promotional campaigns by way of local television stations, the local newspaper, and messaging on the school's marquee board are all ways in which community members can learn about ongoing programming and special events.

Working with Students Versus Adults

There is considerable overlap in the skills and knowledge needed for developing before-, during- and after-school programming for students and a school employee physical activity/wellness program. Both require effective use of generic instructional skills such as being organized and prepared, starting on time, designing appropriate activities using clear demonstrations, using encouragement, and prompting and providing quality performance feedback (both positive and corrective). These are important regardless of the topic or the type of learners.

However, there is a fundamental difference from the perspective of knowing your learner. Adults (in this case the school employees) approach learning differently than do children and youth. Whoever is recruited to work with the school's staff members (the physical educator or outside guest instructors/presenters) will want to be mindful of such differences.

Cercone (2008) suggested the following general instructional principles and strategies when working with adults. First, although adults typically are *more self-directed and motivated*, they become more resistant to learning/participation if they perceive that the instructor tries to impose information, ideas, or actions. Instead, instructors will want to design appropriately paced activities that offer success, and only gradually move from simple (or less demanding) to more complex tasks. In addition, adults will look for the instructor to go out of his or her way to show interest in them, develop rapport, be approachable, and encourage questions. Adults

will quickly determine whether the instructor is actually listening to the participants, and they will appreciate encouragement, along with constructive and specific positive and corrective feedback.

Second, adult learners bring with them *a longer history of life experiences*. The instructor/presenter will want to provide ample opportunity to participating employees to use that base of experience as a springboard toward scaffolding the new knowledge/understanding and skills into their personal experience base.

Third, in order to learn the new skills and knowledge, adult learners *need to see the relevance* of it. Getting them to regularly reflect on their experience before they came to the program and how the new skills and knowledge have affected their life can help them see the relevance and importance of the new skills, knowledge, and experiences.

Fourth, compared to children and youth, adults generally are *more goal-oriented*. Physical educators can tap into this readiness to learn by getting the adult learners to recognize the relevance of the new knowledge and skills.

Fifth, adults tend to be *more practical.* Again, because of their life experiences, adult learners are more likely to prefer and relate to hands-on active learning, so they can determine how it would fit in their life's context.

Finally, not unlike students in primary and post-primary schools, adult learners *want to be respected*. Adults come to feel respected if/when they see that the instructor sees them more as colleagues, as opposed to students in the traditional sense. Taking genuine interest in the participating employees, and encouraging them to express their ideas, experiences, concerns, and difficulties whenever possible, are effective strategies for creating that type of relationship.

CSPAPs: Getting Started

We have attempted to show how today's physical education programs are perhaps even more essential to schools and society at large by explaining (1) the features of CSPAPs, (2) why CSPAPs are important to build, (3) how to reconceptualize the position of traditional physical educators as that of Physical Activity Leaders (PALs), (4) the evidence base underlying implementation of the various CSPAP components, and (5) the skills and knowledge needed for implementing a CSPAP, along with suggested strategies.

Box 2.5 provides a sample listing of various resources that physical educators around the world can use to learn about and gradually create a school environment that vigorously supports physical activity for all students during the school day and beyond.

BOX 2.5 Suggested Resources for Creating Activity-Friendly School Environments

Sample Program Descriptions by Country

- Australia: *Smart Moves* (www.education.qld.gov.au/schools/healthy/docs/planning-smart-moves.pdf)
- Ireland: *Active School Flag* (www.activeschoolflag.ie)
- Finland: *Schools on the Move* (www.liikkuvakoulu.fi/filebank/475-Finnish-schools-on-the-move.pdf)
- Switzerland: *Bewegungsfreundliche Schule* (www.bewegungsfreundlicheschule.ch)
- United States: *Comprehensive School Physical Activity Program* (www.aahperd.org/letsmoveinschool/about/overview.cfm?renderforprint=1)

Programmatic Resources

- *Active and Healthy Schools Program:* www.activeandhealthyschools.com
- NASPE (2011a). *Let's move in school physical education teacher toolkit:* www.aahperd.org/letsmoveinschool/tools/peteachers/index.cfm
- NASPE (2011c). *101 Tips for implementing a comprehensive school physical activity program*: www.aahperd.org/naspe/publications/products/newreleases.cfm?renderforprint=1 (fee-based)
- Partnership for Prevention (2008). *School-based physical education: Working with schools to increase physical activity among children and adolescents in physical education classes*: www.prevent.org/The-Community-Health-Promotion-Handbook/School-Based-Physical-Education.aspx
- *SPARK:* www.sparkpe.org
- *SPARK—After School:* www.sparkpe.org/after-school

(*continues*)

BOX 2.5 Suggested Resources for Creating Activity-Friendly School Environments (*Continued*)

Classroom Physical Activity Break Resources

- *Take10:* www.take10.net
- Mahar, M. T., Kenny, R. K., Shields, A. T., Scales, D. P., & Collins, G. (2004). *Energizers: Classroom-based physical activities*. Raleigh, NC: North Carolina Department of Public Instruction: www.ecu.edu/cs-hhp/exss/apl.cfm
- Mahar, M. T., Kenny, R. K., Scales, D. P., Shields, A. T., & Miller, T. Y. (2006). *Middle school energizers: Classroom-based physical activities*. Raleigh, NC: North Carolina Department of Public Instruction: www.ecu.edu/cs-hhp/exss/apl.cfm
- Pangrazi, R .P., Beighle, A., & Pangrazi, D. (2008). *Promoting physical activity and health in the classroom.* San Francisco: Benjamin Cummings.
- Pangrazi, R. P. Beighle, A., & Pangrazi, D. 2009). *Activity cards for promoting physical activity and health in the classroom.* San Francisco: Benjamin Cummings.
- Rink, J. E., Hall, T. J., & Williams, L. H. (2010). *Schoolwide physical activity: A comprehensive guide to developing and conducting programs*. Champaign. IL: Human Kinetics.

School Employee Wellness Resources

- Directors of Health Promotion and Education. (2005). *School employee wellness: A guide for protecting the assets of our nation's schools.* Washington, DC: Author.
- *School Alliance for a Healthier Generation (requires no-fee membership):* www.healthiergeneration.org
- *Employee Wellness Toolkit:* www.schools.healthiergeneration.org/_asset/n0rrcr/08-439_EWToolkit.pdf
- *Employee Wellness Interest Survey:* www.schools.healthiergeneration.org/_asset/74qhor/07165_EWInterestSurvey.pdf

CHAPTER SUMMARY

In this chapter we have provided an overview of possible programming strategies to promote physical activity for all students throughout the school day. Although much of the focus was on CSPAPs, as proposed by the National Association for Sport and Physical Education in the United States, many of the features and implementation strategies mirror those of similar efforts in other countries. The key is for physical educators anywhere to determine which aspects of the model presented can be built into the existing program. Given the status of the field in many countries, gradually moving toward CSPAP-like programs constitutes a major step toward increasing physical education programs' credibility.

1. Promotion of health-optimizing physical activity among children and youth throughout the school day is the prime focus of comprehensive school physical activity programs (CSPAPs).
2. CSPAP-like initiatives are being implemented in countries around the globe, including Australia, Finland, Ireland, Germany, and Switzerland.
3. A CSPAP is composed of five components: (1) physical education lessons, (2) physical activity during school, (3) physical activity before and after school, (4) school-based physical activity for school staff, and (5) family and community involvement.
4. The centerpiece feature of a CSPAP is the physical education lesson component.
5. Physical activity opportunities during the school day include: (1) classroom physical activity breaks (e.g., during language arts, math, science), (2) morning and afternoon recess in primary schools, and (3) opportunity for physical activity immediately prior to or after eating lunch.
6. Physical activity before and after school opportunities include: (1) active commuting to and from school, (2) informal recreation or play on school grounds, (3) campus-based after-school programs, (4) after-school activity clubs and intramural sports, and (5) interscholastic sport programs.
7. School employees spend much of the workday at school; their health and wellness can be enhanced through school-based physical activity/wellness programming.
8. Parents and adults in the school's surrounding community can benefit from having access to a school's physical activity facilities.
9. CSPAP's emergence is in part a consequence of increasing levels of overweight and obesity across all age groups. This has resulted in health-optimizing physical activity being accepted as a legitimate program outcome for school physical education. Although such programs are receiving widespread support from outside organizations, they remain marginalized relative to other school subjects.
10. Increased physical activity (along with physical education) does not affect academic achievement negatively,

and decreased time in physical education does not automatically translate into improved academic achievement.

11. Physical educators in their role as Physical Activity Leader would coordinate, oversee, and facilitate the CSPAP.
12. There is substantial empirical evidence that demonstrates the efficacy of student-focused CSPAP components (e.g., classroom activity breaks, active recess and lunch periods).
13. Some of the skills and knowledge needed for delivering quality physical education programs do transfer to planning and implementing a CSPAP, including sound management and organization skills, subject matter content knowledge, and pedagogical content knowledge.
14. CSPAP implementation requires additional skills, including (1) coordinating before-, during-, and after-school physical activity programming through recruitment and training of other school staff and parent volunteers in the promotion of physical activity; (2) recruiting and collaborating with experts, agencies, and organization in the community; (3) using social marketing techniques to promote physical activity beyond physical education lessons; (4) raising awareness of the importance of physical activity among classroom colleagues and school (system) managers; and (5) informing and educating parents, guardians, other family members, and members of the community about physical activity opportunities and healthy lifestyles.

When working with school staff and other adults in the community, physical educators should be mindful of the unique differences in working with adults compared to children and youth because each approaches the learning of new skills and knowledge in different ways. Adults tend to be more self-directed and motivated, have more life experiences, want to see the relevance of the learning experiences, are more goal-oriented, are practical, and want to be seen more as colleagues of the instructor.

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