

# Physical Activity and Physical Education in California Schools

## Perceptions, barriers and opportunities among California school board members

### SURVEY REPORT

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Prepared June 2009 by:



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## OVERVIEW

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In 2008, the California School Boards Association (CSBA) and California Project LEAN (Leaders Encouraging Activity and Nutrition) (CPL) initiated a joint effort funded by The California Endowment to support school district and county office of education (COE) decision makers to strengthen physical activity and physical education (P.E.) in schools. Research shows that students who participate in daily physical activity exhibit a more positive attitude toward school, better attendance and increased academic performance.<sup>1</sup> However, youth are less physically active than ever before.<sup>2</sup> Nearly 40 percent of California's youth are not physically fit,<sup>3</sup> and the prevalence of obesity among school-age youth has more than doubled for children aged 6-11 years (from 7 percent to 17 percent) and tripled for adolescents aged 12-19 years (from 5 percent to 18 percent) in the past 30 years.<sup>4</sup>

Schools play an important role in influencing student physical activity behaviors and promoting cognitive learning related to lifelong participation in physical activity. They are also in a unique position to provide a safe environment for physical activity opportunities before, during and after the school day. Schools with numerous physical activity opportunities and quality P.E. programs may see an increase in student concentration, a reduction in disruptive behaviors and improved academic performance.<sup>5</sup> Further, quality physical activity and P.E. programs can contribute to the prevention of obesity and chronic disease.<sup>6</sup>

As members of the school governance team, school board members can consider adopting, supporting and monitoring comprehensive policies and programs that strengthen opportunities for students to be physically active, healthy and ready to learn. School board members have an opportunity to support physical activity through each of their major areas of responsibility:

- 1) Setting Direction: In establishing a district/COE vision, the school board can emphasize student wellness and work to develop an understanding among the governance team (e.g. school board members and district administrators) of the importance of quality P.E. and physical activity, and its link to academic achievement.
- 2) Establishing Structure: The school board must ensure that the district/COE has the structure and resources necessary to effectively implement policies and programs. The board can adopt and align P.E. and physical activity board policies, establish age-appropriate curricular goals, and ensure the district/COE explores funding opportunities to increase P.E. and physical activity opportunities before, during, and after school.
- 3) Providing Support: While school boards do not implement programs, they can support the superintendent's and staff's work to implement programs and policies as they carry out the direction of the board. The board can align decisions and resources with the district's priorities and goals to improve P.E. and physical activity.
- 4) Ensure Accountability: As community representatives, school boards are accountable to the public for the district's/COE's progress towards established goals. The school governance team can establish effective processes for monitoring and communicating the progress of the implementation of P.E. and physical activity policies and programs to the local community.

- 5) Acting as Community Leaders: School boards have a responsibility to act as community leaders and involve the community in meaningful ways in efforts to improve student learning. The board can collaborate with community partners to make informed policy decisions, maximize district/COE resources and ensure a coordinated approach is used to implement P.E. and physical activity policies and programs in schools.

CSBA and CPL have collaborated through a multi-year partnership to increase the adoption, implementation, monitoring, and evaluation of healthy school nutrition and physical activity policies. An important outcome of their initial efforts was the publication of “Student Wellness: A Healthy Food and Physical Activity Policy Resource Guide” for school board members and other policy makers.

A guiding principle of CSBA’s and CPL’s partnership is to base their efforts to influence policy adoption, implementation, monitoring, and evaluation on factors that motivate school board members. Therefore, CSBA and CPL conducted a survey of California school board members in January 2009 to (1) assess school board member perceptions of the importance of student physical activity, and existing district/COE physical activity practices, (2) identify barriers and opportunities that may influence decision-making, and (3) assess district readiness to adopt, implement, monitor, and evaluate physical activity policies. The survey was designed to guide the development policies, trainings, and resources to strengthen P.E. and physical activity opportunities in California schools.

CPL and CSBA created a statewide advisory group to ensure coordination and collaboration of efforts to increase school-based physical activity. The advisory group included leaders from the California Department of Public Health, the California Department of Education, California Center for Public Health Advocacy, California Taskforce on Youth and Workplace Wellness, Association of California School Administrators, California Teachers’ Association, Commission on Teacher Credentialing, California Association of Health, Physical Education, Recreation and Dance, Safe Routes to School National Partnership, and national, state and community obesity prevention organizations (including researchers and evaluators).

This report presents the survey design, methodology, summary of findings and discussion of how findings can be used to provide the governance team with resources to support a healthy school environment, including school board member trainings, sample policies, policy briefs, facts sheets and case studies. This project builds upon CSBA and CPL’s prior work and utilizes their local and statewide leadership, credibility and influence to initiate and support systemic change in school districts/COEs across California towards increasing youth physical activity and improving P.E.

## **SURVEY DESIGN**

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The 26 question “Physical Activity and Physical Education in California Schools” survey (Appendix 1) was developed by CPL and CSBA staff with input from physical activity and P.E. experts, an environmental scan of physical activity and P.E. research and resources, feedback from CPL regional staff about barriers and best practices, and a solicitation survey for board members at

CSBA's Annual Education Conference to understand physical activity in the context of school wellness. The survey was reviewed for content validity by both CPL and CSBA staff, as well as physical activity and P.E. experts at the national, state and/or regional level (including Jim Sallis with Active Living Research, Thom McKenzie with San Diego State University, Deb Hubsmith with the National Safe Routes to School Partnership and Amanda Bloom with the California Center for Public Health Advocacy). The survey was piloted by CSBA's School Health Advisory Committee (SHAC) consisting of school board members, superintendents and school health professionals.

## **SURVEY METHODOLOGY**

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School board members in the CSBA database (Imis, 2009) were invited to participate in the survey via a personalized e-mail message sent on January 15, 2009. The survey included an introductory letter explaining the purpose of the survey, the time required to complete the survey and information that the survey results would be kept confidential; the letter was signed by CSBA's Assistant Executive Director of Governance and Policy, Martin Gonzalez and CPL's Program Chief, Peggy Agron. Per CSBA's communications protocol, one e-mail was sent out on January 23, 2009 to CSBA board members and a second survey notification message embedded within a larger CSBA marketing e-blast to board members on February 9, 2009. The survey closed on February 12, 2009. The survey was administered and analyzed using Survey Monkey, a web-based survey tool ([www.surveymonkey.com](http://www.surveymonkey.com), Portland, OR). Complete survey results are reported in Appendix 2.

Obtaining information from school board members about policies and practices in their districts/COEs was not considered research involving human subjects and therefore was not subject to an institutional review board, per the Public Health Institute's policy.

## **DEMOGRAPHICS**

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The online survey generated 339 responses of 2,669 board members for a 13 percent response rate. Respondents represented districts from every CSBA and CPL region in California and from 49 of 58 counties. Survey respondents represented small, medium and large school districts: 26 percent of respondents serve districts with an average daily attendance (ADA) of 1,000 students or less, 31 percent with an ADA between 1,001-5,000 students, 31 percent with an ADA between 5,001-20,000 students, and 12 percent with more than 20,000 students. Respondents also serve in districts with a variety of grade levels, including 44 percent elementary and/or middle school districts, 8 percent secondary school districts, and 47 percent unified K-12 school districts. Seventeen percent of respondents represented low-income districts (n=59), defined as more than 75 percent of students qualifying for free and reduced-price lunch in the National School Lunch Program (NSLP); and 25 percent of respondents represented high-income districts (n=86), identified by less than 25 percent of the students in the NSLP. Among the school board members who responded, 80 percent were age 46 or older and 53 percent had served on the board for at least five years. This data sample reflects a diverse set of board members, school districts, schools, and students.

## SUMMARY OF FINDINGS

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### Perceptions and district/COE practices

#### *Impact of physical activity*

Respondents held a prevailing belief that physical activity positively impacts a variety of student academic and health outcomes (see Figure 1). For each of the positive impacts measured, a strong majority (over two-thirds) of respondents stated that students will experience a “high” or “moderate” positive impact from physical activity. Over 90 percent of respondents indicated that physical activity has a moderate or high positive impact on the following:

1. Student fitness levels (97 percent)
2. Academic performance (94 percent)
3. Lifetime physical activity behaviors (93 percent)
4. Mental, emotional and social health (91 percent)

#### *Key school wellness issues*

School districts participating in the federal school meal program are required to adopt a local school wellness policy. School board members indicated that the top four school wellness issues their district/COE was currently addressing were:

1. Food and nutrition policies or practices (84 percent)
2. Physical activity and P.E. policies or practices (70 percent)
3. Tobacco and drug prevention (69 percent)
4. Safety issues (injury/violence prevention) (59 percent)

Additional school wellness priorities include mental, emotional and social health (47 percent); obesity prevention (40 percent); oral health (30 percent); asthma management (22 percent); and chronic disease prevention (diabetes, heart disease, high blood pressure) (17 percent).

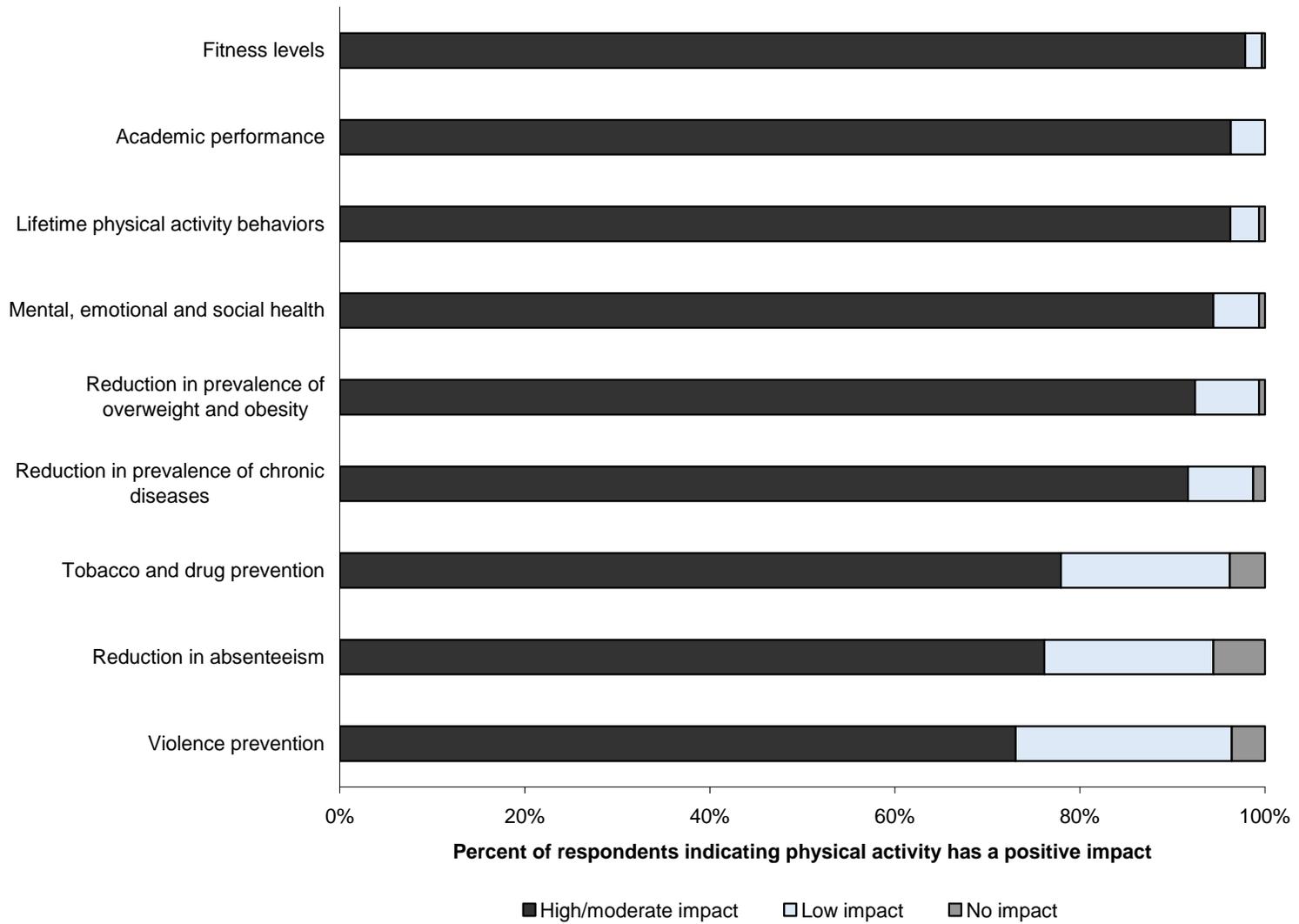
#### *Community access to school physical activity and P.E. facilities*

Fifty-two percent of respondents reported that all of the schools within their district/COE were open to the public outside of school hours for physical activity programs or free play, 36 percent reported that some of their schools were open to the public for physical activity and 9 percent said that none of their schools were open to the public after school hours. A greater percentage of respondents from high-income districts (68 percent) indicated that some or all of their schools were open outside of school hours compared to respondents from low-income districts (44 percent).

The most frequently cited reasons for not opening schools to the public outside school hours were:

1. Lack of staffing (45 percent)
2. Liability concerns (44 percent)
3. Safety concerns (44 percent)
4. Insufficient funding (39 percent)
5. Risk of vandalism (38 percent)
6. Lack of support from other agencies (16 percent)

Figure 1: School board member perceptions of the positive impact of physical activity on student outcomes (n=330)



### *Physical activity and P.E. grant funding*

Respondents indicated whether any schools in their district had received funding for a Safe Routes to School infrastructure grant (15 percent), Carol M. White Physical Education Program (PEP) grant (10 percent), Physical Education Teacher Incentive Program (PETIP) grant (9 percent) and/or a Safe Routes to School non-infrastructure grant (9 percent). Seventy percent of respondents did not know if schools in their district/COE had received one of the above grants.

### *District use of fitness assessment*

The FITNESSGRAM™ is an assessment required by the state to determine student fitness levels in fifth, seventh and ninth grades. When asked if the school board reviews the California physical fitness test results, 27 percent of respondents indicated that their board does review the results, while 36 percent were not sure. For those who indicated that their district reviews the fitness test results, a significant percentage of respondents said they use them to monitor and evaluate progress (e.g., assess new P.E. curriculum) (46 percent). The results are also used to elevate physical activity and P.E. as a district priority (26 percent), identify students or schools in need of extra help (22 percent), create new physical activity and P.E. programs (14 percent) and engage parents or community partners in physical activity programs (13 percent).

## **Barriers**

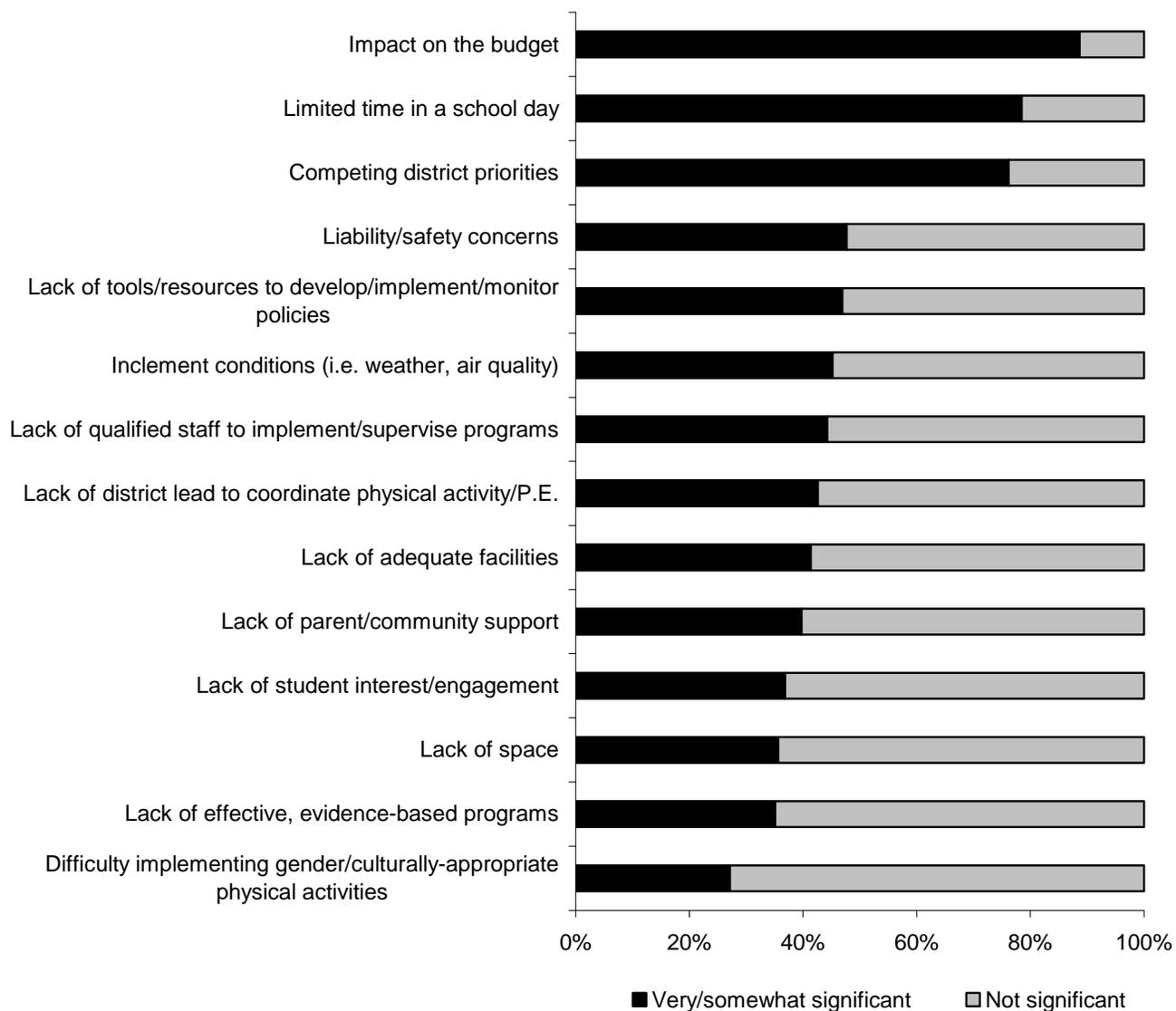
### *Barriers to increasing physical activity*

School board members were asked to identify key barriers and challenges in addressing physical activity and P.E. at the district level (see Figure 2). The three key barriers that the majority of respondents identified as “very significant” or “somewhat significant” were:

1. Impact on the budget (88 percent)
2. Limited time in a school day (77 percent)
3. Competing district priorities (73 percent)

Some additional barriers were considered more likely to be significant (a 20 percentage point difference was considered to be a meaningful difference) by respondents from lower income districts than for respondents from higher income districts, including lack of parent/community support (66 versus 20 percent identified as “very” or “somewhat significant”); lack of tools/resources available to develop, implement and monitor policies and practices (60 versus 40 percent); inclement weather conditions (58 versus 28 percent); and lack of student interest/engagement (54 versus 24 percent).

Figure 2: District barriers and challenges to addressing physical activity and P.E. (n=286)



### ***Impacts on physical activity and P.E. in the 2007-2008 academic year***

School board members were asked if physical activity opportunities in their districts had been impacted in the 2007-08 school year. Of those who responded to the question (n=141), 57 percent indicated at least one negative effect on physical activity opportunities in their district. The most common impacts were an increase in P.E. class size (26 percent), reduction in the amount of time dedicated to P.E. (23 percent) and reduction in staff who oversee physical activity (22 percent). Sixty-seven percent of respondents from low-income districts experienced at least one negative impact as compared to 44 percent of respondents from high-income districts:

1. An increase in P.E. class size (33 percent low-income versus 18 percent high-income)
2. A reduction in the amount of time dedicated to P.E. class (36 percent versus 11 percent)
3. A reduction in equipment/facilities (29 percent versus 11 percent)
4. A reduction in the number of P.E. teachers (26 percent versus 8 percent)
5. A reduction of staff who oversee physical activity opportunities (26 percent versus 14 percent)
6. A reduction of recreational or before/after school sports programs (24 percent versus 10 percent)
7. A reduction/removal of recess (9 percent versus 1 percent)

## **Opportunities**

### ***District monitoring of physical activity and P.E. implementation***

School board member respondents identified the following individuals as most responsible for monitoring implementation of district physical activity and P.E. policies or practices:

1. Assistant superintendents (26 percent)
2. P.E. teachers (16 percent)
3. Principals (14 percent)
4. Superintendents (12 percent)

Additional staff members designated to monitor physical activity and P.E. implementation included athletic directors (5 percent), district P.E. coordinators (5 percent), food services directors (1 percent) and athletic coaches (1 percent). Further, 13 percent of respondents indicated they did not know who was responsible for monitoring implementation, and 3 percent indicated that no one was responsible for monitoring.

### ***Key stakeholders to engage when addressing physical activity and P.E. issues at the district level***

In addition to school board members being key decision makers about physical activity and P.E. issues, respondents indicated other stakeholders also influence decision making, such as:

1. Superintendents (78 percent)
2. Principals (75 percent)
3. P.E. teachers (67 percent)
4. Classroom teachers (62 percent)
5. Parents/parent organizations (57 percent)
6. Athletic coaches (52 percent)
7. Students (29 percent)

### ***Opportunities for strengthening physical activity and P.E. in district policy and practices***

Respondents indicated whether they currently have a district policy or practice adopted from a list of promising policies and/or strategies for improving physical activity during P.E. class, during the school day (other than P.E.), and before and after school (see Figures 3, 4 and 5).

Physical education: The most commonly adopted P.E. policy was, “Schools shall have sufficient and safe P.E. equipment”; the P.E. policy with the lowest rate of adoption was, “Increase the required minutes for P.E. class to meet national recommendations (not less than 300 minutes/10 days in elementary school; not less than 450 minutes/10 days for middle/high school)”; and the P.E. policy with the highest number of “don’t know” responses was, “Students shall engage in moderate to vigorous physical activity for at least 50 percent of P.E. time.”

Physical activity during the school day: The most commonly adopted physical activity during the school day policy was, “Equipment, playground and athletic facilities for physical activity shall be provided and maintained”; and the policy with the lowest rate of adoption and the highest number of respondents indicating that they did not know if the policy was in place was, “Schools shall integrate physical activity into the classroom by establishing physical activity breaks during class or adopting physically active teaching materials.”

Physical activity before/after school: For before and after school physical activity, the most commonly adopted policy was, “Schools shall provide adequate bicycle support facilities”; the policy with the lowest rate of adoption was, “Schools open after school physical activity programs to all children in the neighborhood”; and the highest “don’t know” rate was, “High school sports programs taught by certified coaches who receive professional development.”

### ***The readiness and capacity of school board members to address physical activity issues***

Fewer than half of respondents indicated they felt adequately prepared to improve physical activity policies and practices within their district in the following ways:

1. Introduce physical activity and P.E. topics on their board meeting agendas (48 percent)
2. Develop physical activity and P.E. policies (44 percent)
3. Assure that their district implements physical activity and P.E. policies (41 percent)
4. Assure that their district monitors and evaluates physical activity and P.E. policies (42 percent)

Figure 3 Adoption rates for district policies and strategies for improving P.E. (n=283)

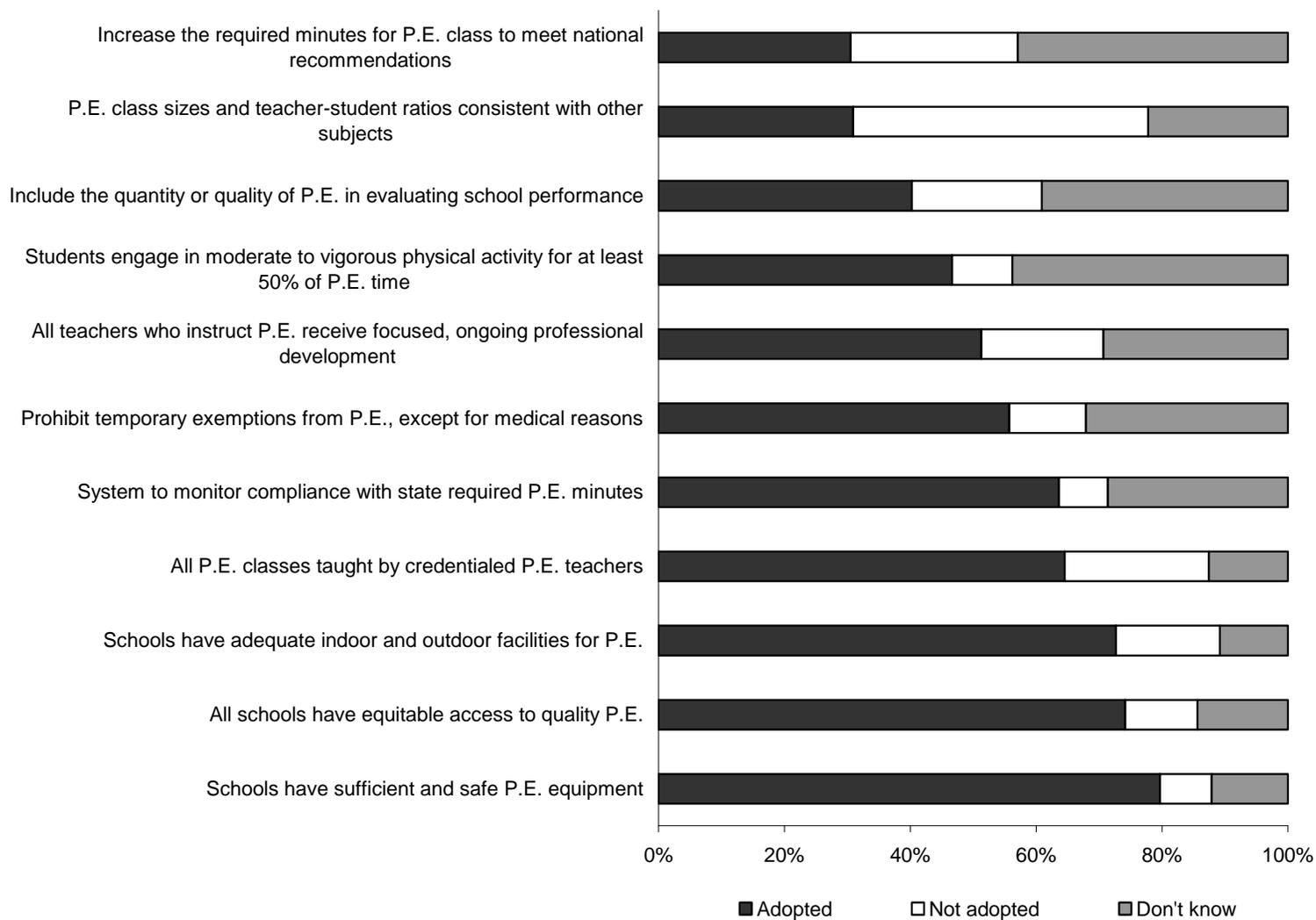


Figure 4: Adoption rates for district policies and strategies for improving physical activity during the school day (other than P.E.) (n=279)

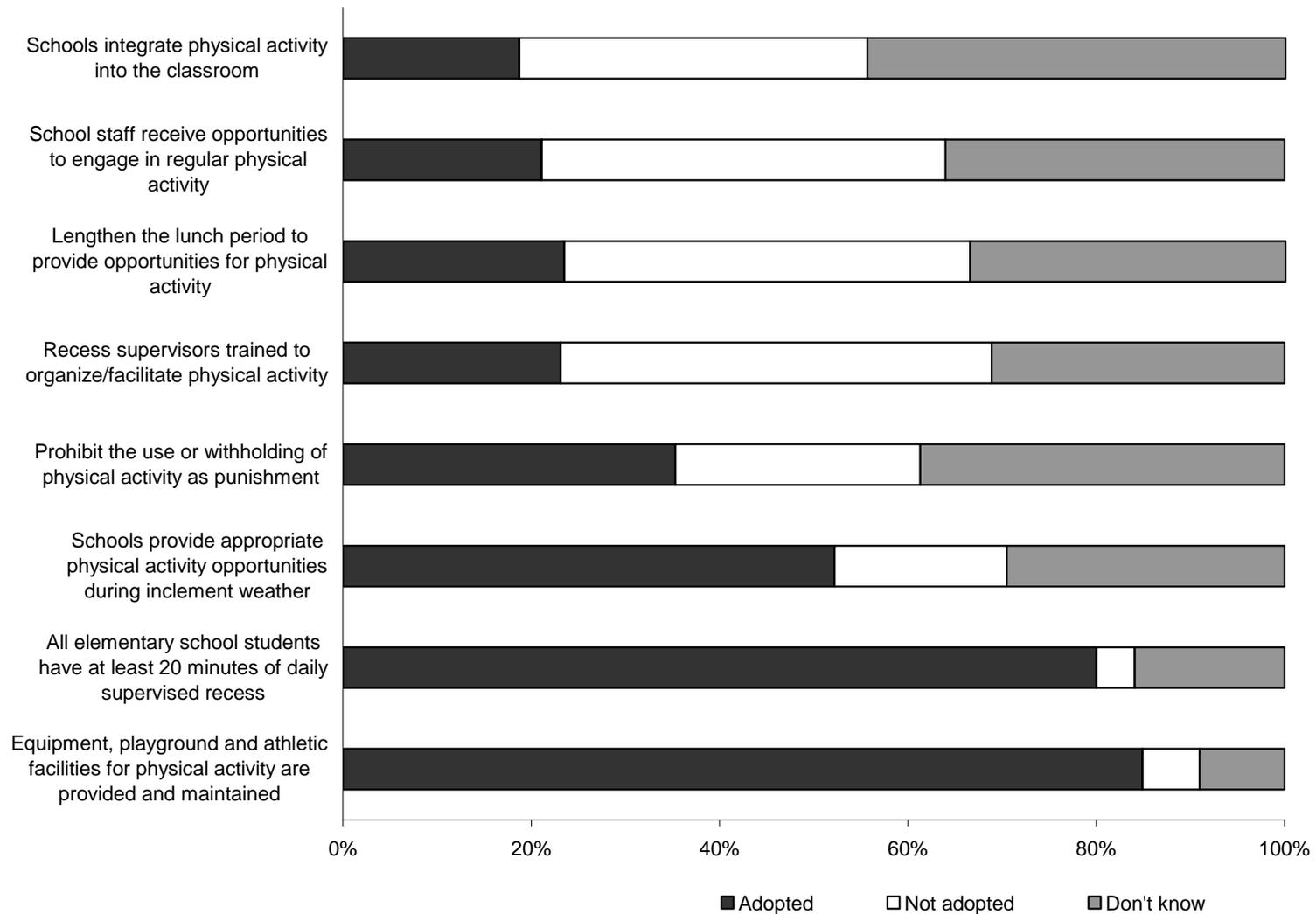
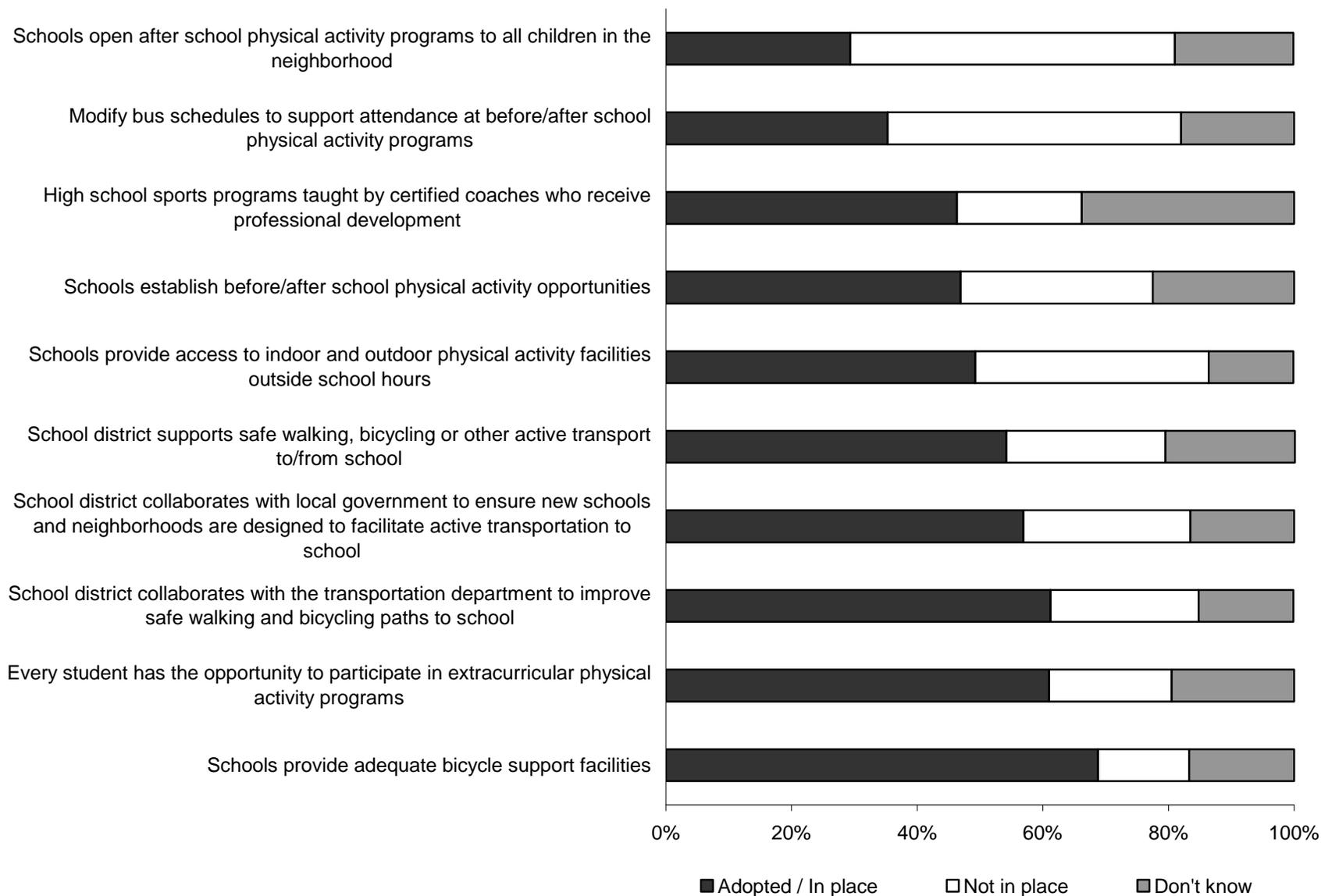


Figure 5: Adoption rates for district policies and strategies for improving physical activity before/after the school day (n=269)



### *Training and technical assistance opportunities*

When board members were asked if they would be interested in receiving training about policies and practices to improve physical activity and P.E. in schools, 47 percent of respondents said that they would be interested, 18 percent of respondents said that another board member or district/COE administrator in their district/COE would be interested and 35 percent said they were not interested. The majority of comments referring to the limited interest in training were due to lack of money to pay for training, the fiscal crisis and budget cuts, and physical activity being a low priority due to the emphasis on No Child Left Behind (The Elementary and Secondary Education Act).

The majority of survey respondents said that the following resources would help prepare them to address physical activity and P.E. policies and practices in their districts:

1. Case studies of other successful school districts (68 percent)
2. Cost-benefit analysis of policies/practices (61 percent)
3. Research on the link between physical activity and P.E. and academic performance (61 percent)
4. Research on the link between physical activity and P.E. and behavioral problems/violence prevention (55 percent)
5. Sample district physical activity and P.E. policies (53 percent)

Other resources included improved understanding of regulations/mandates from the state (48 percent); research on the link between physical activity and P.E. and obesity/overweight (43 percent); implementation and/or monitoring tools (42 percent); advice/guidance from health experts/physicians (40 percent); training school staff (40 percent); information about the health status of students in their district (35 percent); compliance reviews (28 percent); and press coverage of current district policies (7 percent).

## **DISCUSSION**

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The survey showed that board member respondents generally believed there is a positive impact of physical activity on learning, and they cited physical activity and P.E. policies and practices as the second most common wellness priority being addressed in their district. Leveraging optimism about the benefits of physical activity is likely to be helpful in building support within the school community for effective policy adoption, implementation, monitoring, and evaluation.

Despite evidence of interest, respondents indicated many barriers to making physical activity a priority. Budget restrictions, limited time in the school day, and the emphasis on core curriculum classes and test scores represented important barriers that will require systemic change to overcome. Findings suggested that board members from low-income districts had stronger concerns about resources (such as funding, safety, and staffing), even though they have a greater need for more student physical activity options. As districts face budget cuts across the state, these barriers will become more significant. It will be important for community advocates to raise awareness of the importance of physical activity by sharing research on the link between physical activity and academic achievement, as well as cost-effective strategies to increase physical activity.

### ***What school board members can do to improve physical activity and P.E.***

The survey findings show opportunities for providing support to districts/COEs on topics related to physical activity and P.E. CSBA and CPL identified the following evidence-based board policy opportunities based on low adoption rates, lack of knowledge about the policy and/or interest in more information, and the potential impact on student health and/or academic achievement.

#### Physical education

- Ensure students engage in MVPA for at least 30 minutes during the school day, including at least 50 percent of P.E. class time.
- Monitor compliance with state-required P.E. instructional minutes.
- Provide focused, ongoing professional development for all teachers who instruct P.E.

#### Physical activity during school

- Ensure all elementary school students have at least 20 minutes of daily supervised recess.
- Integrate physical activity into the classroom by establishing physical activity breaks during class or infusing physical activity into the curriculum.

#### Physical activity before and after school

- Support safe walking, bicycling and other active transport to/from school.
- Support access to indoor and outdoor physical activity facilities outside school hours.
- Integrate physical activity into before/after school programs and activities.

Because responses indicated the need for cost-effective physical activity and P.E. strategies that do not take time out of the school day or detract from academic achievement, these factors must be considered when working with school boards. Based on the survey, CSBA and CPL will develop written materials and trainings to encourage and support policy solutions that are most likely to lead to increased physical activity in students, and have fewer barriers to adoption and implementation. These resources will be disseminated to school decision makers in the 1,000 school districts in California and to state and community advocates working to improve student physical activity levels. Trainings will support policy recommendations and include information on how to: (1) use cost-effective strategies to strengthen P.E. and physical activity options for students, (2) utilize tools, sample policies and case studies to develop comprehensive physical activity policies, and (3) develop strategies to improve the quantity and quality of student physical activity before, during and after school. Case studies of other school districts will be highlighted at trainings and in materials to show that successful physical activity and P.E. programs are feasible.

## **LIMITATIONS**

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Like all surveys, this survey had some limitations. It is possible that board members already interested in physical activity and P.E. policies may have been disproportionately likely to respond to the survey; thereby, introducing bias into the results. Additionally, respondents were not asked to identify their district for confidentiality purposes; therefore, we were unable to assess the representativeness of our sample and identify whether multiple respondents from the same district participated in the survey. Although the sample was geographically diverse, the low response rate limited the ability represent the views of many California school districts. Due to concerns about

length, the policy opportunities section of the survey only addressed policy adoption. Thus, it was not possible to assess if policies were being implemented or monitored, even if they were adopted.

## CONCLUSIONS

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The survey provided data about what school districts need to move forward with adopting, implementing, monitoring, and evaluating policies to improve physical activity in the school setting. Survey results will be used to inform messaging and policy resources for school board member trainings, which will support systemic change in school districts toward increasing student physical activity and improving P.E. Given the challenge of school board members' time constraints, competing demands, and budget cuts, ongoing efforts will be needed to engage school board members in prioritizing physical activity and P.E. policies that can help meet both education and health goals.

**CSBA** is a nonprofit association consisting of nearly all of the state's 1,000 school districts and county offices of education. The member-driven organization supports the governance team—school board members, superintendents and senior administrative staff—in its complex leadership role, offering policy services, policy analysis, advocacy, publications, continuing education, financial programs, legal services and more. For policy briefs, publications and other resources on a variety of school wellness issues, including asthma, mental health, nutrition, obesity, oral health, physical activity and physical education, visit [www.csba.org/Wellness.aspx](http://www.csba.org/Wellness.aspx).

**CPL** is a joint program of the California Department of Public Health and the Public Health Institute that focuses on youth and parent empowerment, policy and environmental change strategies and community-based solutions to increase healthy eating and physical activity. CPL provides training, tools and technical assistance on developing, implementing and monitoring school wellness policies. [www.CaliforniaProjectLEAN.org](http://www.CaliforniaProjectLEAN.org).

*Support for this project was provided by a grant from The California Endowment.*

## ATTACHMENTS

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Appendix 1: “Physical Activity and Physical Education in California Schools” survey

Appendix 2: Survey results

## REFERENCES

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