Engaging School Governance Leaders to Influence Physical Activity Policies

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Background: Most youth are not meeting physical activity guidelines, and schools are a key venue for providing physical activity. School districts can provide physical activity opportunities through the adoption, implementation, monitoring, and evaluation of policies. This paper reports results of a 2009 survey of California school governance leaders on the barriers and opportunities to providing school-based physical activity and strategies to promote adoption of evidence-based policies.

Methods: California school board members (n = 339) completed an 83 item online survey about policy options, perceptions, and barriers to improving physical activity in schools. Results: Board members’ highest rated barriers to providing physical activity were budget concerns, limited time in a school day, and competing priorities. The key policy opportunities to increase physical activity were improving the quantity and quality of physical education, integrating physical activity throughout the school day, supporting active transportation to/from school, providing access to physical activity facilities during nonschool hours, and integrating physical activity into before/after school programs. Conclusions: Survey findings were used to develop policy resources and trainings for school governance leaders that provide a comprehensive approach to improving physical activity in schools.

Keywords: physical education, survey, youth

Schools can provide a significant source of physical activity for youth. However, most schools fall short in implementing recommended physical activity policies and programs. To comprehensively improve physical activity in schools, the Institute of Medicine and American Heart Association recommend policies requiring daily physical education (P.E.), increasing moderate to vigorous physical activity (MVPA) in P.E., providing elementary school recess, integrating activity breaks during the school day, and providing physical activity opportunities before and after school.

School governance leaders (school board members, superintendents, and senior administrators) play important roles in the policy process because they can introduce and advocate for policies that can favorably influence student health, and set a direction for the school district by establishing expectations and holding the system accountable. School governance leaders can influence physical activity opportunities before, during, and after school through the adoption, monitoring, and evaluation of local board policies and administrative regulations.

The Child Nutrition Reauthorization Act of 2004 mandated that school districts participating in federally reimbursed school meal programs develop a local school wellness policy by the beginning of the 2006–07 school year, requiring school districts to establish goals for nutrition education, physical activity and other school-based activities. While the federal mandate included some physical activity language, it did not include specific requirements for addressing P.E. A national study found that while most districts addressed physical activity in their local school wellness policy, few offered specific requirements for P.E. or physical activity. This review of the preliminary evidence on the implementation of local school wellness policies indicates that more rigorous policies are needed, along with additional financial resources, to improve nutrition and increase opportunities for quality physical activity.

The California School Boards Association and California Project LEAN (Leaders Encouraging Activity and Nutrition), a program of the California Department of Public Health and the Public Health Institute, partnered to support school governance leaders in improving opportunities for physical activity and P.E. in schools. Specifically, the project sought to elevate the importance of physical activity and P.E. to school governance leaders, expand the number of school districts establishing new policies to support physical activity and P.E. and/or improve implementation and monitoring of existing policies, and support communities already working with schools to increase physical activity. A guiding principle of their work is that efforts to influence policy adoption and implementation are more likely to be successful if they are based on factors that motivate school board members. A survey of California school board members...
was conducted to (1) assess district perceptions of physical activity in schools, (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 of policy resources and trainings for school governance leaders.

Methods
Survey development was informed by Institute of Medicine recommendations and a policy brief written for California school stakeholders. A statewide advisory group was established to ensure coordination and collaboration of state efforts to increase school-based physical activity. Forty-five members were invited to participate from health, education (school administrators, teachers and physical educators), legislative, advocacy, research, and evaluation sectors.

Survey Design and Methodology
The 26 question/83 item survey (available at www.CaliforniaProjectLEAN.org) was reviewed for content validity by diverse experts. Obtaining information from school board members about policies and practices in their districts was not considered research involving human subjects and therefore was not subject to an institutional review board, per the Public Health Institute’s policy. The survey was piloted by the California School Boards Association’s School Health Advisory Committee consisting of school board members, superintendents, and school health professionals.

Participants
School board members in the California School Boards Association’s database with valid e-mail addresses were targeted, representing 52% of total California school board members. Survey participants were recruited by e-mail blasts. The survey was conducted and data were collected using Survey Monkey, a web-based survey tool (www.surveymonkey.com, Portland, OR). California school board members were contacted about the confidential survey via a personalized e-mail message, followed by 1 reminder e-mail 1 week later and another 3 weeks later. As an incentive, survey participants were entered into a drawing for a $100 gift card.

Survey Results
Response Rate and Demographics
The online survey generated 339 responses from the 2669 board members (13%). Respondents represented all 24 CSBA regions and 49 of 58 counties in California. Survey respondents represented small, medium, and large school districts: 26% of respondents served districts with an average daily attendance of 1000 students or less, 31% with an average daily attendance between 1001 to 5000 students, 31% with an average daily attendance between 5001 to 20,000 students, and 12% with more than 20,000 students. Respondents served in districts with a variety of grade levels, including 47% unified K–12 school districts, 44% elementary and elementary/middle school districts, and 9% secondary school districts. Seventeen percent of respondents represented low-income districts (n = 59), defined as more than 75% of students qualifying for free and reduced-price lunch in the National School Lunch Program; and 25% of respondents represented high-income districts (n = 86), identified by less than 25% of the students in the National School Lunch Program.

Perceptions of Physical Activity
Respondents generally believed that physical activity positively impacts a variety of student academic and health outcomes (Figure 1). Over 90% of respondents indicated that physical activity has a moderate or high positive impact on student fitness levels, academic performance, lifetime physical activity behaviors, and mental, emotional, and social health.

Respondents indicated the top 3 (out of 9) school wellness priorities their district was currently addressing were

1. Food and nutrition policies or practices (84%)
2. Physical activity and P.E. policies or practices (70%)
3. Tobacco and drug prevention (69%).

Barriers to Increasing Physical Activity in Schools
The 3 barriers that the majority of school board member respondents identified as “very significant” or “somewhat significant” in addressing physical activity and P.E. were: impact on the budget, limited time in a school day, and competing district priorities (Figure 2). There were no differences in barriers by grade level. 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 vs. 20% identified as “very” or “somewhat significant”); lack of tools/resources available to develop, implement and monitor policies and practices (60 vs. 40%); inclement weather conditions (58 vs. 28%); and lack of student interest/engagement (54 vs. 24%).
Recent Impacts on Physical Activity and P.E. in Schools.
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 (n = 141), 57% indicated at least 1 negative effect on physical activity opportunities in their district. The most common impacts were an increase in P.E. class size (26%), reduction in the amount of time dedicated to P.E. (23%), and reduction in staff who oversee physical activity (22%).

A greater percentage of respondents from higher income districts/county offices of education (68%) indicated that some or all of their schools were open outside of school hours compared with respondents from lower income districts (44%).

The most frequently cited reasons for not opening schools to the public after school hours were
1. Lack of staffing (45%)
2. Liability concerns (44%)
3. Safety concerns (44%)
4. Insufficient funding (39%)
5. Risk of vandalism (38%).

Opportunities for Increasing Physical Activity in Schools
School board member respondents identified the following as the most influential stakeholders to engage when addressing physical activity and P.E. at the district level: superintendents (78%), principals (75%), and P.E. teachers (67%). They identified assistant superintendents (26%), P.E. teachers (16%), and principals (14%) as most responsible for implementation of physical activity policies.

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. Policy adoption rates are listed in Figures 3, 4, and 5. The P.E. policy most likely to be adopted was “schools shall have sufficient and safe P.E. equipment”; the P.E. policy least likely to be adopted 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 “don’t know” responses was “students shall engage in moderate to vigorous physical activity for at least 50 percent of P.E. time.”

The physical activity policy during the school day most likely to be adopted was “equipment, playground, and athletic facilities for physical activity shall be provided and maintained,” and the policy least likely to be adopted (and where the highest number of respondents indicated 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.”

For before and after school physical activity, the policy most likely to be adopted was “schools shall provide adequate bicycle support facilities,” the policy least likely to be adopted 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.”

Readiness and Capacity to Address Physical Activity Policy.
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%)
2. Develop physical activity and P.E. policies (44%)
3. Assure that their district implements physical activity and P.E. policies (41%)
4. Assure that their district monitors and evaluates physical activity and P.E. policies (42%)

Training and Technical Assistance Opportunities.
Forty-seven percent of respondents reported they would be interested in receiving training about policies and practices to improve physical activity and P.E. in schools, 18% said that another board member or district administrator in their district would be interested, and 35% said they were not interested. The majority of comments referring to limited interest in training were related to lack of funding to pay for training, a focus on 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 respondents reported the following resources would help prepare them to address physical activity and P.E. policies and practices in their district:
1. Case studies of other successful school districts (68%)
2. Cost-benefit analysis of policies/practices (61%)
3. Research on the link between physical activity and P.E. and academic performance (61%)

\insertfigures 3, 4, and 5
4. Research on the link between physical activity and P.E. and behavioral problems/violence prevention (55%)  

5. Sample district physical activity and P.E. policies (53%).

Discussion of Policy Implications

The survey results indicated 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, and monitoring.

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-resource 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. 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. It will be important for community advocates to raise awareness of the importance of physical activity and P.E. by sharing research on the link between physical activity and academic achievement, as well as cost-effective strategies to increase physical activity.

To focus the resources and trainings developed in the project, the California School Boards Association and California Project LEAN identified the following evidence-based local 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.

P.E.

- Ensure students engage in moderate to vigorous physical activity at least 50% of P.E. 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 incorporating 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.

Based on the survey, the California School Boards Association and California Project LEAN developed 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 (see Table 1). These resources have been disseminated to school board members and superintendents in the 1000 school districts in California and to state and community advocates working to improve student physical activity levels.

Actions Taken

Trainings conducted in 3 regions in California and at national and statewide conferences were designed to support policy recommendations and included information on how to (1) use cost-effective strategies to strengthen P.E. and physical activity options for students, (2) use 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. The content of the trainings was informed by the initial survey. Case studies of other school districts were highlighted at trainings to show that successful physical activity and P.E. programs are feasible.

Training Results

Ninety-three participants attended one of three regional trainings. Attendees included school board members, superintendents, and other school decision-makers, as well as representatives from local government, community, and health agencies. Of the 46% of participants who completed the training evaluation, the majority stated they planned to take a leadership role in advocating for physical activity/P.E. policy development within their districts/county offices of education: 73% stated they would bring up physical activity/P.E. policy development or revision for discussion at a school board meeting, 61% stated they would take steps to assure district monitoring and evaluating of physical activity and P.E. policies, 45% stated they would assign staff to assess the school
environment and recommend strategies to improve implementation of existing policies, and 68% stated they would take other action to improve district physical activity and P.E. opportunities. There was substantial interest in multiple areas of school physical activity promotion, including increasing physical activity during P.E., other school-based physical activity programs, and before/after school programs. Following the training, respondents indicated they planned to focus on

1. Increasing physical activity during school (e.g., recess, classroom breaks, curriculum) (63%)
2. Increasing physical activity in before/after school programs (57%)
3. Increasing moderate to vigorous physical activity in P.E. (49%).

Other focus areas included monitoring required P.E. minutes (43%), joint use of facilities (26%), and Safe Routes to School programs (21%). Attendees reported the training session and materials were helpful in their advocacy efforts. Ninety-one percent of respondents indicated that they strongly agreed or agreed that the training provided them with increased awareness of the importance of providing physical activity opportunities, an improved ability to be an effective advocate for physical activity and P.E., and useful resources to take back to their school district/county office of education/community.

General Discussion

Understanding key issues that influence how school board members perceive student physical activity and its impact on academic achievement is critical to gaining support for policies to improve physical activity. The information gained from the survey was helpful in tailoring trainings, developing resources and communicating messages that resonated with school board members. School board members clearly saw the need and importance for physical activity policies but believed lack of resources and time in the school day were the main barriers. The results from this survey provided information on 1) how school board members can provide support for physical activity, 2) common school district barriers and how they may differ by income level of student families, 3) who influences physical activity policy decisions and efforts, 4) the current policy environment, 5) specific areas of policy weakness, and 6) desired technical assistance and resources. This information may be helpful to other states who are working with school boards to impact physical activity policy. It is important to collect timely local data on factors that influence school board members before embarking on a project to impact school board policy decision-making. Board members can receive timely information on policy through targeted trainings, sample policies, and policy briefs.

Little information exists regarding factors that influence school board members in relation to physical activity policy. The current study echoes previous findings that funding and time constraints were important obstacles to the successful adoption, implementation, and evaluation of school wellness policies and that systemic change is needed. Other critical barriers voiced by board members, such as gaining the support of key stakeholders and having adequate tools to support those responsible for implementation and evaluation, might be overcome by providing communications programs, tools, and resources addressed to an audience already predisposed to believe in the potential positive impact that wellness policies can have.

Limitations

Our study had limitations. It is likely that persons with a heightened interest in the survey’s topic would be more likely to respond. In our case, board members already interested in physical activity and P.E. policies may have more frequently responded to the survey, thereby introducing bias. The low response rate limits our ability to generalize findings to all of California’s school board members. The response rate could have been impacted by a budget crisis and layoff of school personnel in California, which was the priority issue for school boards who were making local budget decisions during the time of the survey. Considering that the majority of California’s counties responded, the respondents represented a large population of students. 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.

Conclusions

The project sought to use evidence to facilitate systemic change in school districts toward increasing youth physical activity and improving P.E. The project illustrated how state-level health and education organizations can partner to engage school governance leaders in implementing evidence-based strategies. 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 were used to inform messaging and materials for school board member trainings. 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.

Acknowledgments

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Influencing School Policy

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References

Figure 1 — School board member perceptions of the positive impact of physical activity on student outcomes (n = 330).
Figure 2 — District barriers and challenges to addressing physical activity and P.E. (n = 286).
<table>
<thead>
<tr>
<th>Policy</th>
<th>Adopted</th>
<th>Not adopted</th>
<th>Don't know</th>
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<tbody>
<tr>
<td>Increase the required minutes for P.E. class to meet national</td>
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<td>recommendations</td>
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<td>P.E. class sizes and teacher-student ratios consistent with other</td>
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<td>subjects</td>
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<td>Include the quantity or quality of P.E. in evaluating school</td>
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<td>performance</td>
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<td>Students engage in moderate to vigorous physical activity for at</td>
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<td>least 50% of P.E. time</td>
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<td>All teachers who instruct P.E. receive focused, ongoing professional</td>
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<td>development</td>
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<td>Prohibit temporary exemptions from P.E., except for medical reasons</td>
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<tr>
<td>System to monitor compliance with state required P.E. minutes</td>
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<td>All P.E. classes taught by credentialed P.E. teachers</td>
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<td>Schools have adequate indoor and outdoor facilities for P.E.</td>
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<td>All schools have equitable access to quality P.E.</td>
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<td>Schools have sufficient and safe P.E. equipment</td>
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</table>

**Figure 3** — Adoption rates for district policies and strategies for improving P.E. (n = 283).
Equipment, playground and athletic facilities for physical activity are provided and maintained.

All elementary school students have at least 20 minutes of daily supervised recess.

Schools provide appropriate physical activity opportunities during inclement weather.

Prohibit the use or withholding of physical activity as punishment.

Recess supervisors trained to organize/facilitate physical activity.

Lengthen the lunch period to provide opportunities for physical activity.

School staff receive opportunities to engage in regular physical activity.

Schools integrate physical activity into the classroom.

Figure 4 — Adoption rates for district policies and strategies for improving physical activity during the school day (other than P.E.) (n = 279).
Schools provide adequate bicycle support facilities

Every student has the opportunity to participate in extracurricular physical activity programs

School district collaborates with the transportation department to improve safe walking and bicycling paths to school

School district collaborates with local government to ensure new schools and neighborhoods are designed to facilitate active transportation to school

School district supports safe walking, bicycling or other active transport to/from school

Schools provide access to indoor and outdoor physical activity facilities outside school hours

Schools establish before/after school physical activity opportunities

Schools provide open after school physical activity programs to all children in the neighborhood

Modify bus schedules to support attendance at before/after school physical activity programs

High school sports programs taught by certified coaches who receive professional development

School district supports safe walking, bicycling or other active transport to/from school

Schools open after school physical activity programs to all children in the neighborhood

Figure 5 — Adoption rates for district policies and strategies for improving physical activity before/after the school day (n = 269).
<table>
<thead>
<tr>
<th>Resource type</th>
<th>Title</th>
<th>Description</th>
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<tbody>
<tr>
<td>Research brief</td>
<td>Physical Activity and Physical Education in California Schools: A survey of district/county office of education perceptions and practices</td>
<td>Summarizes survey findings and highlights board actions to improve physical activity and P.E.</td>
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<tr>
<td>Policy brief</td>
<td>Safe Routes to School: Program and Policy Strategies</td>
<td>Provides information about how school districts can engage in policy and program strategies to increase active transportation to and from school.</td>
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<td></td>
<td>Maximizing Opportunities for Physical Activity Through Joint Use of Facilities</td>
<td>Provides strategies for governance leaders to develop joint use programs in collaboration with other agencies to expand physical activity programs and services.</td>
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<tr>
<td>Fact sheet</td>
<td>Active Bodies, Active Minds: Physical Activity and Academic Achievement</td>
<td>Summarizes research on physical activity and the link to learning, specific to the school board’s role.</td>
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<td></td>
<td>Moderate to Vigorous Physical Activity in Physical Education to Improve Health and Academic Outcomes</td>
<td>Addresses the importance of increasing the quantity of MVPA in P.E. and highlights cost-effective strategies and related policy opportunities.</td>
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<td>Maximizing Opportunities for Physical Activity During the School Day</td>
<td>Outlines policy and curriculum opportunities for school governance leaders to support physical activity during the school day.</td>
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<td>Sample board policies (BP) and administrative regulations (AR)</td>
<td>6142.7 Physical Education and Activity (BP, AR)</td>
<td>The original Physical Education BP/AR was revised to strengthen language to include physical activity in P.E. and other opportunities for providing physical activity during the school day.</td>
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<td></td>
<td>1330.1 Joint Use Agreement (BP)</td>
<td>Overview of the district’s role in supporting joint use agreements.</td>
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<td></td>
<td>5142.2 The Safe Routes to School Program (BP/AR)</td>
<td>Policy language to establish and promote safe routes to school.</td>
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