## Physical Education and California Schools

State and federal legislation has made prevention of childhood obesity a priority by creating strong nutrition guidelines and requiring that districts adopt a local school wellness policy. In addition to addressing student nutrition, district wellness policies must include goals for physical activity, with the objectives of promoting student health and reducing childhood obesity. This policy brief describes research showing the benefits of physical activity for student learning, explains the state requirements and standards for P.E., highlights board actions to support P.E. and lists additional resources board members and others might find useful.

## Implications of physical activity for academic achievement

The Journal of Sports and Exercise Physiology, in an analysis of nearly 200 studies that evaluated the interaction between physical activity and behavior, found evidence that regular physical activity supports learning. ${ }^{1}$ A California study likewise found that: (1) California schools with more active students experienced higher subsequent gains in SAT-9 test scores than schools with a high percentage of students who did not participate in regular physical activity; (2) higher achievement was associated with higher levels of fitness at each of three grade levels measured; and (3) physical activity had beneficial consequences for academic progress in both low- and high-performing schools, regardless of location or socioeconomic status. ${ }^{2}$

A review of the literature in the Journal of School Health found no significant evidence to suggest that daily P.E. detracts from academic success even though P.E. may cut into academic class time. ${ }^{3}$ Schools offering intense physical activity programs have seen positive effects on test scores in mathematics, reading and writing, in addition to less disruptive classroom behavior. ${ }^{4}$

While none of these studies claimed that increased physical activity directly causes improved academic performance or classroom behavior, each does support the idea that a balanced education that includes regular physical activity is correlated with positive student outcomes.
vigorous activity. ${ }^{5}$ The California Endowment supports the idea that the level of activity in P.E., not total P.E. time, is linked to student fitness. ${ }^{6}$ However, its study of 77 California schools found that most time during P.E. classes is spent being sedentary. On average, only four minutes of every half hour involves vigorous activity. The situation was reported to be particularly severe in elementary schools and schools in disadvantaged communities.

Recently, evidence of the connection between physical activity and academic achievement led the American Academy of Pediatrics to issue a policy statement regarding the need for the "expansion of school physical education, dissuading children from pursuing sedentary activities, providing suitable role models for physical activity and making activity-promoting changes in the environment." ${ }^{7}$

## California physical education requirements

## Instructional minutes

Education Code 51210 states that each school district maintaining an elementary school composed of any of grades 1-6 must provide students at least 200 minutes of P.E. instruction for every 10 school days, not including recesses and the lunch period. Pursuant to Education Code 51223, elementary school districts maintaining grades 1-8 must provide instruction in P.E. for students in grades 7-8 that matches the requirement for other elementary schools of not less than 200 minutes each 10 school days.

For students in grades 7-12, Education Code 51222 requires 400 minutes of P.E. every 10 school days. In addition, unless they receive an exemption as described below, all students are required to complete two years of physical education courses between grades 9-12 in order to graduate from high school (Education Code 51225.3).

## Content standards and curriculum

In 2004, Superintendent of Public Instruction Jack O'Connell appointed a committee of P.E. teachers and experts to create model P.E. content standards for students

Healthy People 2010 recommends that 50 percent of P.E. instruction in grades 9-12 should be spent in moderate to
in grades K-12 throughout California. These standards outline the essential knowledge and skills that students should have and be able to demonstrate at each grade level. The State Board of Education (SBE) adopted the standards in January 2005.

The state's curriculum framework for P.E. was last adopted in 1994 and is scheduled to be revised in fall 2008. The standards and supporting materials are intended to assist in the establishment of specific goals and objectives for P.E. at every grade level.

The framework is focused on helping students achieve three major goals throughout the K-12 curriculum: (1) movement skills and movement knowledge, (2) self-image and personal development, and (3) social development. Disciplines, skill areas and content areas that support the achievement of the goals are detailed in the framework. For the high school program, the content areas are also reflected in 5 CCR 10060.

## Physical fitness testing

Education Code 60800 requires districts to annually administer the physical fitness test designated by the SBE to students in grades 5, 7 and 9. The SBE has designated the FITNESSGRAM ${ }^{\circledR}$ as the required test.

The FITNESSGRAM ${ }^{\circledR}$ is administered by district employees between February 1 and May 31 in accordance with instructions from the test developer and 5 CCR 1040-1048. Students with disabilities must be administered as much of the test as their physical condition will permit, as specified in their individualized education program (IEP) or Section 504 accommodation plan. State regulations specify certain test variations and accommodations that may be provided to all students, students with disabilities and English learners.

The FITNESSGRAM ${ }^{\circledR}$ measures six fitness areas: aerobic capacity, body composition, abdominal strength and endurance, trunk extensor strength and flexibility, upper body strength and endurance, and flexibility. Some areas have more than one test option (e.g., upper body strength and endurance may be measured by push-ups, modified pull-ups or the flexed-arm hang). The California Department of Education (CDE) clarifies that it is not necessary for all students within a school or district to use the same test option. The teacher or the student may select which test option will be used for each fitness area. Only one test option for each fitness area will be reported.

Performance on each fitness area is classified as being in the "Healthy Fitness Zone" or as "needs improvement." The standards differ by age, and also by gender where there is a valid rationale from a health-related perspective.

Student performance is scored by district employees and the scores must be provided to individual students as they complete the testing. Test results are submitted to the state's physical fitness test contractor (now Educational Data Systems) by June 30 each year. Results of the physical fitness testing also must be included in the annual school accountability report card.

Results from the statewide physical fitness test in 2006 show that the majority of students in grades 5, 7 and 9 (52.0, 55.7 and 53.8 percent, respectively) performed in the Healthy Fitness Zone for five or six of the six areas measured, and nearly three-quarters (72.6, 74.9 and 73.2 percent, respectively, for grades 5, 7 and 9) performed in the Healthy Fitness Zone for four or more areas. ${ }^{8}$

## Exemptions from physical education

There are three types of student exemptions from P.E. courses - temporary, two-year and permanent - which the district may, but is not required to, grant under the circumstances specified in Education Code 51241.

Temporary exemptions are authorized for students who are (1) ill or injured when a modified program to meet their needs cannot be provided or (2) enrolled for one-half time or less.

Two-year exemptions are authorized at any time during grades 10-12. Effective July 1, 2007, Education Code 51241 added a new requirement applicable to the two-year exemption only. Before a district can grant the two-year exemption to a student in grades 10-12, the student must have passed the state's physical fitness test (the FITNESSGRAM ${ }^{\circledR}$ ) in grade 9 (or in any of grades 10-12 if the district offers the test during those grades to students who need it for purposes of the exemption). SB 601 (Torlakson, 2007) amended Education Code 51241, effective January 1, 2008, to define "passage" as satisfactorily meeting any five of the six standards of the state's physical fitness test (e.g., by performing in the Healthy Fitness Zone on five standards).

Permanent exemptions are authorized for students who are (1) age 16 years or older who have been enrolled in grade 10 for one or more academic years; (2) enrolled as postgraduate students; or (3) enrolled in a juvenile home, ranch, camp or forestry camp school with scheduled recreation and exercise.

Boards may determine whether or not to allow any category of exemption and the circumstances under which the exemption may be granted, consistent with law.

## Categorical program monitoring of PE requirements

The CDE monitors districts' compliance with state law through the Categorical Program Monitoring (CPM) process. The CDE selects 25 percent of the school districts for on-site monitoring each year; thus, each district participates in on-site review approximately once every four years.

SB 601 amended Education Code 33352 to significantly expand the CPM process with respect to P.E. requirements. Education Code 33352 requires the CDE to review districts' compliance with requirements related to the minimum number of instructional minutes in P.E., physical fitness testing, inclusion of physical fitness test results in the school accountability report card, the offering of elective P.E. courses to students exempted from P.E. under Education Code 51241(b)(1) or (c)(1), components of the district's P.E. program for grades 9-12, equal opportunities for participation in P.E. regardless of gender, and possession of appropriate credentials by P.E. teachers.

Any school district found to be in noncompliance must develop a proposed resolution plan with the CDE and will be required to undergo an on-site review the following year.

## The struggle to meet state mandates

The California Center for Public Health Advocacy (CCPHA) recently reviewed data collected from the CDE's compliance review records for P.E. instructional minutes provided in schools throughout the state over a twoyear period. ${ }^{9}$ This review found that at least 51 percent of districts were not in compliance with the mandated minutes of P.E. for elementary schools. CCPHA found the lack of compliance to be consistent across the state, regardless of districts' economic status or location.

In a California study focused on physical activity among adolescents, more than 15 percent of teens reported that their school either does not require or offer P.E. classes. ${ }^{10}$

## The board's role

Rigorous academic requirements and school accountability measures make district compliance with the P.E. mandates increasingly difficult and school boards and superintendents are faced with the challenge of finding ways to deliver quality P.E. programs to students. Boards play an important role in encouraging and facilitating physical activity in district schools. They provide community leadership and serve as advocates for children by working collectively to make decisions that
will best serve all the students in the community. Boards will help ensure that students receive a well-rounded education by encouraging community support of P.E. programs that meet state requirements.

School boards can help ensure that all students have access to a high-quality, comprehensive and developmentally appropriate P.E. programs on a regular basis through the following actions:

## Setting the direction for the community's schools

It is the responsibility of the board, working with staff and the community, to set a vision for the district's schools that drives the district's programs. In establishing a district vision that is focused on student learning and ensuring that more specific goals are aligned to this vision, the board has an opportunity to emphasize the importance of student health, including physical activity. The board can:

- Make P.E. a priority at all grade levels and educate community members on the importance of P.E. for young people.
- In accordance with federal law, adopt a wellness policy that clearly states goals for physical activity to ensure that educators, administrators, the board and community members understand the purpose and importance of physical activity.
- Adopt California's P.E. model content standards to ensure all schools within the district and state are striving to reach the same academic objectives.
- Establish curricular goals that encourage an increased level of physical activity in P.E. classes, with a target goal of at least 50 percent of student instructional time spent in moderate to vigorous activity.


## Establishing an effective and efficient structure for the district

The board must ensure that the district has the resources and other structures necessary to implement a highquality P.E. program. Some suggestions include:

- Allocate funding and other resources to adequately staff and equip P.E. programs so that all students meet at least the minimum requirements for P.E.
- Support P.E. teachers by offering annual professional development opportunities that address activityrelated skills and teaching ability. Various funding opportunities may be available for P.E. teachers. Districts may check with the CDE and the National Association for Sport and Physical Education for more information.
- Adopt policies on P.E. that describe the board's expectations for the P.E. program and/or other opportunities for physical activity before, during and after school. CSBA and California Project LEAN (Leaders Encouraging Activity and Nutrition) developed a resource guide entitled Successful Students Through Healthy Food and Fitness Policies to provide direction for development of physical activity policies. Available at www.csba.org, the guide also contains a worksheet to facilitate board discussions of relevant policy issues.
- Minimize exemptions allowed for participating in P.E. classes and provide alternative activities for students with disabilities or who are otherwise unable to participate.


## Providing support

Although the board does not implement policies or programs, the board may support the superintendent's and staff's implementation of the P.E. program through the decisions it makes in a variety of areas. For instance, the board can:

- Align the district's P.E. policy with other efforts to promote student health and wellness.
- Ensure that the board's decisions regarding other curricula and instruction allow sufficient time for schools to provide P.E.
- Encourage board members, administrators and educators to serve as role models by engaging in physical activity.


## Ensuring accountability to the public

The board must monitor the district's progress in achieving its goals for educational programs, including the P.E. program. The board should:

- Ensure that all P.E. instructional minutes are correctly documented. These minutes only include instructional time and do not include recess, beforeor after-school programs or free play.
- Ensure that school accountability report cards include physical fitness test results in accordance with law.
- Review results of the state's CPM process pertaining to the district's compliance with state P.E. requirements.
- Schedule regular reports from the superintendent or his/her designee to the board regarding the P.E.
program, including the amount of time devoted to P.E. instruction at each grade level, the results of the annual physical fitness testing for each school and applicable grade level, the number of two-year and permanent exemptions granted, and any other data agreed upon by the board and the superintendent or designee to evaluate program quality and the effectiveness of the district's program in meeting goals for physical activity.


## Acting as community leaders

Multiple opportunities exist to increase physical activity opportunities for students throughout the community. Suggestions include:

- Connect with parks and recreation departments and city and county officials to assess the adequacy of physical activity opportunities for youth throughout the community.
- Participate in joint-use agreements with community agencies and organizations in order to support P.E. programs.
- Communicate with students, parents, staff and the community about the district's priority on student wellness in order to build support for physical activity programs.
- Participate in the California Superintendents' Challenge, a challenge by the Superintendent of Public Instruction to all school districts across the state to improve the health of all their students through the development and implementation of policies that promote proper nutrition and regular physical activity. The challenge provides awards to exemplary districts that demonstrate success in supporting student health.


## Resources

## CSBA

CSBA sample policies and administrative regulations related to physical activity include BP/AR 6142.7Physical Education, BP 5030 - Student Wellness and BP/AR 6145.2 - Athletic Competition. CSBA also offers a variety of publications on topics related to student wellness, including Student Wellness: A Healthy Food and Physical Activity Policy Resource Guide and Monitoring for Success: Student Wellness Policy Implementation Monitoring Report and Guide. www.csba.org

## Action for Healthy Kids

Provides a variety of resources and tools to aid districts and schools in building quality educational programs. www.actionforhealthykids.org

## California Department of Education

Provides information about state requirements, including requirements pertaining to the state's physical fitness test. www.cde.ca.gov/ta/tg/pf

## Centers for Disease Control and Prevention

Guidelines for School and Community Programs to Promote Lifelong Physical Activity Among Young People provides guidelines and recommendations for policies that promote enjoyable, lifelong physical activity. This report also includes information regarding P.E. curriculum and instruction. www.cdc.gov/mmwr/preview/ mmwrhtml/00046823.htm

The Physical Activity Evaluation Handbook outlines six basic steps of evaluating physical activity programs for state and local agencies and community organizations and illustrates each step with program examples. Appendices provide information about physical activity indicators, practical case studies and additional evaluation resources. www.cdc. gov/nccdphp/dnpa/physical/handbook/index.htm

## National Association for Sport and Physical Education

NASPE offers workshops, conferences and professional development opportunities for teachers, as well as training tools and services to aid in the development of quality P.E. programs. www.aahperd.org/NASPE

## Surgeon General

The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity outlines strategies that communities can use in helping to address the health problems associated with obesity, including requiring P.E. at all grade levels, providing more healthy food options on school campuses and providing safe and accessible recreational facilities for residents of all ages. www. surgeongeneral.gov/topics/obesity

## End notes

${ }^{1}$ Etnier, J.L., Salazaw, W., Laners, D.M., Petruzzello, S.J., Han, M., \& Nowell, P. (1997) The influence of physical fitness and exercise upon cognitive functioning: A meta-analysis. Journal of Sport and Exercise Physiology, 19(3), 249-277.
${ }^{2}$ Hanson, T.L., \& Austin, G.A. (2003) Are student health risks and low resilience assets an impediment to the academic progress of schools? California Healthy Kids Factsheet 3. Los Alamitos, CA: WestEd.
${ }^{3}$ Taras, H. (2005) Physical activity and student performance at school. Journal of School Health, 7, 214-218.
${ }^{4}$ Symons, C.W., Cinelli, B., James, T.C., \& Groff, P. (1997) Bridging student health risks and academic achievement through comprehensive school health programs. Journal of School Health, 67(6), 220-227.
${ }^{5}$ Healthy People 2010, www.healthypeople.gov
${ }^{6}$ The California Endowment. (2007, January) Failing Fitness: Physical Activity and Physical Education in Schools. Los Angeles: Author.
${ }^{7}$ Council on Sports Medicine and Fitness and Council on School Health. (2006) Active healthy living: Prevention of childhood obesity through increased physical activity. Pediatrics, 117(5), 1834-1842.
${ }^{8}$ California Department of Education, 2005-06 California Physical Fitness Report, Summary of Results, DataQuest, http://data1.cde. ca.gov/dataquest
${ }^{9}$ California Center for Public Health Advocacy. (2006) District Compliance Summary in California Elementary School PE Requirements 2004-05 and 2005-06. Davis, CA: Author. www. publichealthadvocacy.org/PDFs/DistrictComplianceChart.pdf
${ }^{10}$ Babey, S.H., Diamant, A.L., Brown, E.R., \& Hastert, T. (2005) California Adolescents Increasingly Inactive. Los Angeles: UCLA Center for Health Policy Research.

