

“School Physical Activity Opportunities Report Card” (SPARC): Maximizing Opportunities for School-Based Physical Activity

Policy Brief

(Draft report for review purposes only)

August 31, 2011

UCLA School of Public Health, Health Impact Assessment Project
Brian Cole, Dr.P.H., Project Manager, Lead Author
Alice Tan, M.P.H., Research Associate
Jonathan Fielding, M.D., M.P.H., M.B.A., Principal Investigator
Antronette Yancey, M.D., M.P.H., Co-Principal Investigator

Supported with a grant from Robert Wood Johnson Foundation’s Active Living Research Program

Rationale

Physical activity is a crucial part of addressing our nation’s obesity epidemic and the growing burden of related chronic disease (IOM, 2005). Physical activity in schools can improve students’ physical and mental health, classroom behavior and academic performance (ALR, 2009). Physical education and sports are important, but in our schools, as well as in our communities, broad, sustained improvements in health across different segments of the population, will require moving physical activity beyond the confines of gyms and playing fields. The school day is full of potential opportunities for students to engage in physical activity, that, along with physical education, can yield numerous health and education benefits. By assessing and communicating information about these opportunities, the “School Physical Activity Report Card” (SPARC) can help members of school communities identify strategies and monitor progress towards maximizing the potential of these opportunities.

The Problem

Opportunities for physical activity at school have generally been eroding, a result of a confluence of factors including pressure to demonstrate improved educational progress, various curricular and program mandates, injury liability concerns, and budget cuts. At the same time, an increasing number of children and youth are overweight and obese, a trend driven in part by well documented deficiencies in the amount of daily physical activity.

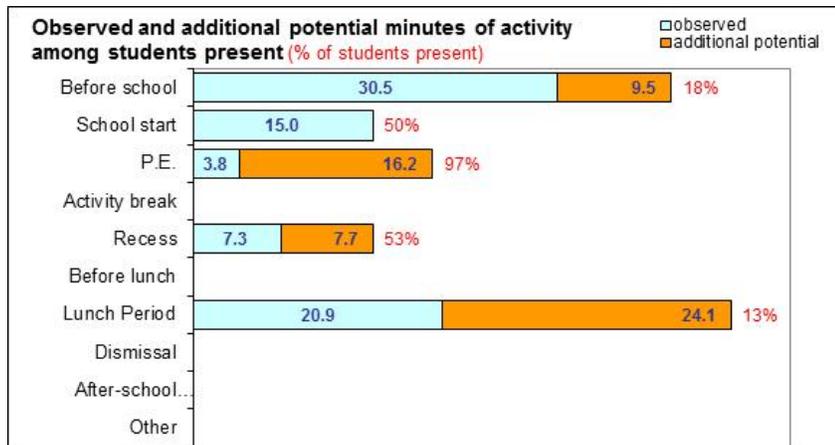
Eroding opportunities for physical activity in schools

- Nationwide there is pressure to reduce or eliminate P.E. to make more time for instruction in academic subjects covered in standardized tests (California Center for Public Health Advocacy, 2006b; California Department of Education, 2005a; California State Assembly, 2006; National Association for Sport and Physical Education, 2006b).
- Official statistics may overstate the actual amount of P.E. in schools. A 2004 national survey of state obesity control policies concluded that P.E. requirements are rarely enforced, insufficiently funded; viewed as expendable in comparison to core curriculum requirements such as math and reading, and are frequently waived through exemptions (Trust for America’s Health, 2004).
- A review of California’s state department of education’s records, found that more than half of California school districts fail to meet the mandated elementary school P.E. requirement of 200 minutes every ten days (California Center for Public Health Advocacy, 2006a). Even when P.E. is offered, the extent to which students are actually physically active (i.e. engaged in moderate-to-vigorous physical activity, aka “MVPA”) may be reduced by large class sizes with insufficient supervision and equipment (UCLA Center to Eliminate Health Disparities and Samuels and Associates, 2007).

- Recess has been eliminated or is in the process of being eliminated by an estimated forty percent of elementary schools nationwide (Strong Museum of Play, 2007). In Texas, an estimated 60% of elementary schools had eliminated recess to make way for more instructional time, until the state legislature responded to public outcries and mandated daily activity and time for free play (Texas State Legislature, 2007).
- A recent nationwide survey of teachers' self-reported time allocation found that teachers whose students were predominantly Black or from low income households reported less time for recess than teachers of White and more affluent students (Barros, Silver and Stein, 2009).
- Similar to the case of P.E., MVPA during recess may be severely curtailed due to lack of space and equipment, and by increasingly restrictive rules on where and what types of activities are allowed. It has become increasingly common for schools to ban many traditional playground activities such as tag, climbing, tug-of-war, and even running due to fear of legal liability in case of injury (Roberts, 2004; Bazar, 2006; Kumar, 2006; Sommer, 2008).¹
- Inadequate enforcement of physical education policies may have discriminatory effects (Garcia and Fenwick, 2009) similar those that were the focus of the Williams Case that found inadequate and unequal distribution of educational resources for poor and minority students.

Information is part of the solution

SPARC is an information tool for school decision-makers and stakeholders. Schools can use it to informally plan and monitor progress towards making more effective use of existing opportunities for physical activity throughout the school day. SPARC could also be incorporated into existing school reporting requirements, such as the federally mandated [School Accountability Report Cards](#) that schools and school districts make available to the Public. School officials, LEAs and other members of school communities can use SPARC to systematically assess, inform, and create improved opportunities for physical activity throughout the school day. Incorporating SPARC into existing requirements and



procedures, such as School Accountability Report Cards and School Wellness Plans, could provide school personnel, parents and community groups with more complete information about opportunities for physical activity and what schools are doing to make maximize the use of existing resources to maximize student wellness and learning.

Figure 1: Hypothetical results from the UCLA-SPARC tool showing minutes of activity. At this hypothetical school students are physically active for an average of 77 minutes (blue bars) during a total 135 minutes available for physical activity (blue+gold bars). More information at <http://www.ph.ucla.edu/hs/health-impact/methodology.htm>

Development of the SPARC

The School Physical Activity Opportunities Report Card (SPARC) was developed by the UCLA School of Public Health with support from the Robert Wood Johnson Foundation's Active Living Research

¹ While media outlets abound with reports of lawsuits against schools for injuries incurred during recess and PE, it is difficult to ascertain the trends in the number of lawsuits or consistent patterns in the decisions and settlements. In general, courts appear to defer to schools as long as school personnel exercise "duty to care." (Bossenmeyer, undated).

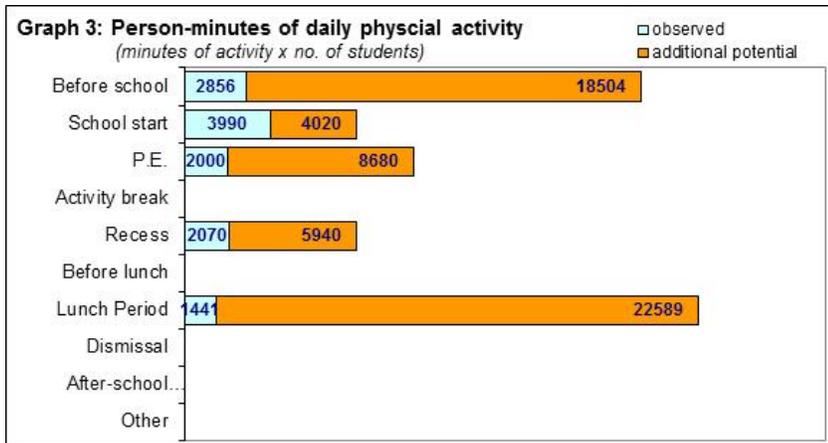


Figure 2: Hypothetical results from the UCLA-SPARC tool showing person-minutes of activity. Reported person-minutes are the product of minutes and number of students present. For this hypothetical school before school activities, school start (i.e. morning assembly) and recess provide more person-minutes of activity than P.E. (blue bars). More information at <http://www.ph.ucla.edu/hs/health-impact>

Program. Our tool was developed through evaluation of existing policies at five case-study schools in Southern California using rapid “health impact assessments” (HIAs).

Use of SPARC

At the core of SPARC audit tool is a straight-forward observation form on which observers note when, where and how many students are present and active during different parts of the school day. Observers can be trained in audit procedures for the SPARC in less than one hour; no special skills or

previous experience is required. Data entered into the MS-Excel-based SPARC form are automatically summarized showing:

1. Actual and potential minutes of activity throughout the school day for different time periods and activities (e.g. P.E., recess, lunch period, etc.)
2. Person-minute averages combining activity duration and number of students, and
3. Comparisons of girls’ versus boys’ engagement in different types of physical activity.

In addition to the summary graphs (such as the ones shown above), SPARC forms also document the quantity and quality of space and facilities available for students.

Other Examples of Physical Activity Report Cards

- State of Louisiana’s Physical Activity Report Cards: “Louisiana’s Report Card on Physical Activity and Health for Children and Youth.” http://www.pbrc.edu/report_card (Inception date: 2008)
- “Active Healthy Kids Canada Report Card on Physical Activity for Children and Youth”: activehealthykids.ca (Inception date: 2005)
- “Report Card on Physical Activity, Nutrition and Tobacco Use for South African Children and Youth,” a Report Card modeled after Active Healthy Kids Canada: www.mrc.ac.za/chronic/healthykids.pdf (Inception date: 2007)
- Researchers in Mexico are collaborating with Canada to produce a physical activity report card
- Kenya’s Physical Activity Report Card: www.cheori.org/halo/pdf/kenyan-report-card-long-form.pdf (Inception date: 2011)

Recommendations

1. The California Department of Education and local school districts develop procedures for incorporating SPARC data into schools’ School Accountability Report Cards;
2. Schools with guidance from their Local Education Agencies (LEAs) include SPARC self-assessments as part of their Wellness Plan monitoring and reporting activities.

References

- Active Living Research (ALR). (2009). Active Education: Physical Education, Physical Activity and Academic Performance. Research Brief, Summer 2009. Accessed 8/31/11 at http://www.activelivingresearch.org/files/Active_Ed_Summer2009.pdf
- Anonymous. (2009). Comment posted on Twittermoms.org, 3/4/09. Accessed 3/30/09) at <http://www.twittermoms.org>.
- Barros RM, Silver EJ, Stein REK. (2009). School Recess and Group Classroom Behavior. *Pediatrics* 123:431-436.
- Bazar E. (2006). 'Not it!' More schools ban games at recess. *USA Today*. Updated 6/27/2006. Accessed 4/13/09 at http://www.usatoday.com/news/health/2006-06-26-recess-bans_x.htm
- Bossenmeyer M. (undated). Playground Liability: Accident or Injury. Accessed 8/31/11 at <http://www.peacefulplaygrounds.com/playground-liability-accident-or-injury.htm>
- California Center for Public Health Advocacy. (2006a). Dropping the Ball...California Schools Fail to Meet Physical Education Mandates. Accessed on June 15, 2006 at <http://www.publichealthadvocacy.org/droppingtheball.html>.
- California Center for Public Health Advocacy. (2006b). Sample quotes from multiple subject student teachers regarding physical education at their placement schools. Supplement to Dropping the Ball...California Schools Fail to Meet Physical Education Mandates. Accessed on November 27, 2006 at <http://www.publichealthadvocacy.org/droppingtheball.html>.
- California Department of Education. (2005a). Final Minutes, Wednesday, September 7, 2005, Item W-12: Request by San Jose Unified School District for a waiver of the elementary Physical Education statute.
- California Department of Education. (2005b). Guidance for the development of California School Wellness Policies. Accessed 4/11/09 at http://www.californiahealthykids.org/articles/guidance_for_wellness.pdf
- California State Assembly, Appropriations Committee. (2006). AB 1779 (Karnette): Bill Analysis, Purpose. Hearing Date May 10, 2006. Accessed November 30, 2006 at http://www.leginfo.ca.gov/pub/05-06/bill/asm/ab_1751-1800/ab_1779_cfa_20060509_163023_asm_comm.html.
- Garcia R, Fenwick C. (2009). Social Science, Equal Justice, and Public Health Policy: Lessons from Los Angeles. *Journal of Public Health Policy* 30:26–S32.
- Kumar R. (2006). Elementary schools increasingly restrict or ban recess for kids. *The Baltimore Sun* Reprinted in *Seattle Times* 12/2/06. Accessed 4/13/09 at http://seattletimes.nwsource.com/html/nationworld/2003457946_recess02.html
- Institute of Medicine (IOM) of the National Academies. (2005). *Preventing Childhood Obesity: Health in the Balance*. National Academies Press, Washington, D.C.
- National Association for Sport and Physical Education (NASPE). (2006b). *Shape of the Nation: Executive Summary*. Accessed on November 28, 2006 at <http://www.aahperd.org/naspe/ShapeOfTheNation>
- Roberts G. (2004). Tacoma elementaries enforce ban on recess: Goal is 'maximizing instruction time.' *Seattle Post-Intelligencer* 9/18/2004. Accessed 4/13/09 at http://www.seattlepi.com/local/191407_recess18.html
- Sommer M. (2008). Decline in School Recess Continues. *Buffalo News* 6/27/08. Accessed 4/13/09 at http://www.childrenandnature.org/news/detail/decline_in_school_recess_continues
- Strong National Museum of Play. (2007). Strong National Museum of Play® Releases Research on School Recess: Results Support Proposed Texas State Recess Bill (News Release) 3/20/07. Accessed 4/13/09 at http://www.strongmuseum.org/about_us/press/texasrecessrelease.html
- Texas State Legislature. (2007). House Passes Rep. Villarreal's "Freedom to Play and Learn Act" (Press Release, 5/23/07). Accessed 4/13/09 at <http://www.house.state.tx.us/news/release.php?id=2041>
- Trust for America's Health. (2004). *F as in Fat: How obesity policies are failing in America* (Issue Report). Washington, DC: Trust for America's Health, 2004. Accessed on July 22, 2005 at <http://www.healthyamericans.org>.
- UCLA Center to Eliminate Health Disparities and Samuels & Associates. (2007). *Failing Fitness: Physical Activity and Physical Education in Schools*. Funded by the California Endowment. Accessed on June 10, 2007 at <http://www.calendow.org>.
- Yancey AK, Winfield D, Larsen J et al. (2009). Live, learn and play: Building strategic alliances between professional sports and public health. *Preventive Medicine*. 49(4):322-5.