
Policy in Action: Maximizing Physical Activity Opportunities in Tough Budget Times



Alameda County Office of Education
California School Boards Association
California Project LEAN
March 11, 2010



Project Support

*Support for this project have been provided by grants
from The California Endowment and
Vitamin Cases Consumer Settlement fund*

Welcome and Introductions

- Christine Boynton, Project EAT Director, Alameda COE (cboynton@acoe.org)
- Martin Gonzalez, Deputy Executive Director, CSBA (mgonzalez@csba.org)

Training Objectives

- Understand the importance of school-based physical activity on student health and academic achievement.
- Develop cost-effective strategies to improve the quantity and quality of student physical activity before, during and after school.
- Utilize tools, sample policies and case studies to develop comprehensive physical activity policies.



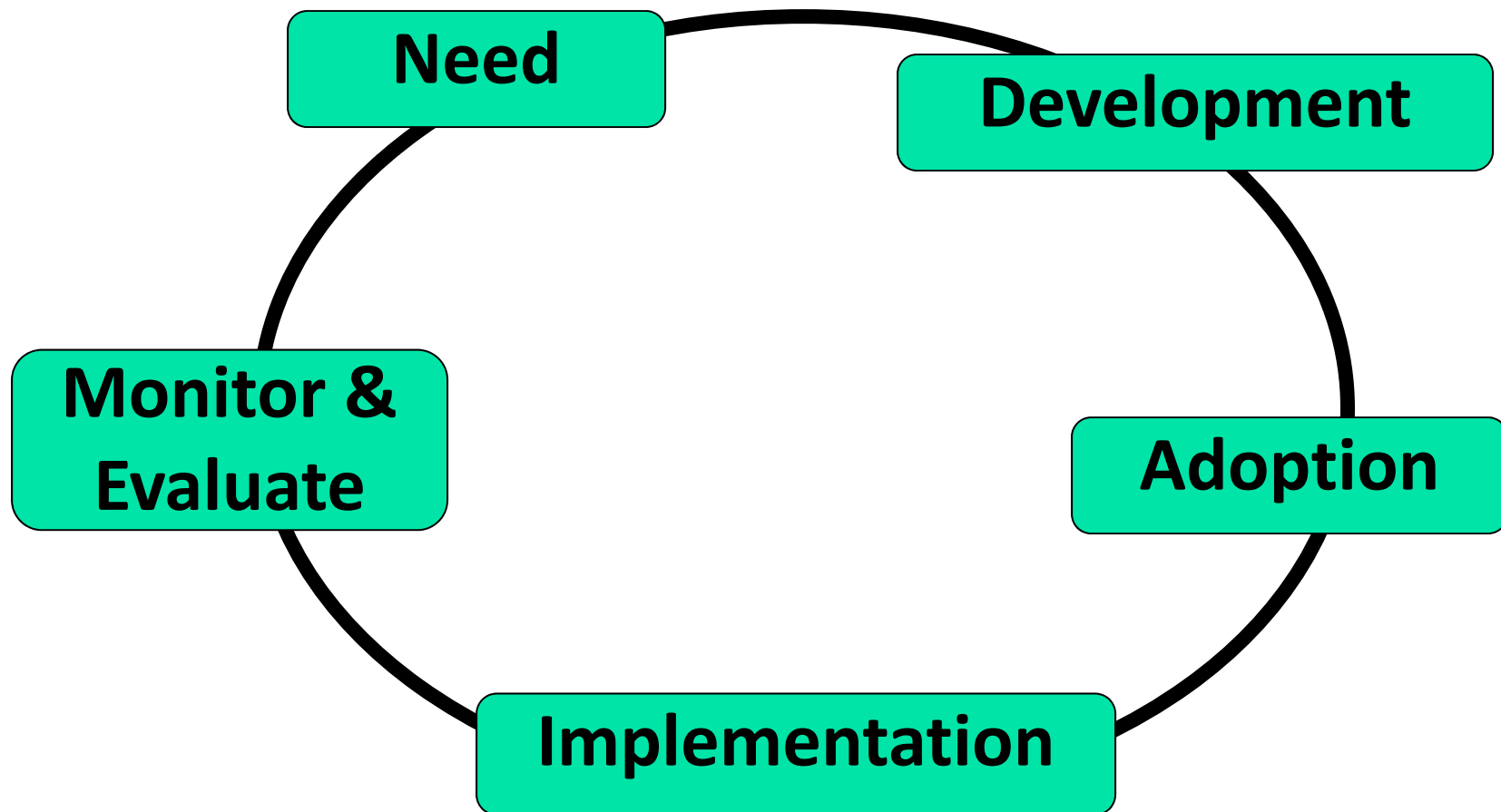
The Role of the School Board


To ensure that school districts are responsive to the values, beliefs and priorities of the community

The Board's Responsibilities

1. Set direction for the district
2. Establish a structure for action
3. Provide support for implementation
4. Hold the system accountable
5. Engage and lead the community

Policy Development Cycle



A photograph of two children running through a field of tall grass. The child on the left is wearing a white shirt and light-colored pants, while the child on the right is wearing a yellow shirt and grey pants. The background is a bright, hazy sky.

**What can
School Boards do to support
increased student physical activity?**

Setting Direction: Active Bodies, Active Minds

- Lindsey Cox, Physical Activity Specialist,
California Project LEAN
(lindsey.cox@cdph.ca.gov)

Physical Activity Guidelines

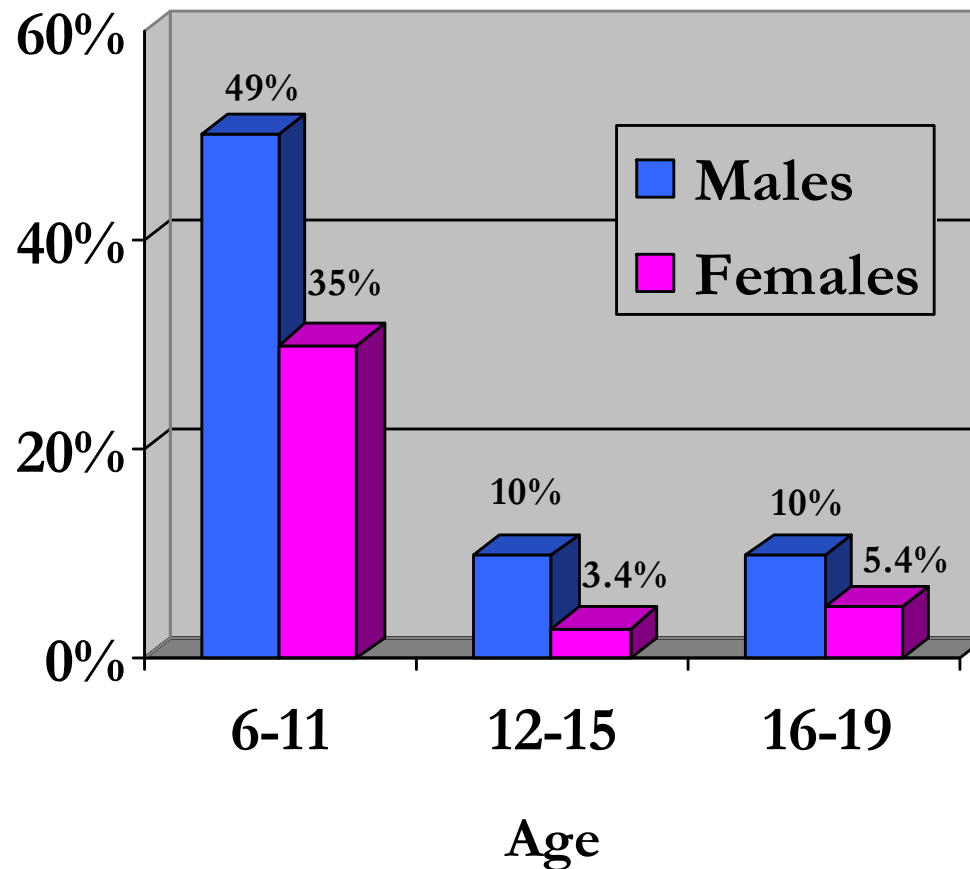
- U.S. Department of Health and Human Services
Physical Activity Guidelines for Americans 2008:
 - **60 minutes** or more physical activity daily

- Institute of Medicine 2005:
 - **Schools** provide at least half of the recommended daily physical activity time for youth:
30 minutes per day, including at least 50% of P.E. time.

What % of children meet 60 minutes per day moderate-vigorous intensity physical activity?

Percentage meeting 60 min/day physical activity guidelines.

Based on accelerometers. NHANES 2003-4



Comprehensive Physical Activity Program

Before school
Walk and roll to school
Before school programs
Morning stretch



During school
Classroom-based physical activity
Activity breaks and Recess
Quality Physical Education
School and community initiatives

After school
Joint use of facilities
After school programs

Safe Routes to School:

- *The research:*
Students who consistently walk/bike to/from school are **more physically active across the day** and have **higher intensities of physical activity.**
- *Policy opportunity:*
Support safe walking, bicycling and other physically active modes of transportation to/from school.



Source: Caltrans Safe Routes to School website

Active Living Research

Building Evidence to Prevent Childhood Obesity and Support Active Communities

MEMORANDUM | May 2009

active.livingresearch.org

Walking and Biking to School, Physical Activity and Health Outcomes

Over the past few decades, a number of social and environmental changes have limited children's access to safe places where they can walk, bike and play. As a result, children and adolescents are less physically active than they were a generation ago.¹ For example, traffic dangers, neighborhoods that lack sidewalks and urban sprawl have contributed to a sharp decline in the number of students ages 5 to 18 who walk or bike to school, from 42 percent in 1969² to only 13 percent in 2001.³

This decrease in active transport to school coincided with an alarming increase in childhood obesity. During the past four decades the obesity rate for children ages 6 to 11 has more than quadrupled (from 4.2 to 17 percent), and the obesity rate for adolescents ages 12 to 19 has more than tripled (from 4.6 to 17.6 percent).^{4,5} Policies and practices that

Morning stretch



Matt Diskin, Gateway USD, Tai Chi (Grade K)

Integrate physical activity into the classroom:

Policy opportunities:

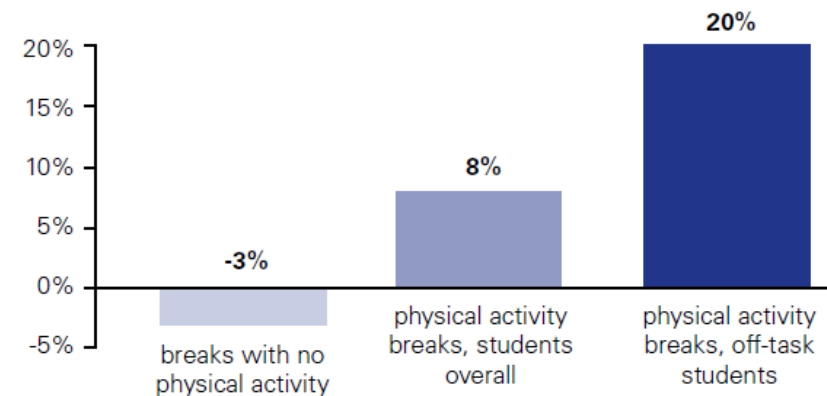
- Structure the class to facilitate physical activity
- Incorporate physical activity into the curriculum
- Establish physical activity breaks



Incorporate physical activity breaks

- *The research:* Short activity breaks during the school day can improve cognition, classroom behavior, and enhance academic performance.
- *Policy opportunity:* Ensure all elementary school students have at least 20 minutes of daily supervised recess.

Elementary students' on-task classroom behavior improves with physical activity breaks³⁵



Recess



Matt Diskin, Gateway USD

Physical education

Policy opportunities:

- Engage students in moderate to vigorous physical activity for at least 50% of physical education (P.E.) instructional time
- Monitor compliance with state required P.E. minutes
- Ensure all teachers who instruct P.E. receive focused, ongoing professional development

School and community initiatives

- Fundraisers: walk-a-thons, 5Ks
- School clubs: running, yoga, dance clubs
- School competitions: jump rope, pedometers



Joint use of facilities

- *Policy opportunity:*
Support access to indoor and outdoor physical activity facilities outside school hours.



Before and after school programs

- *Policy opportunity*: Integrate physical activity into before and after school programs.



Overcoming the Physical Inactivity Epidemic

<i>Activity</i>	<i>Min/day</i>
Classroom breaks (2/day x 5 min each)	10
Physical Education (20 min class)	10
Recess (one 20 min/day)	20
Total Physical Activity	40
Walking to school	10
After-School Program	30
Total Physical Activity	80

Making the Case: Activity Matters

- Dr. Lucy Phuong, Pediatrician, Kaiser Permanente-Hayward (Lucy.Phuong@kp.org)
- Craig McKinley, Physical Education Coordinator, Alameda COE (cmckinley@acoe.org)



Making the Case: Activity Matters

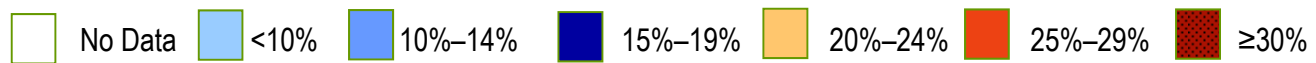
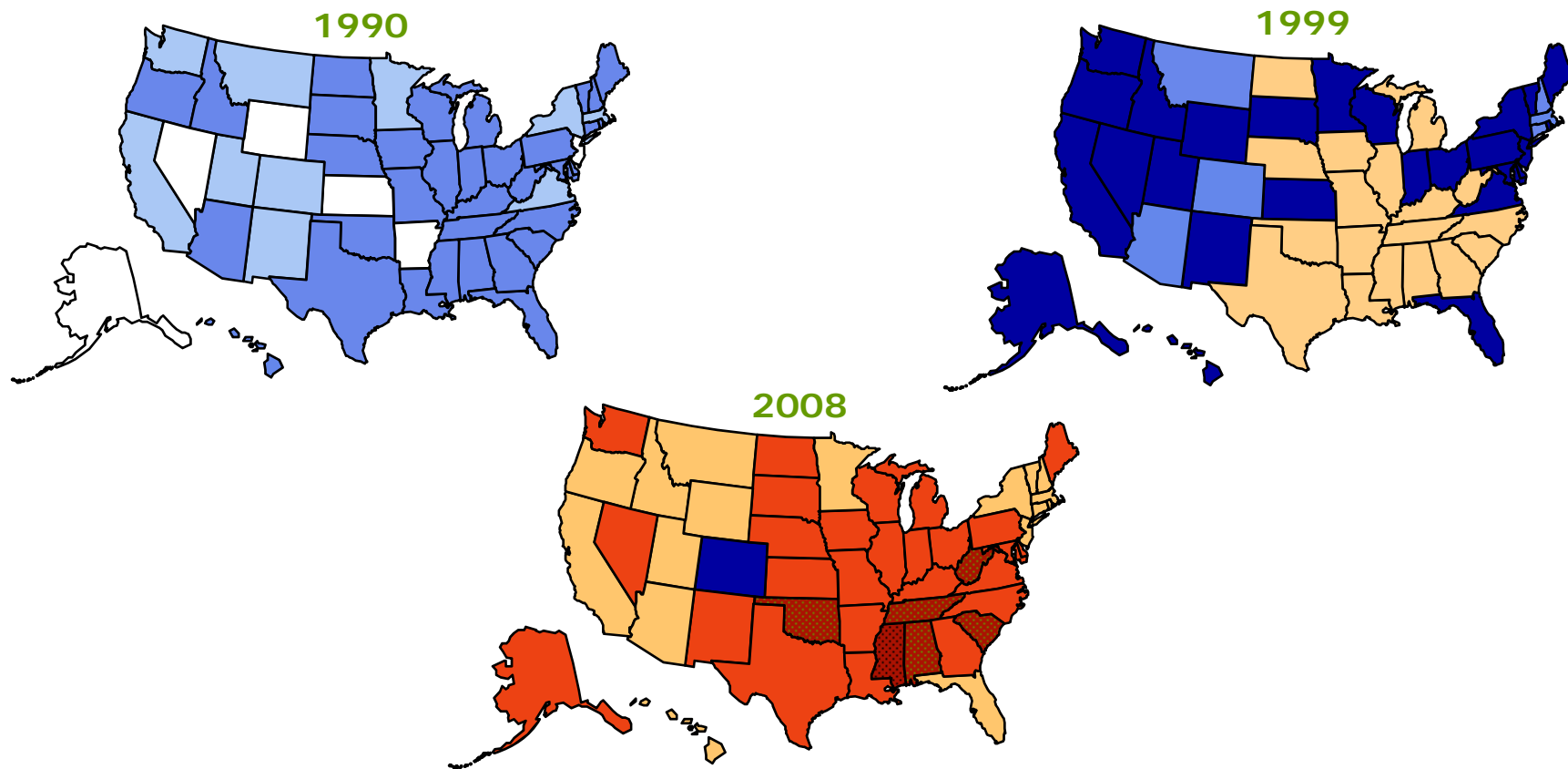
Lucy Phuong, MD
Department of Pediatrics, Hayward
March 11, 2010

What I'd like to discuss

- **The Obesity Epidemic**
- **Why it matters**
- **Get moving! (and who's not)**
- **Let's work together**

Obesity Trends* Among U.S. Adults BRFSS, 1990, 1999, 2008

(*BMI ≥ 30 , or about 30 lbs. overweight for 5'4" person)



Source: Behavioral Risk Factor Surveillance System, CDC.

The Overweight Epidemic: Closer to Home

What about our kids?

28.1% of 5th, 7th, and 9th graders in California are overweight.

Source: California Center for Public Health Advocacy, 2006

Contra Costa	23.8%
Hayward	34.9%
Oakland	30.7%
San Francisco	24.4%
San Jose	27.4%
San Lorenzo	34%
San Rafael	22.1%
Sunnyvale	24.8%

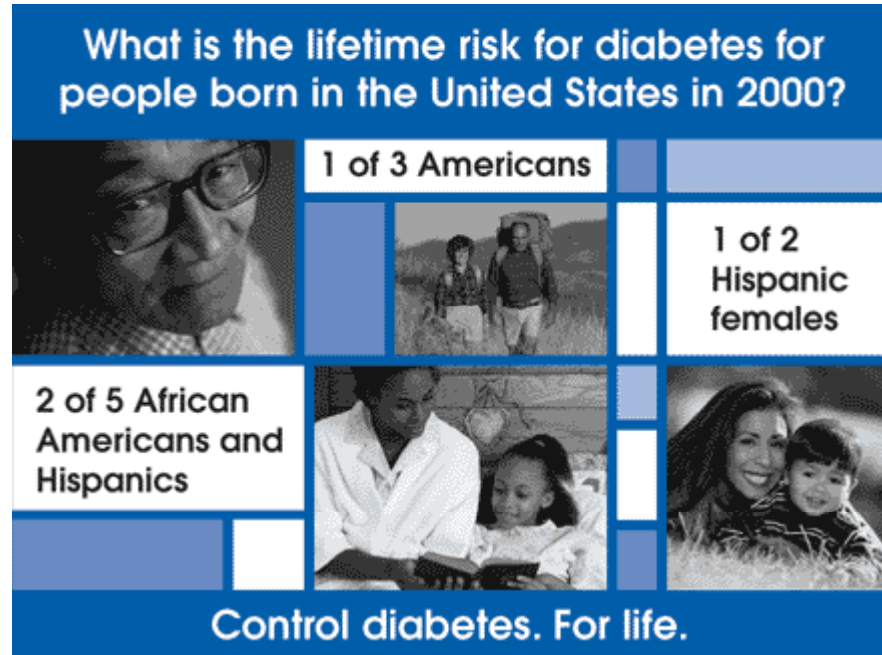
Why worry?

Overweight and obese children are at higher risk of:

- ☒ High Blood Pressure
- ☒ High Cholesterol
- ☒ Type 2 Diabetes
- ☒ Hip and knee problems
- ☒ Asthma
- ☒ Hormonal Problems
- ☒ Sleep apnea
- ☒ Fatty Liver
- ☒ Gallstones
- ☒ Psychosocial Problems
- ☒ Depression

Overweight and obese children are more likely to be overweight adults.

To put it in perspective...



Little Adults

“I think we’re looking at the first generation of children who may live less long than their parents as a result of the consequences of overweight and Type 2 DM.”

*Francine Ratner Kaufman, MD
Head, Division of Endo & Metabolism
Children’s Hospital, Los Angeles
NEJM 2005*



What the experts say

A survey of 233 experts in the fields of physical activity, nutrition, and childhood obesity identified **increasing physical activity** as the most important strategy for combating childhood obesity.

U.S. Government Accountability Office, 10/7/2005

Why physical activity matters

- ✓ Helps with weight reduction/ weight control
- ✓ Improves high blood pressure
- ✓ Reduces symptoms of fatty liver
- ✓ Increases concentration, reduces disruptive behavior, and improves academics
- ✓ Increases self-esteem and self-concept
- ✓ Helps with stress reduction
- ✓ Decreases anxiety and depression
- ✓ Less likely to use drugs or smoke



Why “screen time” matters

Adolescents with a bedroom television reported more television viewing time, less physical activity, poorer dietary habits, fewer family meals, and poorer school performance.

Daheia J. Barr-Anderson, Patricia van den Berg, Dianne Neumark-Sztainer, and Mary Story. Characteristics Associated With Older Adolescents Who Have a Television in Their Bedrooms. *Pediatrics*, Apr 2008; 121: 718 - 724.

Why school PE matters

Kids who participate in a daily school physical education (PE) program are more likely to engage in high level moderate to vigorous physical activity

Penny Gordon-Larsen, Robert G. McMurray, and Barry M. Popkin.
Determinants of Adolescent Physical Activity and Inactivity Patterns.
Pediatrics, Jun 2000; 105: e83.

Who to watch out for

Risk factors for having low levels of physical activity:

- ethnic minorities (especially girls) in the preadolescent/adolescent age groups
- children living in poverty
- children with disabilities
- children residing in apartments or public housing
- children living in neighborhoods where outdoor physical activity is restricted by climate, safety concerns, or lack of facilities

Sources:

US Department of Health and Human Services. *Healthy People 2010: Understanding and Improving Health*. 2nd ed. Washington, DC: US Department of Health and Human Services; 2001

Raine KD. *Overweights and Obesity in Canada: A Population Health Perspective*. Ottawa, Ontario, Canada: Canadian Institute for Health Information; 2004.

Inactivity is twice as common among females (14%) as males (7%) and among black females (21%) as white females (12%). - CDC

How much PE?

A study in 2000 of private and public schools showed: only 8% of elementary schools, 6.4% of middle schools, and 5.8% of high schools with existing PE requirements provided daily PE classes for all grades for the entire year.

Burgeson CR, Wechsler H, Brener ND, Young JC, Spain CG. Physical education and activity: results from the School Health Policies and Programs Study 2000. *J Sch Health*. 2001;71 :279 –293

How well are we doing?

The good news: The percentage of students who met all 6 state physical fitness standards increased substantially from 1999 to 2008 statewide and in many counties across California.

The not so good news: In 2008, 35.6% of 9th graders, 32.9% of 7th graders, and 28.5% of 5th graders met all fitness standards in California.

The percentage of children meeting fitness standards is measured through the California Physical Fitness Test, which is administered annually to public school children in grades 5, 7, and 9. Six areas of fitness are measured: upper body strength, flexibility, aerobic capacity, body composition, abdominal strength, and trunk strength. Students must meet minimum fitness levels in all 6 areas to pass this state test.

What else needs to be done?

- Implement healthy food and beverage standards for products sold in schools and other public facilities.
- Ensure quality physical education for all children in grades K-12.
- Eliminate advertising of unhealthy foods and beverages on public property.
- Make school recreation facilities available for after-hours use.

Recommendations from the
California Center for Public Health Advocacy

We want to help!

- ❑ Educational Theatre Programs
 - ❑ “The Best Me,” “PEACE Signs,” “Nightmare on Puberty Street,” “Secrets”
 - ❑ Check website or call: 877-353-2223

- ❑ Have a good idea and need funding? Consider applying for a KP Community Benefits grant (check website)

- ❑ Reach out to your local pediatrician!

CSBA Policy in Action
Training:
Maximizing Physical
Activity Opportunities in
Tough Budget Times

Craig McKinley
Physical Education Coordinator
Alameda County Office of Education
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510-670-7720



My Goal

Stronger Smarter Healthier Kids





The Economic Cost of Overweight, Obesity and Physical Inactivity

- **Total Cost to California in 2011 is estimated to be \$52.7 billion**
- **If there was just a 5% reduction per year for each of the risk factors, we would save \$2.4 billion per year**
- **What if we could put that money towards reducing the Achievement Gap and Prevention?**



The Economic Cost of Childhood Obesity and Physical Inactivity

- The national cost of childhood obesity is estimated at approximately \$14 billion per year.



Absenteeism = Loss of Funding

- Very overweight students miss 4-6 times more school than normal weight students. Schwimmer 2003; Action for Health Kids
- Students with poor nutrition and fitness levels are more likely to be absent and tardy



How Much????

Los Angeles Unified	\$ 15 million a year
Average Size District	\$100,000 or more

Cost of Students being out one day a month

A single-day absence by one student cost districts between \$9-\$20.



Figure out the impact to your district

<p>If all students were in school one extra day a year</p> <p>= Amount more \$</p>	<p># of students <u>x \$10</u></p>
<p>If even 25% more students were in school one extra day a year</p> <p>= Amount more \$</p>	<p>Amount \$ <u>Divided by 4</u></p>



The Unhealthy State of our Kids

- **No Child Left Behind has contributed to student inactivity by reducing the amount of time available for physical education, physical activity, and causing the elimination of recess in many schools.**



The Unhealthy State of our Kids

- **Obesity rates are highest among low-income Californians of African American, Latino, American Indian, and Pacific Islander descent.**
- **Approximately 60 percent of obese children ages 5 to 10 years have at least one cardiovascular disease risk factor, such as elevated total cholesterol, triglycerides, insulin, or blood pressure, and 25 percent have two or more risk factors.**

Source: Children Now Advocacy Group 2007 Report



Physical Activity

- Physical Activity is **ANY BODILY MOVEMENT** that is produced by the contraction of skeletal muscle and that substantially increases energy expenditure, including exercise, sport, dance, and other movement forms.



Physical Education:

- Physical Education instructional programs provide students with the **SKILLS** and **KNOWLEDGE** they need to **ESTABLISH** and **SUSTAIN** physical activity as a key component of their lifestyle, as children, adolescents and adults.

What do “Moderate” and “Vigorous” Activity Mean?

- **MODERATE:** While performing the physical activity, if your breathing and heart rate is noticeably faster but you can still carry on a conversation — it's probably moderately intense. Examples include—
 - Walking briskly (a 15-minute mile).
 - Light yard work (raking/bagging leaves or using a lawn mower).
 - Light snow shoveling.
 - Actively playing with children.
 - Biking at a casual pace.



What do “Moderate” and “Vigorous” Activity Mean?

- **Vigorous:** Your heart rate is increased substantially and you are breathing too hard and fast to have a conversation, it's probably vigorously intense. Examples include—
 - Jogging/running.
 - Swimming laps.
 - Jumping rope.
 - Cross-country skiing.
 - Rollerblading/inline skating at a brisk pace.
 - Most competitive sports (football, basketball, or soccer).



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["Words leap off the page."
— USA Today]

brain rules

12 Principles for Surviving and Thriving
at Work, Home, and School

JOHN MEDINA



Includes link to *Brain Rules* film

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SPARK

THE REVOLUTIONARY
NEW SCIENCE OF EXERCISE
AND THE BRAIN



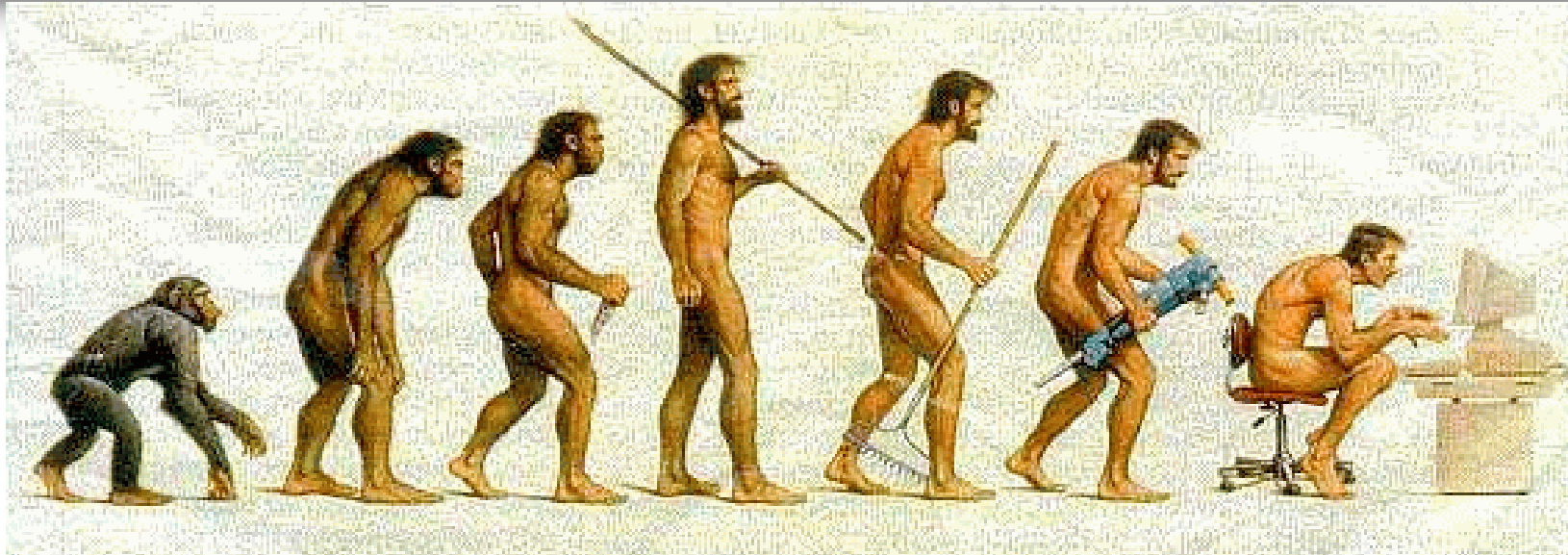
Supercharge Your Mental Circuits to
Beat Stress, Sharpen Your Thinking, Lift Your Mood,
Boost Your Memory, and Much More

JOHN J. RATEY, MD

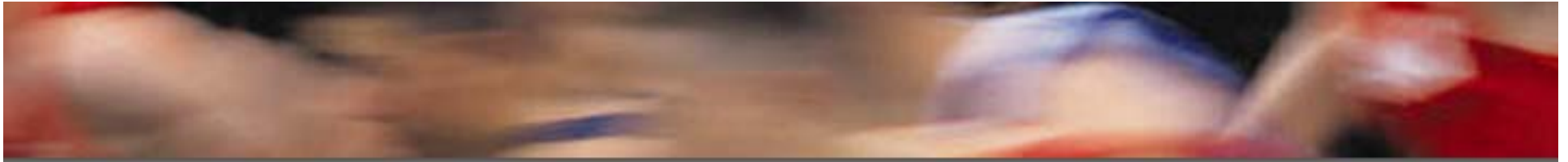
COAUTHOR OF *DRIVEN TO DISTRACTION*

with ERIC HAGERMAN

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- When we as humans first evolved, we were part of a hunter gatherer society that spent a great deal of our time walking around.
- Our brains developed to associate movement with cognition.



- If you did not run you did not eat.
- Individuals who could outrun & out-plan their peers would survive.



How the Human Brain Works: A brief overview.

- The brain is like a muscle: the more you use it, the stronger it gets.
- The brain is like play-doh: it can be shaped and molded by experience.
- Life experiences can lead to changes in cognition.



Oxygen and the Brain

- The brain is “fed” by the blood supply that delivers much needed oxygen.
- The blood also carries away toxins to promote healthy functioning.



How do our Brains “Grow?”

- Our brains can become more effective, and cognition can be enhanced in several ways.
 - The brain needs oxygen to function properly. Increasing the amount of oxygen can increase brain function.
 - The brain can grow by strengthening existing neurons and also by building new neuron branches.

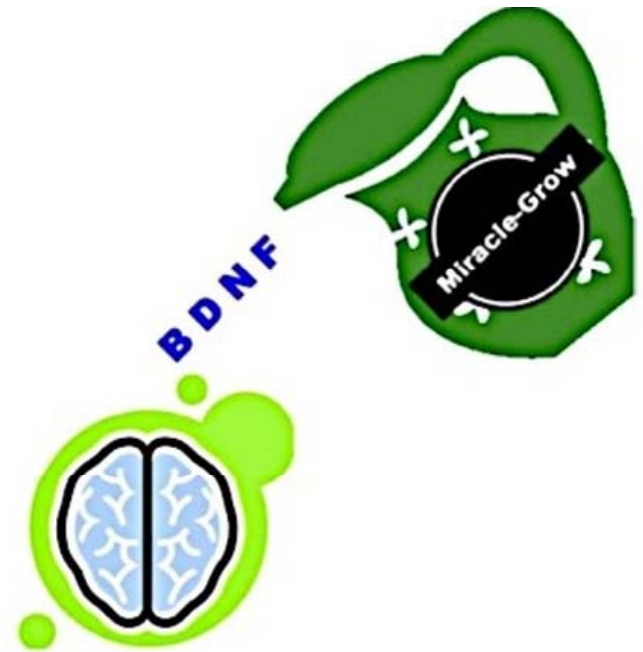


Oxygen, the Brain, and EXERCISE:

- When we exercise, we increase blood flow to all parts of our body, including the brain.
- This increases the oxygen and allows for more effective brain functioning
- **In essence, exercise FEEDS the brain by increasing OXYGEN!**

Brain Growth

- BDNF- Brain Derived Neurotrophic Factor: A protein produced inside nerve cells when they are active.
- BDNF is like a fertilizer, or Miracle-Gro for the brain.
- It keeps old brain cells functioning, and spurs the growth of new cells too!






Brain Growth and EXERCISE

- The correlation between BDNF and exercise is parallel:
 - As exercise increases, the body produces more BDNF.
 - More BDNF = Learning occurs at a faster rate.
 - Less exercise also means less production of BDNF.
 - Less BDNF = Learning slows down again.



How Physical Activity Affects the Brain

- 
- *Mood regulation*
 - *Self-esteem*
 - *Impulse control*
 - *Combats toxic effects of stress hormones*
 - *Improves neural arousal*
 - *Combats depression*
 - *Improves behavior*
 - *Memory retention – Better encodes information*
 - *Combats depression*

** Dr. John Ratey, Harvard**



Physical Activity and School

- In 2004, 13 researchers from various fields conducted a review of 850 studies on the effects of physical activity on school age children.
 - They determined that physical activity has a positive influence on memory, concentration, and classroom behavior.



The World of Brain Research

*A Sampling of Studies
Linking Movement and
Academic Success*

“School-based physical activity is positively linked to improved grades and standardized test scores.”

- *Hanson & Austen (2003)*
- *Robert Wood Johnson Foundation, 2007*
- *Maher, et. al., 2006*
- *NASPE, 2001*
- *Wang & Weugelers, 2008*
- *Trudeau & Shephard, 2008*
- *Coe, et. al, 2006*
- *Castelli, et. al., 2007*
- *Carlson, et. al., 2008*



The World of Brain Research

*A Sampling of Studies
Linking Movement and
Academic Success*

Physical activity increases concentration, mental cognition, and facilitates executive function.”

- *Hansson & Austen, 2003*
- *Maher, 2006*
- *Robert Wood Johnson Foundation, 2007*
- *Caterino & Polak, 1999*
- *Etnler, et. al., 1997*
- *Trudeau & Shepard, 2008*
- *Tamporowski, et. al., 2008*



The World of Brain Research

*A Sampling of Studies
Linking Movement and
Academic Success*

“There is NO evidence in the research literature that increased physical education/physical activity negatively impacts student performance in the core academic subject areas.”

*Physical Education
Research for Kids
Literature Review, 2009*



The World of Brain Research

*A Sampling of Studies
Linking Movement and
Academic Success*

“Physical Activity in the classroom successfully increases student activity levels and reduces adiposity.”

** Reed, et. al., 2008*

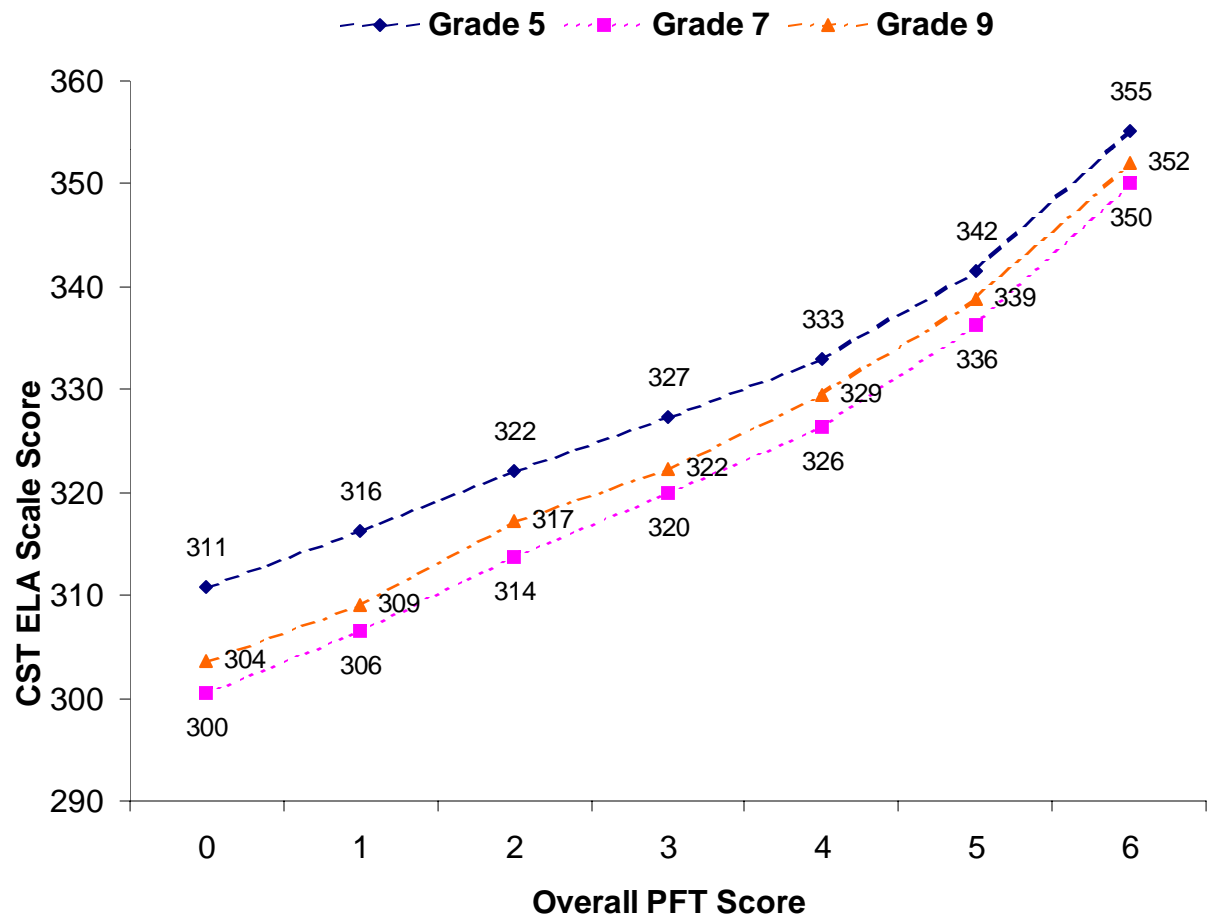
** Naylor, et. al., 2008*

** Taylor, et. al., 2009*

** Economos, et. al., 2007*

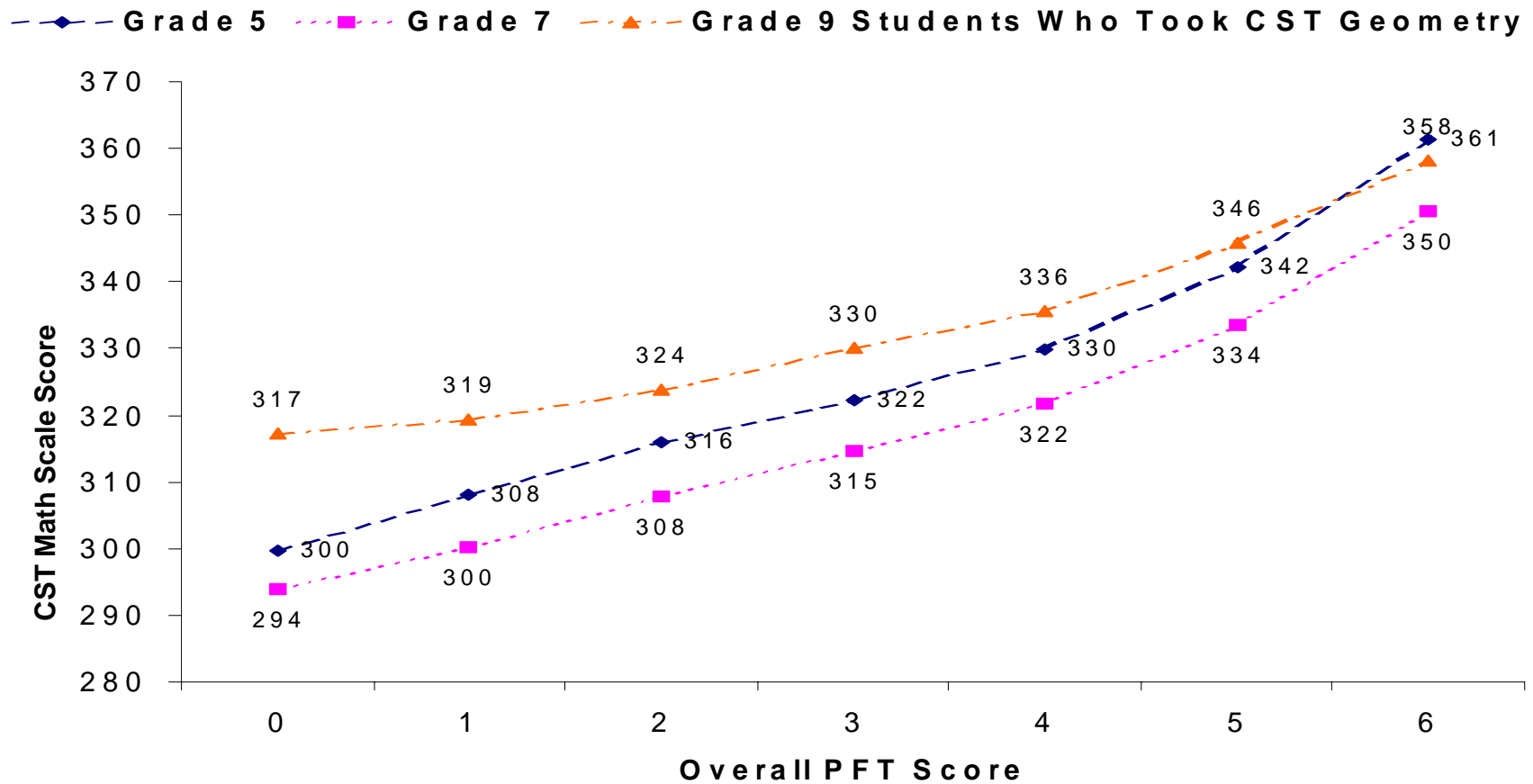
Relationship Between Physical Fitness and Academic Achievement in California

Source: California Department of Education 2005



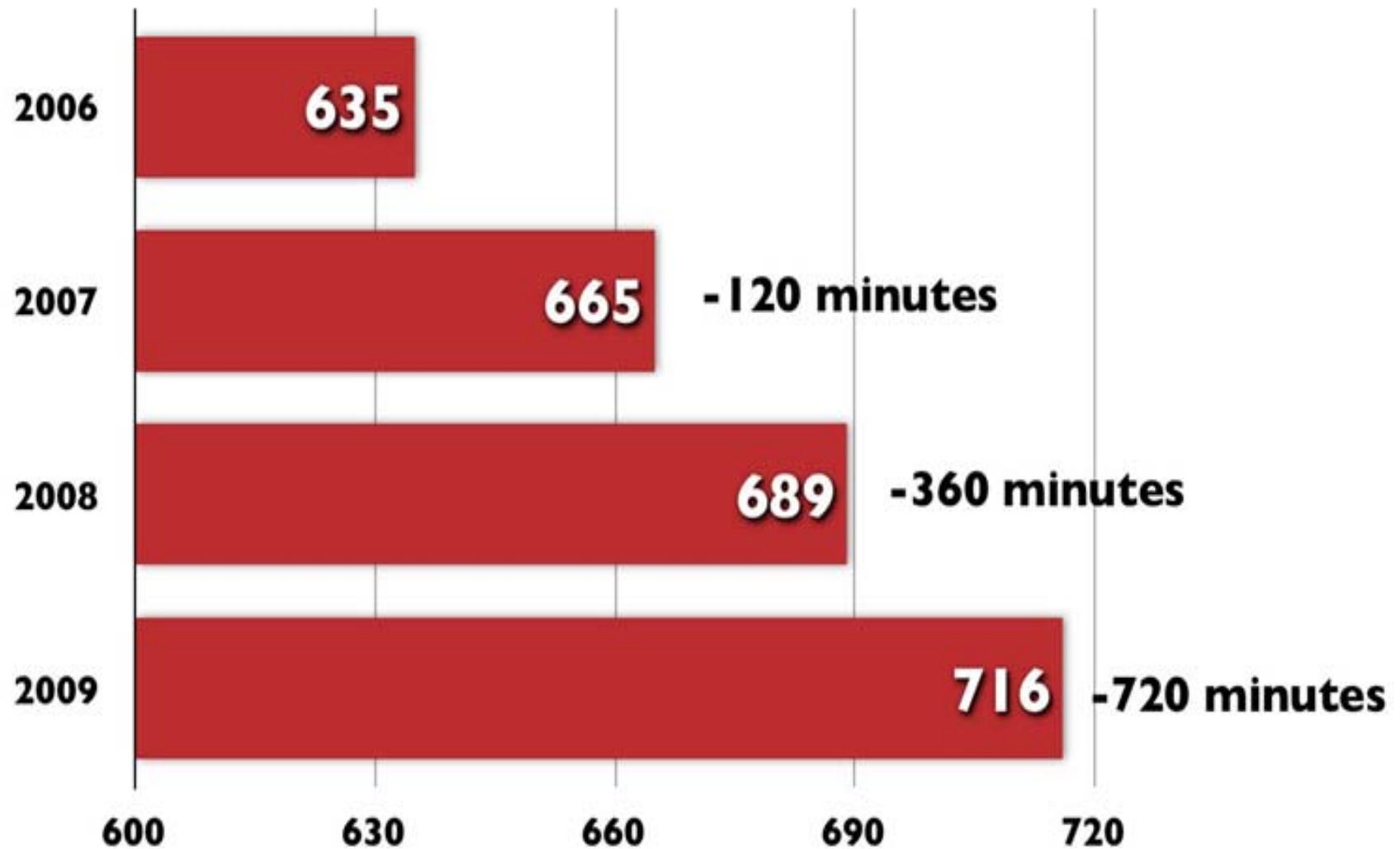
Relationship Between Physical Fitness and Academic Achievement in California

Source: California Department of Education 2005



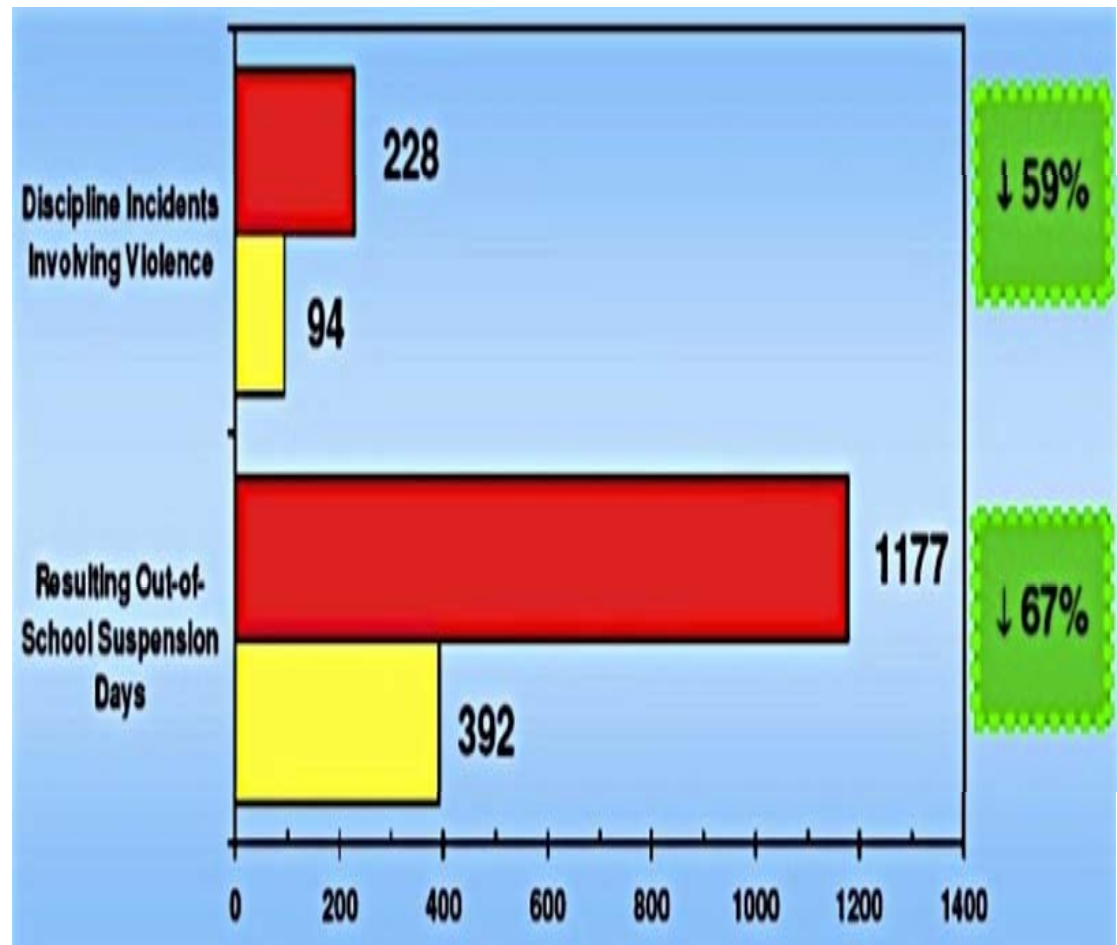
Cecil Avenue Middle School

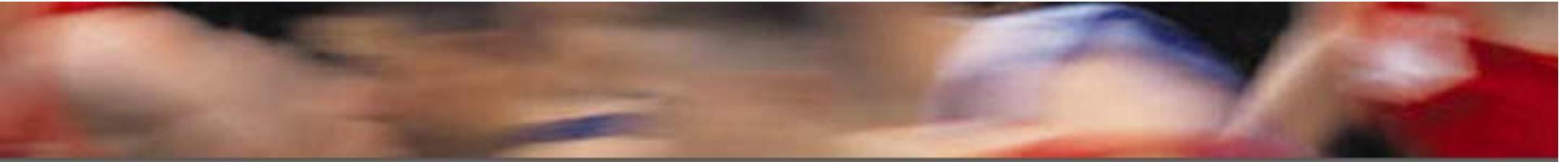
Ken Dyar Delano Union School District 2009



Woodland Elementary School Kansas City, Missouri

- 2005 expanded physical education class from one class a week to 45 minutes a day
- In one school year counselors reported the number of incidents involving violence decreased from 228 to 94 for the year
- The number of out of school suspension days decreased from 1177 to 392 for the year.





Physical Education Research for Kids (PERK)

A study for the California Task Force on Youth and Workplace Wellness
Sections of this report were written and edited by

Gail Woodward-Lopez, MPH

Dr. Robert C. and Veronica Atkins
Center for Weight and Health University of California, Berkeley

Heather Diaz, DrPH California State University, Sacramento

Leah Cox Whitney Chamberlain California Task Force on Youth

and Workplace Wellness



Integrate Physical Activity into The Full School Program

- Physical activity in the classroom
- Recess and activity breaks (outside class time)
- School facilities and playgrounds
 - ✓ All shown to be effective at increasing PA levels
 - ✓ Easy and cost-effective
 - ✓ Currently not fully utilized
 - ✓ In addition to, but never in place of PE



Classroom Physical Activity, Recess / Activity Breaks, Facilities Recommendations

- Require:
 - Frequency/minutes of physical activity in classroom and recess/activity breaks—in all grades
 - Facilities specifications and minimum space per pupil
- Identify/disseminate models, materials, guidelines
- Professional development (pre-service and in-service): benefits and strategies
- Provide funding and monitor use of funds
- Stakeholder involvement and reporting



Engaging Stakeholders and the Public Recommendations

- Provide incentives/recognition/publicity for students, teachers, and school achievement.
- Fund media campaigns to increase awareness and support
- Report status and progress to the public
- Involve key stakeholders in all steps of policy development and implementation



References

- Ratey, J. (2008) ***SPARK: The Revolutionary New Science of Exercise and The Brain.*** New York, NY: Little Brown & Co.
- Medina, J. J., (2008). ***Brain Rules: 12 Principals for Surviving and Thriving at Work, Home and School.*** Seattle, WA: Pear Press.
- ***The Economic Costs of Overweight, Obesity, and Physical Inactivity Among Californian Adults_2006*** (July 2009) The California Center for Public Health Advocacy



References

- Texas Education Agency. (2009). ***Physically fit students more likely to do well in school, less likely to be disciplinary problems.*** Austin, TX
- National Association for Sport and Physical Education. (2008). ***Comprehensive School Physical Activity Programs.*** Reston, VA
- California Project Lean. (2001) ***Nutrition, Physical Activity and Academic Achievement.*** Sacramento, CA
- Dyer, K., Keynote Address, School Wellness Conference. (2009) Delano Unified School District
- CDC
 - <http://www.cdc.gov/nccdphp/dnpa/obesity/>

Physical Activity Break

- Courtney Sjoerdsma, Elite Trainer, The SPARK program
 - Email: Courtney.Sjoerdsma@schoolspecialty.com
 - Web: www.sparkpe.org



Achieving Excellent P.E. Panel

■ Panelists:

- Jill Wynns, Board Member, San Francisco USD
(jillwynns@sfusd.edu)
- Michelle Zapata, Physical Education Content Specialist,
San Francisco USD(zapatam@sfusd.edu)

■ Moderator:

- Vicki Berends, Marketing Director, California Project
LEAN (vicki.berends@cdph.ca.gov)

Monitoring for Success: Moderate to Vigorous Physical Activity in P.E.

- Hannah Thompson, Research Associate,
university of California, San Francisco
(thompsonh@peds.ucsf.edu)

Measuring Physical Activity

Surveys



Activity Numbers

Eating

- 1.) Eating a meal
- 2.) Snacking

Work

- 3.) Working (e.g., part-time job, child care) (list)

- 4.) Doing house chores (e.g., vacuuming, dusting, washing dishes, animal care, etc.)
- 5.) Yard Work (e.g., mowing, raking)

After School/Spare Time/ Hobbies

- 6.) Church
- 7.) Hanging around
- 8.) Homework
- 9.) Listening to music
- 10.) Marching band/flag line/drill team
- 11.) Music lesson/playing instrument
- 12.) Playing video games/surfing Internet
- 13.) Reading
- 14.) Shopping
- 15.) Talking on phone
- 16.) Watching TV or movie

Transportation

- 17.) Riding in a car/bus
- 18.) Travel by walking
- 19.) Travel by bicycling

Sleep/Bathing

- 20.) Getting dressed
- 21.) Getting ready (hair, make-up, etc.)
- 22.) Showering/bathing
- 23.) Sleeping

School

- 24.) Club, student activity
- 25.) Lunch/free time/study hall
- 26.) P. E. Class
- 27.) ROTC
- 28.) Sitting in class

Physical Activities and Sports

- 29.) Aerobics/aerobic dancing
- 30.) Basketball
- 31.) Bicycling
- 32.) Bowling
- 33.) Calisthenics(i.e., jumping jacks, sit-ups)
- 34.) Cheerleading
- 35.) Dancing (social, recreational)
- 36.) Dancing (ballet, jazz, modern, tap)
- 37.) Field hockey
- 38.) Frisbee
- 39.) Golf
- 40.) Horseback riding
- 41.) Ice/roller skating
- 42.) Jogging/running
- 43.) Karate/judo/martial arts/ self-defense
- 44.) Rollerblading
- 45.) Skateboarding
- 46.) Soccer
- 47.) Softball/baseball
- 48.) Stationary exercise machines (e.g., cycle, ski machine, stair climber, treadmill)
- 49.) Street hockey
- 50.) Swimming, water exercise
- 51.) Tennis
- 52.) Volleyball
- 53.) Walking (briskly)
- 54.) Weight/circuit training
- 55.) Gymnastics/tumbling
- 56.) Kickboxing/Tae Bo
- 57.) Track and field
- 58.) Trampoline
- 59.) Other _____

Sample activity time sheet:

The table below shows the correct way to fill out the activity time sheets. Note that only one intensity level is checked for each activity.

	Activity Number	Light	Moderate	Hard	Very Hard
7:00-7:30	22	✓			
7:30-8:00	21	✓			
8:00-8:30	18		✓		
8:30-9:00	28	✓			
9:00-9:30	28	✓			
9:30-10:00	26			✓	
10:00-10:30	26			✓	

Write activity numbers in this column.

Put a "✓" to rate the intensity of each activity

TUESDAY



	Activity Number	Light	Moderate	Hard	Very Hard
before school	7:00-7:30				
	7:30-8:00				
during school	8:00-8:30				
	8:30-9:00				
	9:00-9:30				
	9:30-10:00				
	10:00-10:30				
lunch time	10:30-11:00				
	11:00-11:30				
	11:30-12:00				
	12:00-12:30				
	12:30-1:00				
after school	1:00-1:30				
	1:30-2:00				
	2:00-2:30				
	2:30-3:00				
	3:00-3:30				
	3:30-4:00				
	4:00-4:30				
supper time	4:30-5:00				
	5:00-5:30				
	5:30-6:00				
	6:00-6:30				
	6:30-7:00				
	7:00-7:30				
	7:30-8:00				
evening	8:00-8:30				
	8:30-9:00				
	9:00-9:30				
	9:30-10:00				
	10:00-10:30				
	10:30-11:00				
	11:00-11:30				
	11:30-12:00				

Measuring Physical Activity

Pedometers

- Count steps
- No time stamp
- Approx \$20 per unit



Accelerometers

- Measure activity (acceleration)
- Time stamp
- Intensive data downloading and interpretation
- Approx \$350 per unit





Measuring Physical Activity



Direct Observation

SOFIT: System for Observing Fitness Instruction Time

Scientific method for:

- Observing children's activity levels during physical fitness time
- Gathering contextual information
- Has been validated in PE, recess, and after-school

Data Collection

M = General Content (no intended PE, ex: transition, management, break times)
 K = Knowledge Content (student acquisition of knowledge related to PE)
 F = Fitness (stretching, calisthenics, running, warm-up and cool down activities)
 S = Skills (drills, dribbling, learning dance steps, scrimmage with instruction)
 G = Game Play (soccer, volleyball, tag games, dance performances, etc.)
 O = Free Play (activities not led by an adult)

Interval	Student Activity	Content
1	1 2 3 4 5	M K F S G O
2	1 2 3 4 5	M K F S G O
3	1 2 3 4 5	M K F S G O
o	4	M K F S G O
n	5	M K F S G O
e	6	M K F S G O
	7	M K F S G O
	8	M K F S G O
m/f	9	M K F S G O
	10	M K F S G O
	11	M K F S G O
	12	M K F S G O

Subject's Primary Activity:

Notes:



How It Works

- Develop a question:
 - How active are my kids?
 - Do activity levels vary by grade or gender?
 - How do activity levels vary based on activity?
 - How much time is spent in behavior management?
- Type of evaluation:
 - Cross-sectional (snapshot)
 - Pre and post (baseline and follow-up)



How It Works (cont)

- Collect the data
- Use a computer program or manually analyze data
- Look at your findings and decide on next steps
 - What did you learn?
 - What do you want to change?





How You Can Use Data

Sample data from an evaluation in SFUSD Elementary Schools

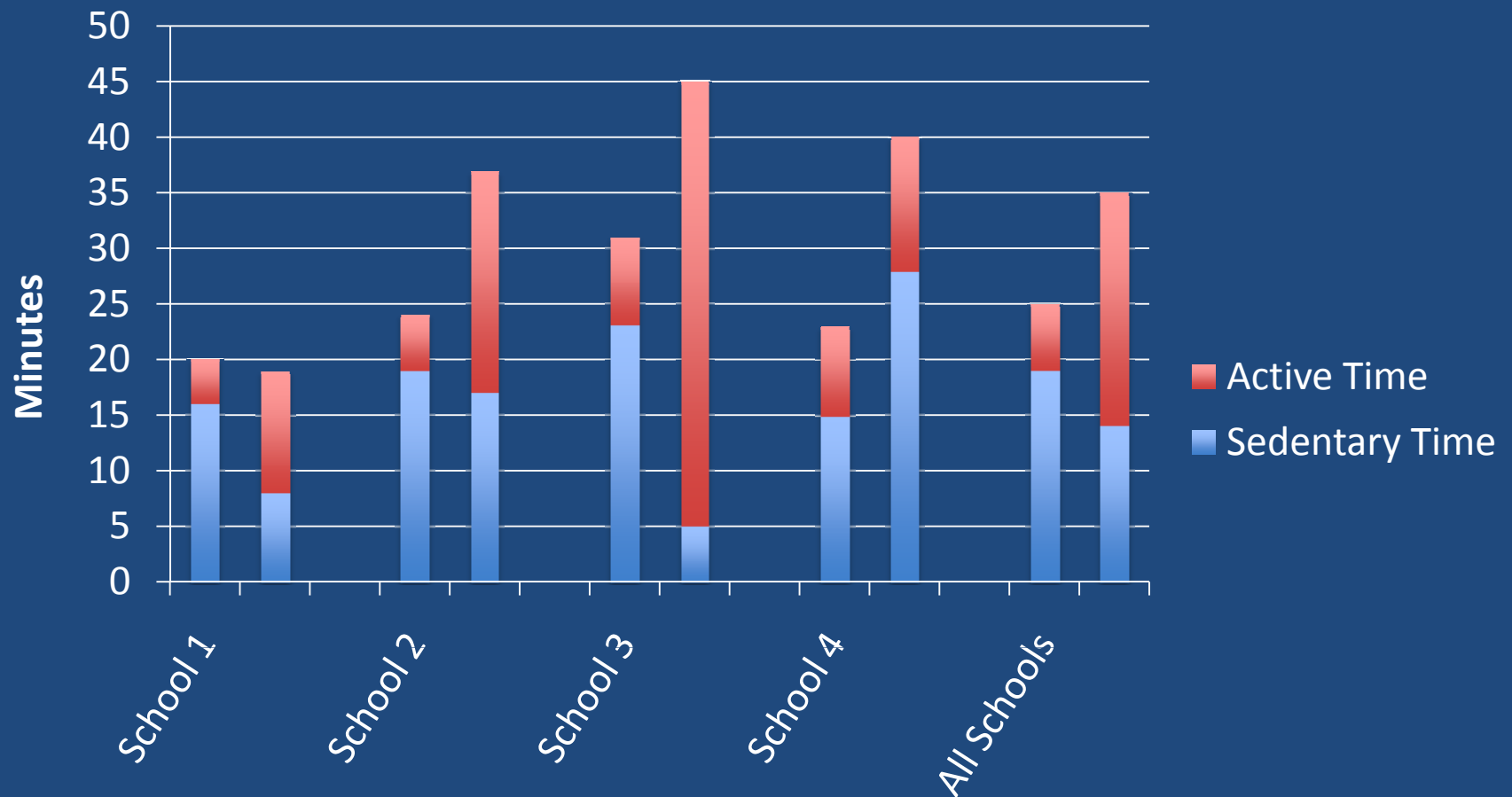
Activity	Average Activity Level
Break Dancing	2.4
Dance/Hip Hop Class	3.4
Track Practice	3.5
Various	3.5
Dodge Ball	3.6
King Pin	3.7
Transition Time	3.8
Sharks and Minnows	4.0
Tag	4.0

Gender	Average Activity Level
Girls	3.4
Boys	3.6



How You Can Use Data (cont)

Time in MVPA



How You Can Use Data (cont)

Table: Percent of Lesson Spent in Content Type

	General	Knowledge	Fitness	Skills	Game Play	Free Play
School 1	19%	9%	12%	0%	60%	0%
School 2	19%	2%	9%	2%	70%	0%
School 3	6%	0%	9%	0%	68%	20%
School 4	18%	13%	33%	37%	0%	0%
All Schools	15%	6%	16%	10%	49%	5%

Official SOFIT Trainings

Julie Frank

Director of Operations & Special Projects

The SPARK Programs

Phone: 1-800-SPARK-PE (772-7573) ext. 2204

www.sparkpe.org



Questions?

Hannah Thompson

UCSF Department of Pediatrics

thompsonh@peds.ucsf.edu

415-514-1444

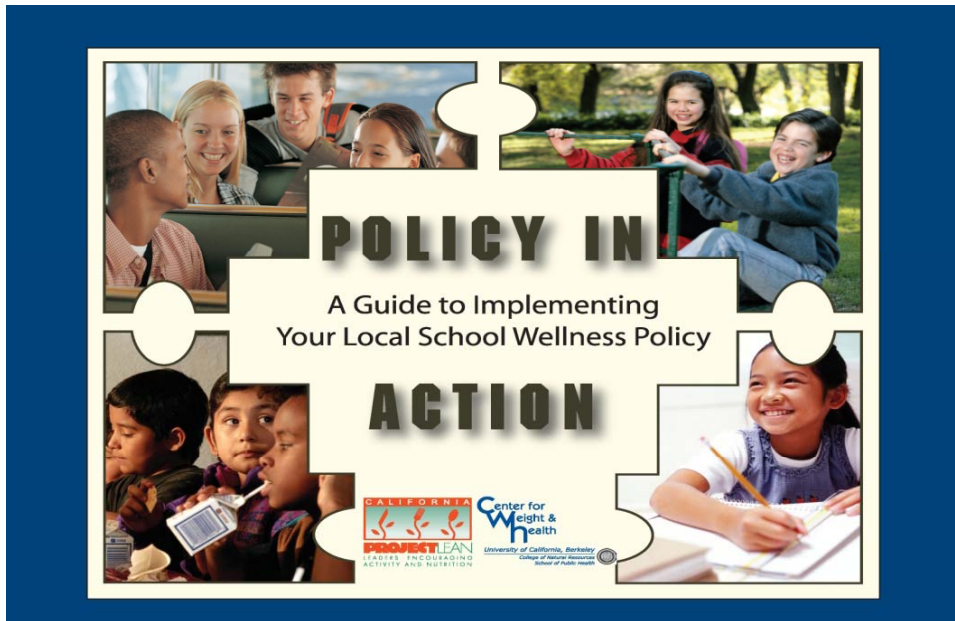


Policy in Action: Group Activity

- Katherine Hawksworth, Health Educator,
California Project LEAN
(Katherine.Hawksworth@cdph.ca.gov)

Policy Implementation

(www.CaliforniaProjectLEAN.org)



POLICY COMPONENT	PRIORITY (HIGH/MEDIUM/LOW)			DATE DUE
	H	M	L	
1. Physical Activity Policy Elements				
<input type="checkbox"/> PE				
<input type="checkbox"/> Minutes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Staff training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Curriculum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Fitness testing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Recess	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> During school (classroom activity)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Before or after school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. Nutrition Education Policy Elements				
<input type="checkbox"/> Curriculum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/> Staff training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	



Recess before Lunch

- Jeremy Lansing, Training Manager, Playworks
 - Email: jlansing@playworks.org
 - Web: www.playworks.org



Lunch

Collaboration in Action: Maximizing Physical Activity Opportunities

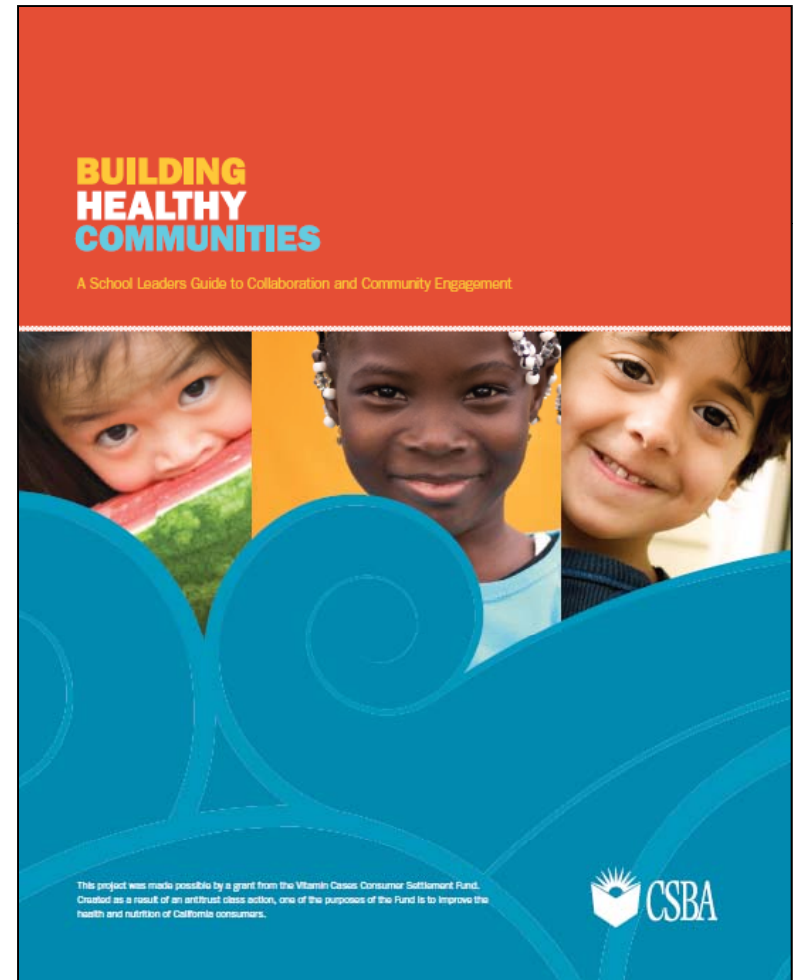
- Betsy McNeil, Student Wellness Consultant, CSBA (bmcneil@csba.org)
- Michelle Mount, *Fit for Learning* Coordinator, Santa Clara COE (Michelle.Mount@sccoe.org)

Healthy Communities, Healthy Students project

- To equip school board members with the resources, tools and training needed to engage other locally elected officials on the issues and impact of childhood obesity.
- CSBA and Cities Counties Schools Partnership

Engage and Lead the Community

- Building Healthy Communities:
A School Leader's Guide to Collaboration and Community Engagement





Collaboration In Action: Maximizing Physical Activity Opportunities

Presenter: Michelle Mount
fit for learning™

Santa Clara County Office of Education
San Jose, California

Foundation of Collaboration

“Creating a community where the healthy and active choice is the easy choice takes time and many players. It is not an outcome that can be achieved by one entity. All sectors of the community have a role to play: schools, cities, counties, businesses, nonprofits, parents youths and others.”

Building Healthy Communities: A School Leaders Guide to Collaboration and Community Engagement, CSBA, 2009



SANTA CLARA COUNTY



OFFICE OF EDUCATION



fit for learning™

“Even during difficult budget times,
nutrition and fitness should be a
priority for all schools and districts
Our schools have an exceptional
opportunity to guide our children
towards healthier lifestyles.”

-Jack O’Connell,
California State Superintendent of Schools

Shared Vision

We care about the health and well being of our children within the school environment.



HEALTHY SILICON VALLEY

Nutrition & Wellness
Public Health Department
Santa Clara Valley Health & Hospital System

Silicon Valley Leadership Group

GUIDANT
FOUNDATION

BARNES & NOBLE
BOOKSELLERS

KAISER PERMANENTE. thrive



HEALTHTrust

mattson



The California Endowment

Lucile Packard Children's Hospital at Stanford

Steps to a Healthier CA
Santa Clara County

American Cancer Society



WEBCOR BUILDERS

SANTA CLARA COUNTY OFFICE OF EDUCATION

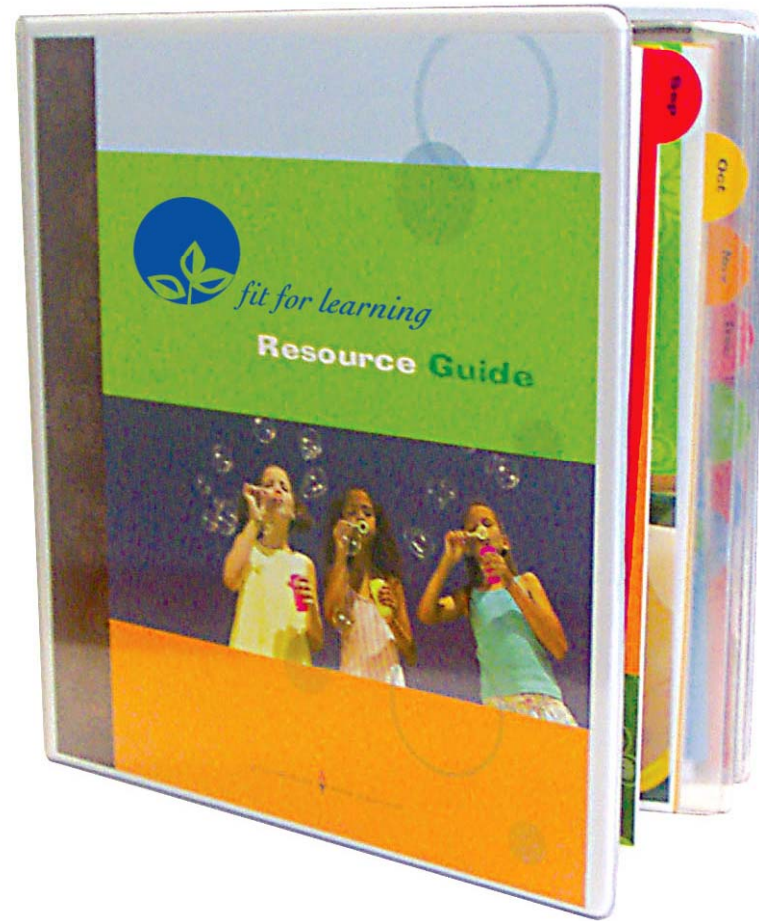


fit for learning™

***fit for learning*TM is a multi-faceted initiative that:**

- Promotes health and wellness messages in the school environment;
- Infuses nutrition and physical activities in the classroom; and
- Supports implementation of the school wellness policy.

*fit for learning*TM Resource Guide



Monthly Themes



September	<i>Fruits & Veggies Matter</i>
October	<i>Let's Move!</i>
November	<i>MyPyramid.gov</i>
December	<i>Celebrate</i>
January	<i>Healthy Choices</i>
February	<i>Heart Healthy Body</i>
March	<i>Fuel Your Body</i>
April	<i>Consumer Beware</i>
May	<i>Ready Set Go!</i>
June	<i>Rethink Your Drink</i>
July	<i>Play it Safe</i>
August	<i>Me, We, and the Big E</i>

*fit for learning*TM
Champions



Healthier Campus



Local School Wellness Policy

1. **Nutrition Education**
2. **Physical Education**
3. **Campus food provision**
4. **Other school-based activities designed to promote student wellness**

The Collaborative Approach

- Creates a win-win situation
- Maximizes financial resources



We build strong kids,
strong families,
strong communities.

“This work is about children and their future. Addressing the needs of the whole child will result in greater success in academics and in life. Accomplishing this will take everyone working together. As adults and leaders, it is our responsibility and our task to provide the best possible future for the next generation .”

Building Healthy Communities: A School Leaders Guide to Collaboration and Community Engagement, CSBA, 2009



SANTA CLARA COUNTY  OFFICE OF EDUCATION



Successful Strategies: Integrating Physical Activity throughout the School Day

- Lloyd Nadal, Program Director, CANFIT (lnadal@canfit.org)
- Craig McKinley, Physical Education Coordinator, Alameda COE (cmckinley@acoe.org)
- Jeremy Lansing, Training Manager, Playworks (jlansing@playworks.org)
- Mariah Martin, Physical Activity Program Manager, California After School Resource Center (mmartin@californiaafterschool.org)
- Discussant: Nancy Newkirk, Board President, Sunnyvale School District (n_newkirk@hotmail.com)

All young people deserve to
grow up in a **PLACE** that
supports being healthy.

CANFIT

To work with communities & policymakers to develop culturally resonant policies & practices that improve food & fitness environments for adolescents in low income communities & communities of color.









NO TRESPASSING

CALIFORNIA PENAL CODE SECTION 627
REQUIRES ALL PERSONS ENTERING SCHOOL
PROPERTY TO OBTAIN PERMISSION FROM
THE PRINCIPAL OR A DESIGNATED SCHOOL
OFFICIAL PRIOR TO ENTERING THE SCHOOL
PROPERTY DURING THE FOLLOWING DAYS
AND HOURS: MONDAY THROUGH FRIDAY
7:00 AM TO 4:30 PM

VIOLATION IS A MISDEMEANOR
PUNISHABLE BY FINE AND/OR JAIL.

<p>NO</p> <ul style="list-style-type: none">• SKATEBOARDING• ROLLER BLADING• BICYCLES OR TRICYCLES• LOUD MUSIC• SOCCER OR BALL PLAYING <p>IN BUILDING AT ANY TIME!</p> <hr/> <p>PLEASE RESPECT OTHERS</p>	<p>NO</p> <ul style="list-style-type: none">• PATINETAS• PATINES• BICICLETAS O TRICICLOS• MUSICA EN ALTO• JUGAR SOCCER O CON PELOTAS <p>EN ESTE EDIFICIO A NINGUNA HORA!</p> <hr/> <p>POR FAVOR RESPETEN A LOS INQUILINOS</p>
--	--

NO SE PERMITE JUGAR PELOTA EN EL PATIO

IT IS PROHIBITED TO PLAY BALL IN THE PATIO

NO CHILDREN ALLOWED PLAYING IN COURT YARD

MANAGEMENT

PASSIVE
AREA
NO ACTIVE
SPORTS

05/19/2004



STEP 1: Who's Your Target Audience?

Basic Model of Communication



(Adapted with permission from MEE Productions ©, 2006.)

STEP 2: How Do You Reach Your Audience?

- Connect w/ Today's Culture & Needs
- Argument/Counter-Argument;
" Be Prepared To Argue Myths "
- Use Various Media Outlets - Video-Based
(ex: YouTube)



STEP 3: Create an Effective Message

- Quick, Easy & Simple (ex: 15 secs or less)
- Authentic & Real (ex: tells a story)
- Inspire or Aspire
- Universal appeal



Communities Need



- **Mo' Good Food!**

...and Fewer unhealthy food choices

- **Mo' Safe Places to Play!**

...and Rapid transit w/ safe, complete streets

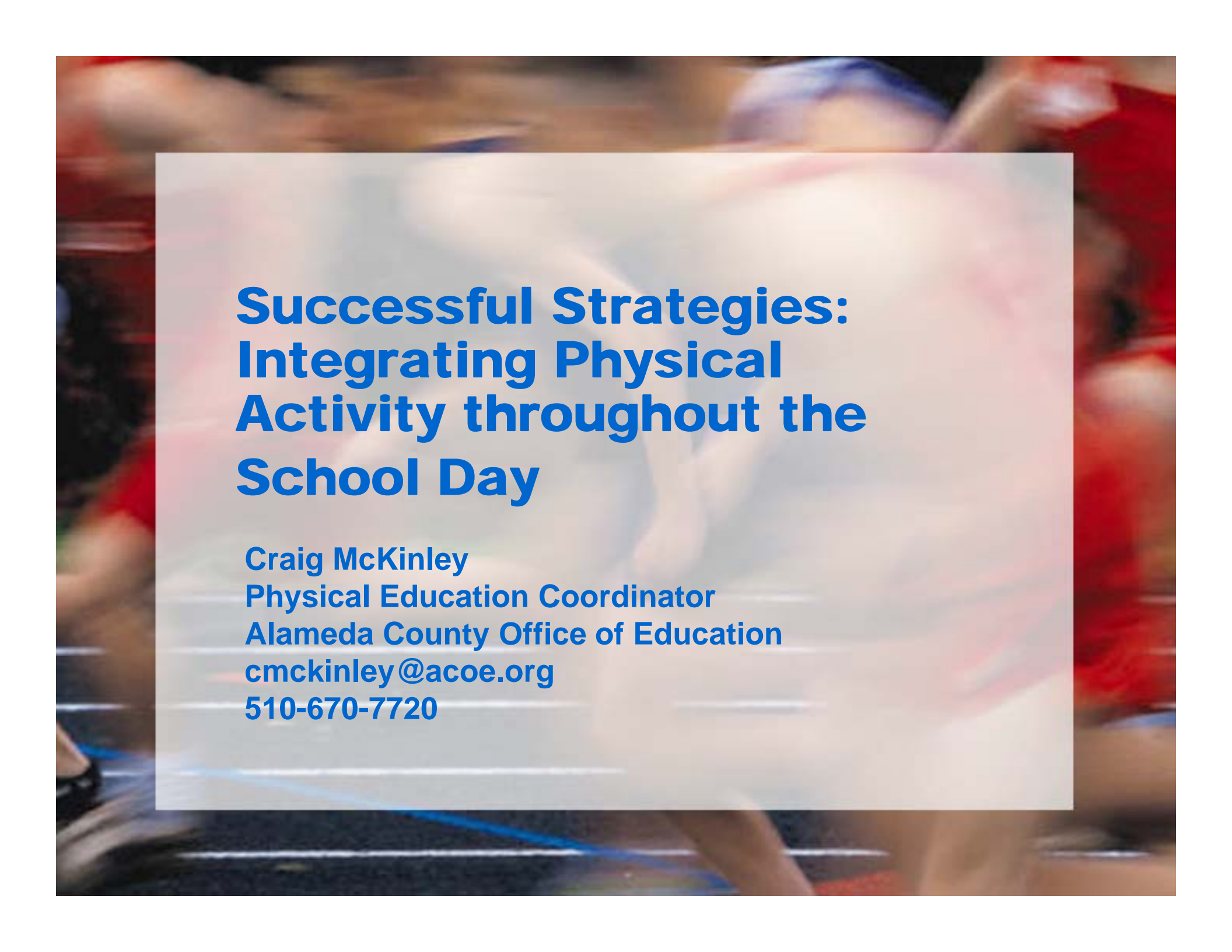
- **Mo' Opportunities for Youth!**

- Less exposure to advertising for unhealthy foods
- Schools with quality PE every day (all grades)
- School grounds open to the community after hours

Team Debate Challenge

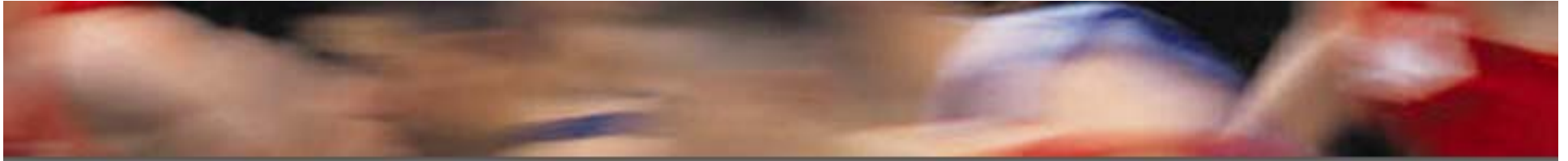
ISSUE:

Is it important to have parks or places to play in our community?



Successful Strategies: Integrating Physical Activity throughout the School Day

Craig McKinley
Physical Education Coordinator
Alameda County Office of Education
cmckinley@acoe.org
510-670-7720



Energizers

Classroom-based Physical Activities

The way teachers integrate physical activity with academic concepts



The “Energizers” were
developed by the

EAST CAROLINA UNIVERSITY Activity Promotion Laboratory Department of
Exercise and Sport Science College of Health and Human Performance

Energizer Team Members:

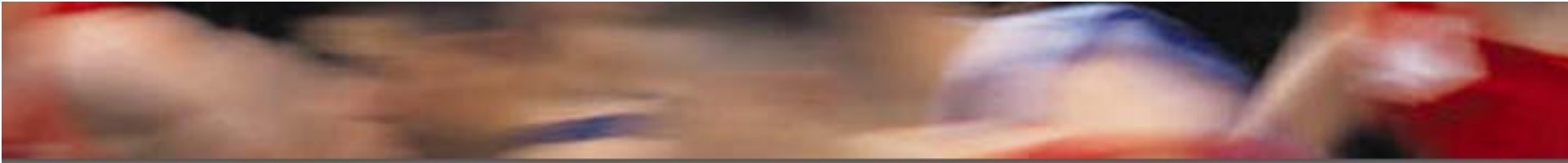
Matthew T. Mahar, Ed.D.

Donna P. Scales, M.A.Ed. Rhonda K. Kenny, M.A.Ed.
Gretchen Collins, B.S.
Tamlyn Shields, M.A.



Background

- In January of 2003, the North Carolina State Board of Education passed the Healthy Active Children Policy (HSP-S-000). This policy provides local school districts with resources to promote coordinated school health programs, emphasizing the physical education and physical activity components.



In April 2005, the State Board of Education revised the policy to mandate that schools provide a minimum of 30 minutes of physical activity for all K-8 students daily. It further states, “the physical activity required by this section must involve physical exertion of at least a moderate to intense level and for a duration sufficient to provide a significant health benefit to students”.



California Dreamin'

March across Golden Gate Bridge

Surf in the Pacific Ocean

Climb up a Redwood Tree

Pretend you're an actor and wave to your fans

Stomp Grapes in the Napa Valley

Pick Oranges in the Central Valley

In line skate on the strand in San Diego

Ski on the Sierra Nevadas

Climb Mt. Whitney, the highest peak in the continental US

Hit a Home Run at Pac Bell Park

Shoot a Jump Shot at the Network Associates Coliseum

30 Seconds



Policy in Action Training:

Maximizing Physical Activity Opportunities in Tough Budget Times

Jeremy Lansing, M.A.

JLansing@Playworks
www.Playworks.org



PLAYWORKS
EDUCATION ENERGIZED

**Stop the chaos at
recess**



**More time for teachers
to teach**

**Improve student
learning**



PLAYWORKS

EDUCATION ENERGIZED



The State of Recess

Conflict Resolution

Youth Leadership

Benefits to Play and PA

Barriers to Play and PA



PLAYWORKS

EDUCATION ENERGIZED



School Based Program

- California Regions:
Alameda County, WCC,
San Francisco, Silicon
Valley, Los Angeles

Training

- Stockton Model
- Professional Development



More Information

Jeremy Lansing

510.768.7351

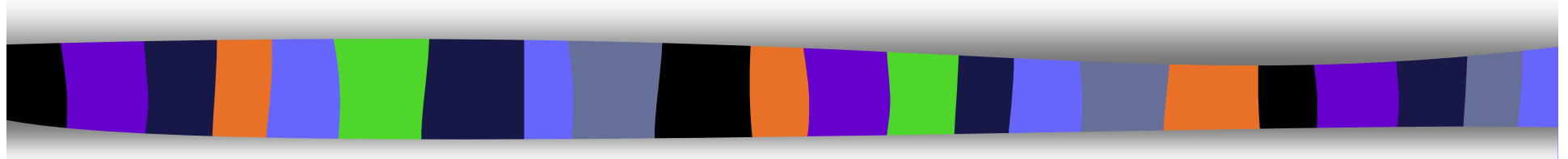
www.Playworks.org

Download our **FREE Playbook**





Boost Academic Achievement with After School Physical Activity



Mariah Martin, MPH

California After School Resource Center



Top Three Ways to Improve Achievement with After School Physical Activity

- 1) Start every day with physical activity.**
- 2) Never have students sitting more than 50 consecutive minutes.**
 - Younger students no more than 20 to 30 minutes.**
 - Use physical activity to break up sedentary time.**
- 3) Reinforce academic concepts with physical activity.**

Sample Science Standard: Grade Two

Students know matter has three forms:
solid, liquid, and gas.





Movement Guidance

Movement Concepts	Solid	Liquid	Gas
Relation to the Ground	Low	Low	High
Speed	No movement or slow	Slow to medium	Fast
Body Movement	Balancing/ still	Bending and turning	Floating and rising

Sample Science Standard: Grade Five

Students know when liquid water evaporates, it turns into water vapor in the air and can reappear as a liquid when cooled or as a solid if cooled below the freezing point of water.





Movement Guidance

Movement Concepts	Evaporated to Vapor	Cooled to Liquid	Cooled to Solid
Relation to the Ground	Low to high	High to low	High to low
Speed	Fast	Fast then medium	Fast then medium then slow/no movement
Body Movement	Bending and turning to floating and rising	Floating and rising to bending and turning	Floating and rising to bending and turning to balancing/still



Ready to get active after
school?

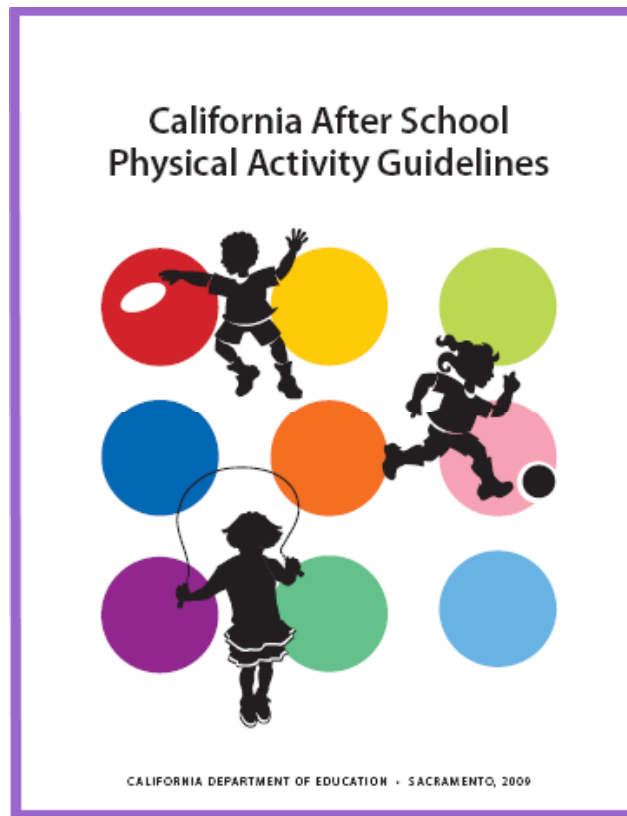


We can help.



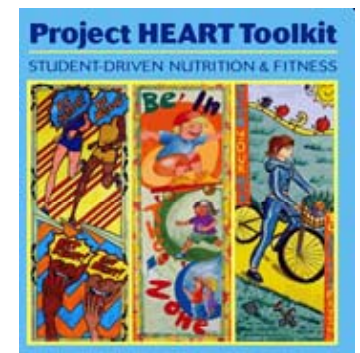
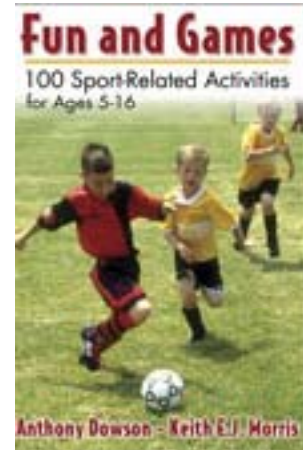
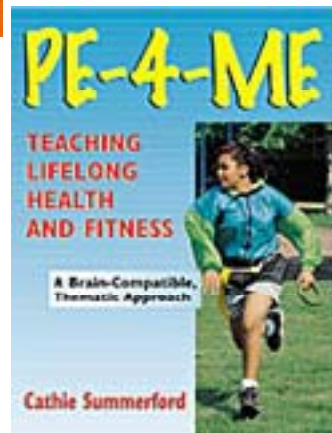
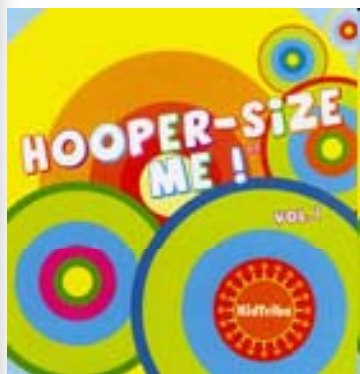
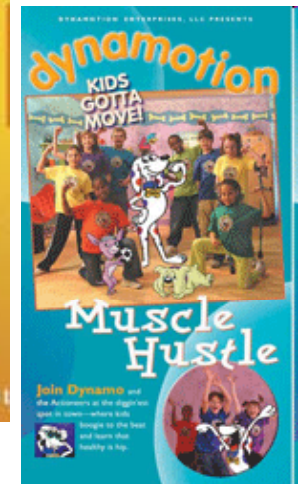
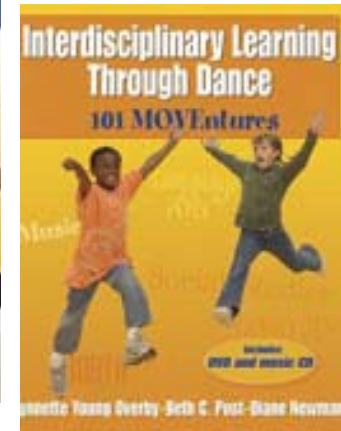
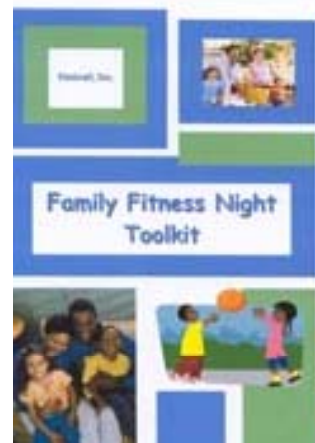
FREE Access to the CASPA Guidelines

California After School Physical Activity (CASPA) Guidelines and How-to Manual



FREE Lending Library

Resources for free four-week loan



FREE Online Trainings

24hr access to free online trainings

- Physical Activity 1: Up and Running
- Physical Activity 2: Maximize Potential
- Physical Activity 3: Going the Distance
- Physical Activity: Ability Awareness





CASRC

The one-stop site for after school professionals who are ready to get active.

<http://www.californiaafterschool.org>



Discussant: Nancy Newkirk, Board President,
Sunnyvale School District

What do you do next?

- Christopher Columbus syndrome- “If you don’t know where you are going, how will you know when you get there?”
- Check the topography (*big picture*)
- Use the binoculars offered by the boards responsibilities

**Check your touch points of
Accountability**

Monitoring, Reviewing, and Revising Policies

travel guides

- Check CSBA gamut for sample policies
- Look to CSBA policy briefs
- Ask when they were last updated
- What is cycle for update/review

Monitoring student achievement

- PA Standards for all grade levels
- Performing Arts Standards also has opportunities for movement
- Preschool Learning Foundations to come out this year (aligned)
- Ed code has time prescription
- Fitness gram (5,7,9) <http://www.cde.ca.gov/ta/tg/pf/.gov>
- Look at annual School Accountability Report cards. How many students are not meeting 4-6 standards? Is there correlation with school site achievement?
- Early childhood association (NAEYC) has national guidelines for standards for preschool and school age programs. Head Start and state preschools have time requirements for outdoor play.

Budget, Facilities, Policies and Collective Bargaining

Seaworthy, ships company and crew

- Is maintaining physical education a priority?
- Have you used Tier III Flexibility?
- Are you looking at other resources to help with budget like grants, parent boosters, PTA, local government, partnerships with healthcare or fitness organizations, and community groups?
- Do you have joint use agreements?
- Have you checked in with your Wellness Committee?
- If you ask for change to curriculum or how you organize school times, are you working with your units to bring about buy-in and to provide in-service to implement changes?

Providing Support and Community Leadership

Getting everyone on board

- What are the best ways for you as a board to become knowledgeable about this subject?
- Are you taking advantage of opportunities to communicate with your board members around this topic?
- Have you done any board development activities that create the importance of physical activity/links to learning a board goal?
- Is the board member person assigned to your to Wellness Committee wanting to be knowledgeable about relevant district programs and report back to the board?
- Are you supporting your established partnerships around physical activity and celebrating successes with the community?
- Are you communicating with civic leaders, business community, local officials and legislators the importance of leveraging efforts around this issue especially in tight budget years?

Bringing all together in Setting Direction

- Look at your district's mission and vision. Is it inclusive of the idea of physical activity as an essential element for student success?
- Do you find this supported in your strategic plan?
- Schedule touch points for input and accountability
- Ask for information about your PE program and an opportunity to discuss it as a board
- Remember special meeting options like study sessions for more focused discussions or board development for setting board goals
- Set forth your directions clearly and realistically - be clear about knowing your destination, avoid Christopher Columbus mistake
- Align your direction within superintendent's annual goals (e.g. superintendent to direct staff to include information regarding PA in school's annual presentations)

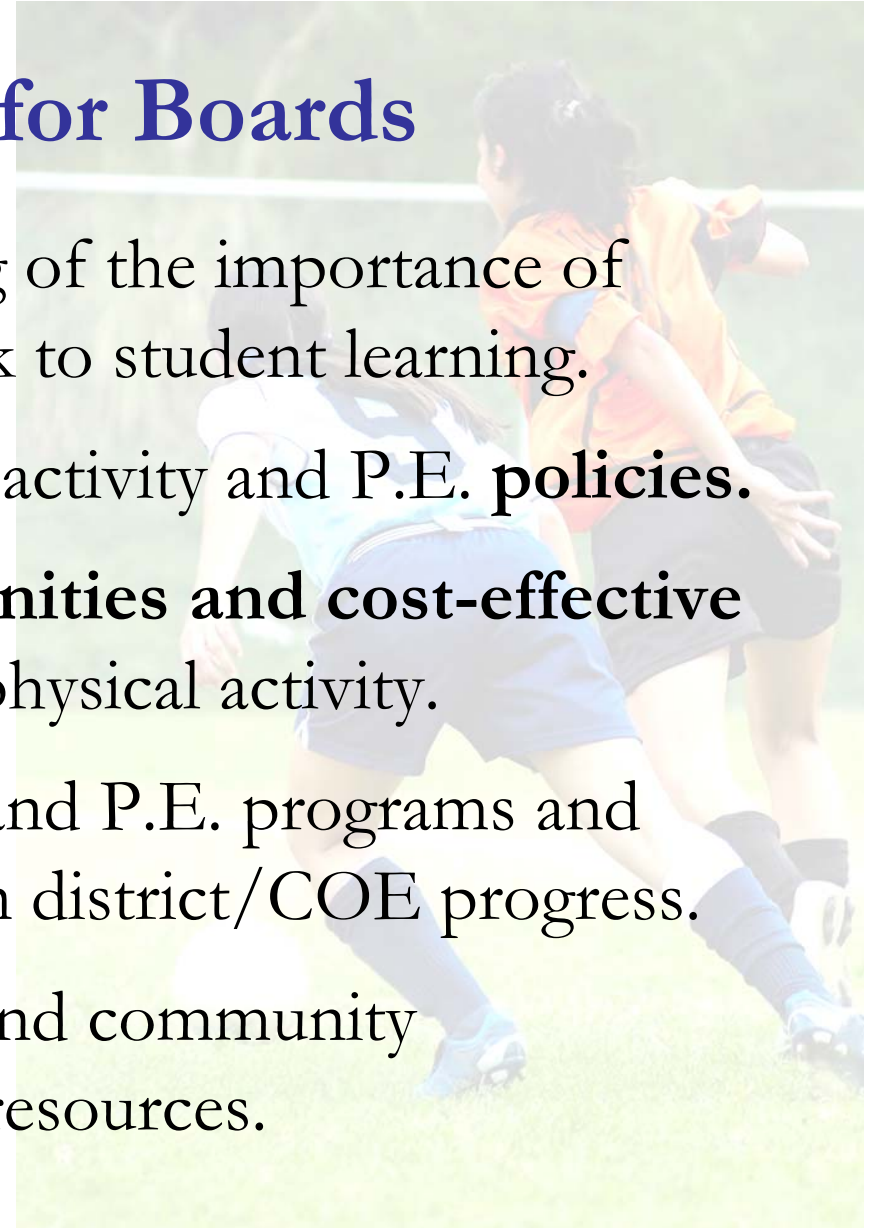
Nancy Newkirk
School Board President
Sunnyvale School District
Nancy.Newkirk@sesd.org

Providing Support: Resources for Success

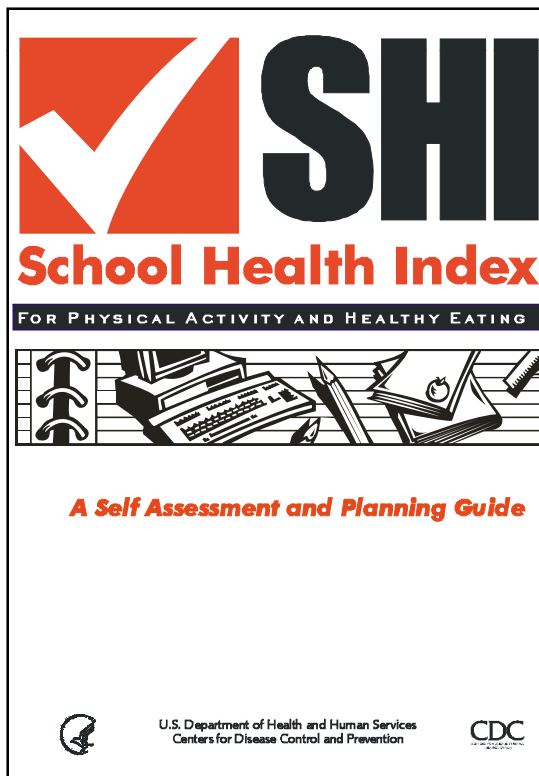
- Jessica St. John, Physical Education/Physical Activity Consultant, CSBA

Action Steps for Boards

- **Develop** an understanding of the importance of physical activity and its link to student learning.
- **Adopt and align** physical activity and P.E. policies.
- Explore **funding opportunities and cost-effective strategies** for improving physical activity.
- **Monitor** physical activity and P.E. programs and schedule regular reports on district/COE progress.
- **Collaborate** with school and community stakeholders to maximize resources.



School Health Index: A Self-Assessment and Planning Guide



- ◆ Identify your own school's strengths and weaknesses
- ◆ Prioritize issues
- ◆ Develop an action plan
- ◆ Involve teachers, students, parents, and community
- ◆ Download free at www.cdc.gov/nccdphp/dash/SHI/index.htm

Assessing your District

kidsdata.org

Your gateway to local information about children's health.
Now available for six Bay Area counties.

See Data.		Find the facts you need, on topics ranging from asthma and fitness to reading proficiency and foster care .
Make Data Change.		Customize your search by year, locale, ethnicity, age, and more, and view the results as graphs, tables, or maps.
Watch Data Grow.		Stay current with the most recent data, plus find links to community resources and related news and research.

Log on to [kidsdata.org](#) We've got your numbers.

Promoting Children's Health in the San Francisco Bay Area  **Lucile Packard**
FOUNDATION for Children's Health

Policy Resources

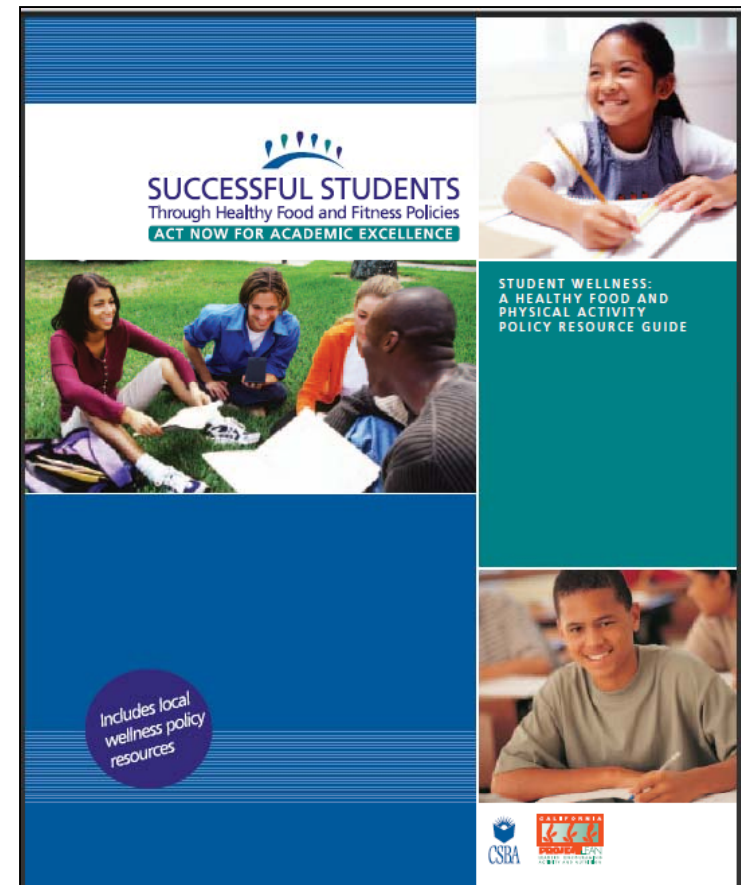
(www.csba.org/PhysicalActivity.aspx)

- Policy development
- Policy implementation
- Policy monitoring
- Community collaboration




Policy Development

- Student Wellness:
A Healthy Food and Physical Activity Policy Resource Guide
- Sample board policies and administrative regulations



Policy Development

■ Policy Briefs

California School Boards Association October, 2007

Physical Education and California Schools



Maximizing Opportunities for Physical Activity through Joint Use of Facilities

Policy Brief | September 2009

igorous activity.⁵The 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



Safe Routes to School Program and policy strategies

Policy Brief | August 2009

Increased physical activity is associated with better academic performance, concentration and classroom behavior.¹ Research shows that school-age children who have opportunities to engage in physical activity are more likely to focus on academic subjects in the classroom.² Thus, students who travel to school by walking, bicycling or using other physically active forms of transportation (including skates, skateboards and non-motorized scooters) may come to school more ready to learn. Supporting active and safe transportation to and from school through local school board policy provides an opportunity to increase daily physical activity and reinforce positive health and academic outcomes among youth (see CSBA's sample board policy and administrative regulation BP/AR 5142.2 – Safe Routes to School Program).

Over the past few decades, the number of students who walk and bicycle to and from school has been declining. A study conducted by the U.S. Department of Transportation's Federal Highway Administration found that the number of students ages 5 to 18 who walk and/or bicycle to and from school decreased almost 70 percent in 30 years, from 42 percent in 1969 to only 13 percent in 2001.³ A number of recent studies have associated the decline in active transportation to and from school with larger public health and safety concerns, such as physical inactivity, obesity, poor air quality, traffic congestion and collisions.⁴

The Safe Routes to School federal grant program (SRTS)

HOW TO GET STARTED

School districts/COEs can begin developing Safe Routes to School programs by establishing a multidisciplinary team with parent organizations, students, school administrators and staff, local law enforcement, city planners, health officials and other stakeholders. The group can assist with realizing a community vision, developing project proposals and implementing those projects if selected for funding.

There are a variety of resources, as well as examples of successful programs, available to assist districts/COEs and communities in designing and implementing Safe Routes to School programs.

The Federal Highway Administration, the federal agency that oversees the SRTS program, recommends that program implementation address the "5 E's"—education, encouragement, enforcement, engineering and evaluation as outlined below. Some of these strategies could be implemented by districts/COEs on their own, while others would more likely be implemented by city/county agencies or other program partners.

Education

Education projects may include teaching students and adults about the range of transportation choices; increasing awareness of the benefits of active transportation, including health and environmental benefits; including them in education, fitness and

Common examples of joint use include:

- 1) The district/COE opens existing school outdoor recreational facilities for unsupervised public use during non-school hours. For example, Clovis Unified School District in Fresno County has a policy to make school facilities available to the community when such use does not conflict with educational or school co-curricular activities. (To see the policy, visit http://www.clovis-schools.org/news/K-1650_facility_usage.pdf.)
- 2) The district/COE partners with an agency or organization for supervised physical activity programs by either opening up existing or constructing new indoor/outdoor school recreational facilities for use before, during or after school. For example, Sweetwater Union High School District in San Diego County has a partnership with a local soccer league, allowing the soccer league to use a school field after school hours if the league maintains it.
- 3) The district/COE partners with an agency or organization to utilize existing or construct new community recreational facilities for use before, during or after school. For example, the New Millennium Institute of Education has an agreement with the Fresno County Boys & Girls Club for use of its gym. (To see a video on this project, visit <http://www.jointuse.org/resources/success-spotlight/7item-2>.)
- 4) The district/COE and agency or organization have reciprocal use of each other's indoor/outdoor recreational facilities for use before, during or after school. For example, the San Carlos Elementary School District and the City of San Carlos in San Mateo County have an agreement to make school facilities open to city residents outside of school hours and to make city facilities available to district recreation programs. (For a copy of the Joint Use Agreement, visit <http://preventioninstitute.org/sa/policies/pdf/text/SCarlosJointUse.pdf>.)

California physical education requirements instructional minutes

Education Code 51230 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 if 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

Policy Development

■ Fact sheets



Active Bodies, Active Minds


Physical Activity and Academic Achievement

Fact Sheet | February 2013



Maximizing Opportunities for Physical Activity during the School Day

Fact Sheet | November 2009



Moderate to Vigorous Physical Activity in Physical Education to Improve Health and Academic Outcomes

Fact Sheet | November 2009

Schools play a central role in providing opportunities for students to engage in physical activity. Physical education (P.E.) is the one time during the day when all students can be active.¹ School boards can consider policy and curriculum strategies to support increased physical activity in P.E.

BENEFITS OF MODERATE TO VIGOROUS PHYSICAL ACTIVITY IN P.E.

Engaging students in moderate to vigorous physical activity (MVPA) in P.E. prepares them to lead physically active lives and can improve health and academic outcomes.² Physical activity does not have to compete with educational goals; in fact, it can help students learn content by enhancing concentration skills and on-task behavior.³

- Activity-focused P.E. can contribute to academic performance, improved attendance and positive classroom behavior.⁴
- Increasing MVPA in P.E. has the greatest potential for increasing health benefits for most students⁵ as it generates more energy expenditure; contributes to obesity prevention and muscular and bone development; reduces anxiety and stress; improves self-esteem, mood and concentration; and reduces the risk of chronic disease.⁶
- Increasing MVPA in P.E. provides more opportunities to meet other P.E. goals such as motor development, increased fitness, skill enhancement and positive social interactions.⁷

WHAT IS MVPA AND HOW MUCH DO STUDENTS NEED?

Moderate physical activity refers to activities equivalent in intensity to brisk walking or bicycling. Vigorous physical activity produces large increases in breathing or heart rate, such as jogging, aerobic dance or bicycling uphill.

The Physical Activity Guidelines for Americans recommend that children and adolescents participate in at least 60 minutes of MVPA most days of the week, preferably daily. In order to attain health benefits,⁸ to help reach this goal, Healthy People 2010, an initiative of the Centers for Disease Control and Prevention and the President's Council on Fitness, recommends that students be engaged in MVPA for at least 50 percent of P.E. class time.⁹

THE CURRENT STATUS OF P.E.: NOT ENOUGH MVPA

Many P.E. classes do not provide students with adequate opportunities to engage in MVPA. A recent study of California schools found that students are sedentary most of the time during P.E., with only four minutes of every half hour spent in vigorous physical activity. Moreover, active P.E. time decreases with larger class sizes. Students in classes with more than 45 students are half as active as students in smaller class sizes.¹⁰

Percentage of P.E. time in MVPA, by class size for secondary school level

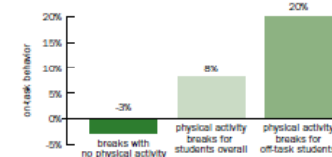


CLASSROOM-BASED PHYSICAL ACTIVITY

Incorporating physical activity into the classroom does not have to compete with educational goals. In fact, integrating physical activity into the classroom may reinvigorate, engage and energize students to focus on the classroom material.¹¹ Ideas to support physical activity in the classroom include:

- **Integrating physical activity into the curriculum.** Teachers can guide learning with activities that get students moving while learning the content in a variety of subjects (e.g., science, math and reading).⁷
- **Structuring the classroom to facilitate physical activity.** Classroom teachers may enhance learning by incorporating physical activity equipment (e.g., stability balls) into the classroom during regular instruction.⁸ To minimize costs of physical activity equipment, districts/COEs can explore contributions from local businesses.
- **Providing physical activity breaks.** Students may get restless or off-task after long periods of sedentary activity (e.g., periods of 20 minutes or more) in the classroom. By taking a short stretching or physical activity break, students may exhibit more on-task classroom behavior.⁹

Elementary students' on-task classroom behavior improves with physical activity breaks



Source: Active Education: Physical Education, Physical Activity and Academic Performance¹²

- In a California study, higher achievement was associated with higher levels of fitness for students in grades 5, 7 and 9, and achievement was greater in mathematics than in reading, particularly at higher fitness levels.¹³
- Higher levels of physical fitness are linked with better school attendance and lower disciplinary problems.¹⁴

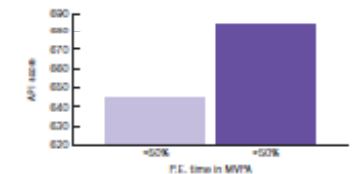
Studies show an increase in academic achievement when additional time is provided for physical activity, even when time is removed from academic instruction.

- In one study, a reduction of 240 minutes per week in class time for academics to enable increased physical activity led to higher mathematics scores.¹⁵
- Research indicates that decreasing the time allotted for P.E. in favor of traditional academic subjects does not lead to improved academic performance and may harm health.¹⁶

The type of activity matters—students who engage in moderate to vigorous physical activity (MVPA) experience the greatest academic achievement gains.

- One review of multiple studies found that MVPA, defined as activity that increases the heart rate, has the greatest positive effect on student performance and academic achievement.¹⁷

School Academic Performance Index (API) scores by minutes of MVPA in P.E.



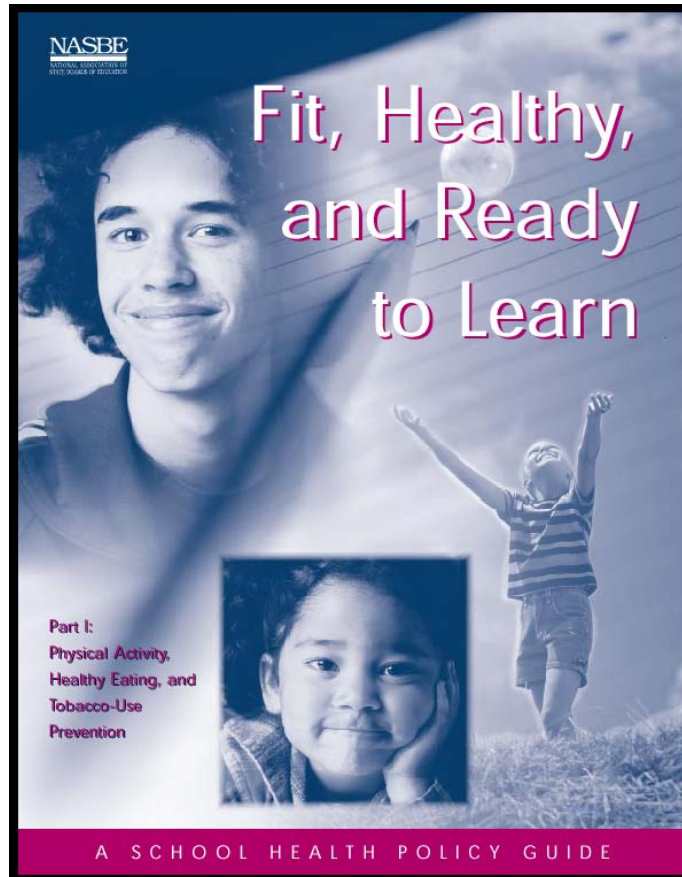
Source: Fitting Fitness: Physical Activity and Physical Education in Schools

Policy Adoption: Board policy



1. BP 5030 Student Wellness
2. BP/AR 6142.7 Physical Education and Activity (March, 2010)
3. BP/AR 5142.2 Safe Routes to School Program
4. BP 1330.1 Joint Use Agreements (March, 2010)

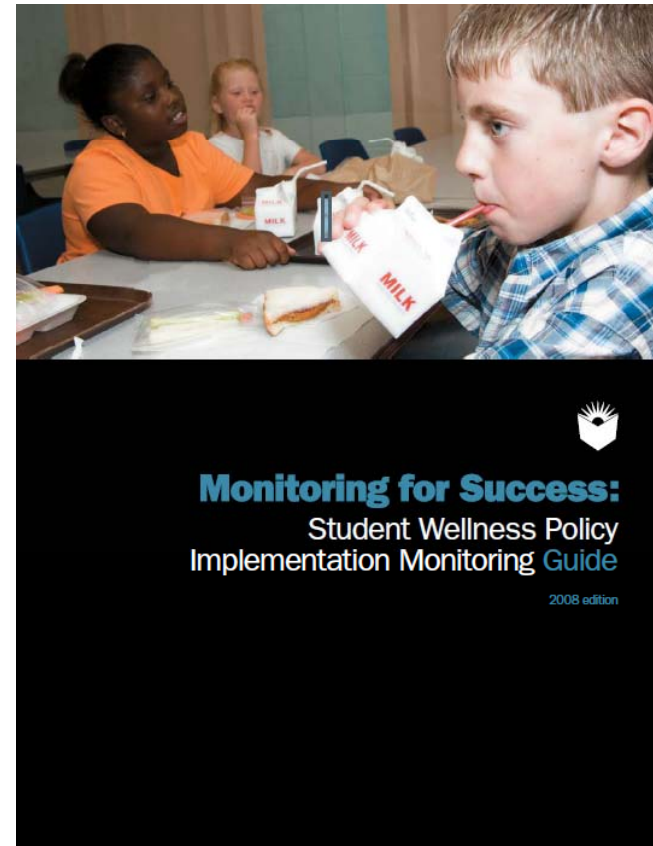
Fit, Healthy, and Ready to Learn: A School Health Policy Guide



- Guide to policymaking
- Sample policies—download at www.nasbe.org/healthy-schools/fithealthy.mgi
- Research findings
- Resource lists

Policy Monitoring

- Monitoring for Success:
*Student Wellness Policy
Implementation Monitoring
Report Guide*



Funding Resources

- Physical Education and Activity
 - Carol M. White Physical Education Program (PEP) grant (www2.ed.gov/programs/whitephised/index.html)
- PA/PE Grant Web Sites:
 - SPARK Grant-finder (www.sparkpe.org/grants/grantfunding-resources/)
 - Peaceful Playgrounds (www.peacefulplaygrounds.com)
 - Safe Routes to School State and Federal Grant Funding (www.saferoutesinfo.org/legislation_funding)

Comprehensive Physical Activity Program

Before school
Walk and roll to school
Before school programs
Morning stretch



During school
Classroom-based physical activity
Activity breaks and Recess
Quality Physical Education
School and community initiatives

After school
Joint use of facilities
After school programs

Wrap-up

- What are some key lessons you can bring back to your school district/COE?

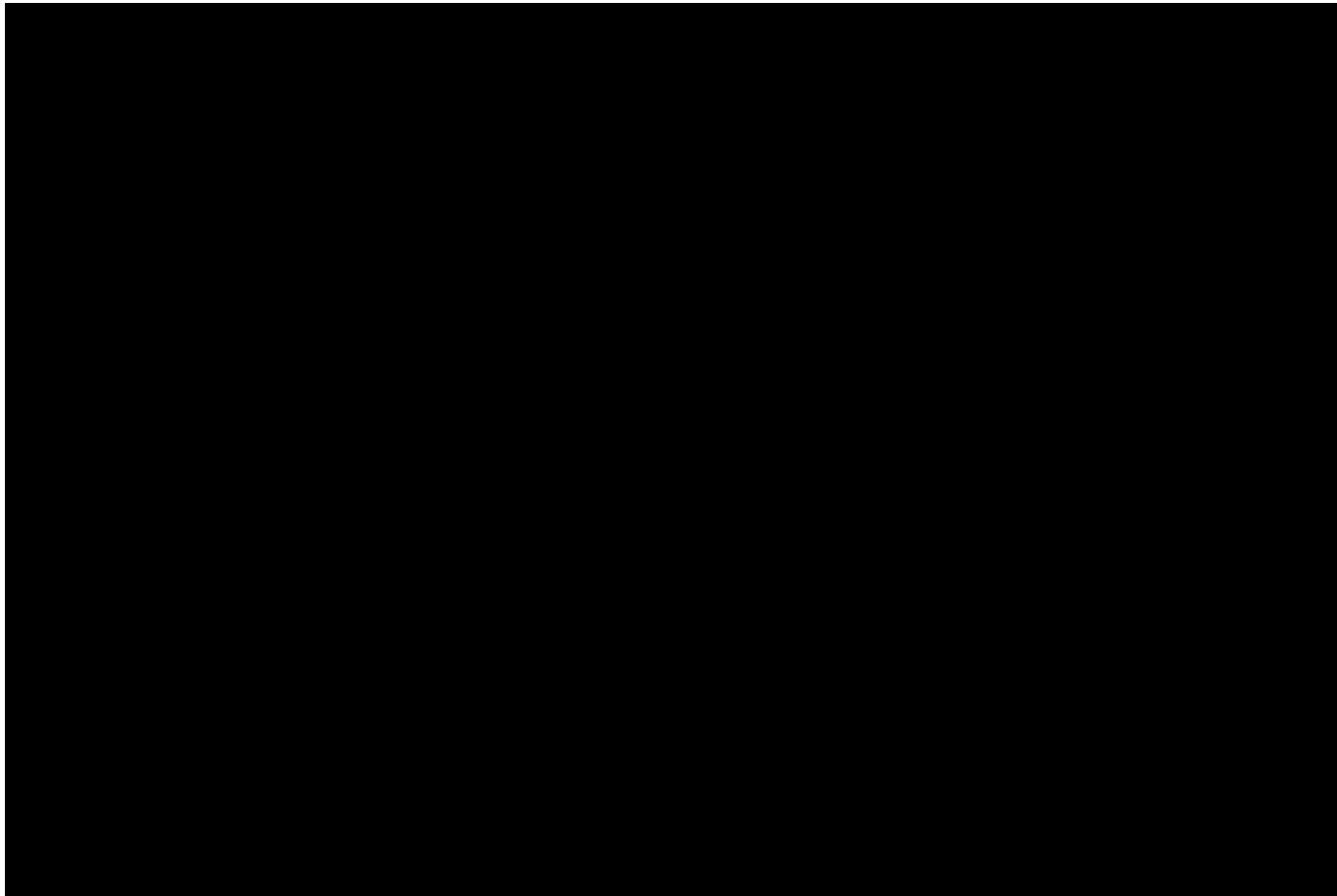


Adjourn

- Jessica St. John, Physical Education/Physical Activity Consultant, CSBA

Thank you for coming!

Get Ready for some “Instant Recess”



www.networkforahealthycalifornia.net/pa/InstantRecess.html

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