

# Investigating Youth Physical Fitness in Greater Redwood City

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# The Story: How Education Researchers Began a Study of Childhood Obesity

- Community-driven research focused on questions raised by our partners.
- Salud America! proposal built on responses to one-on-one interviews with partners.
- Builds on earlier work that examined link between physical fitness and academic achievement.

# Latino Adolescent After School Program Participation and Physical Fitness

- Aims to examine the effects of participating in existing fitness and non-fitness after school programs on physical fitness outcomes.
- Concentrates on adolescents in Redwood City, CA (district has 70% Latinos, 50% English Learners, 63% F/R Lunch)
- Uses linked administrative data from school districts and after school providers.
- Works closely with community partners and California School Boards Association to turn findings into actionable practice and policy.

# Measuring Fitness and Overweight

## California Physical Fitness Test

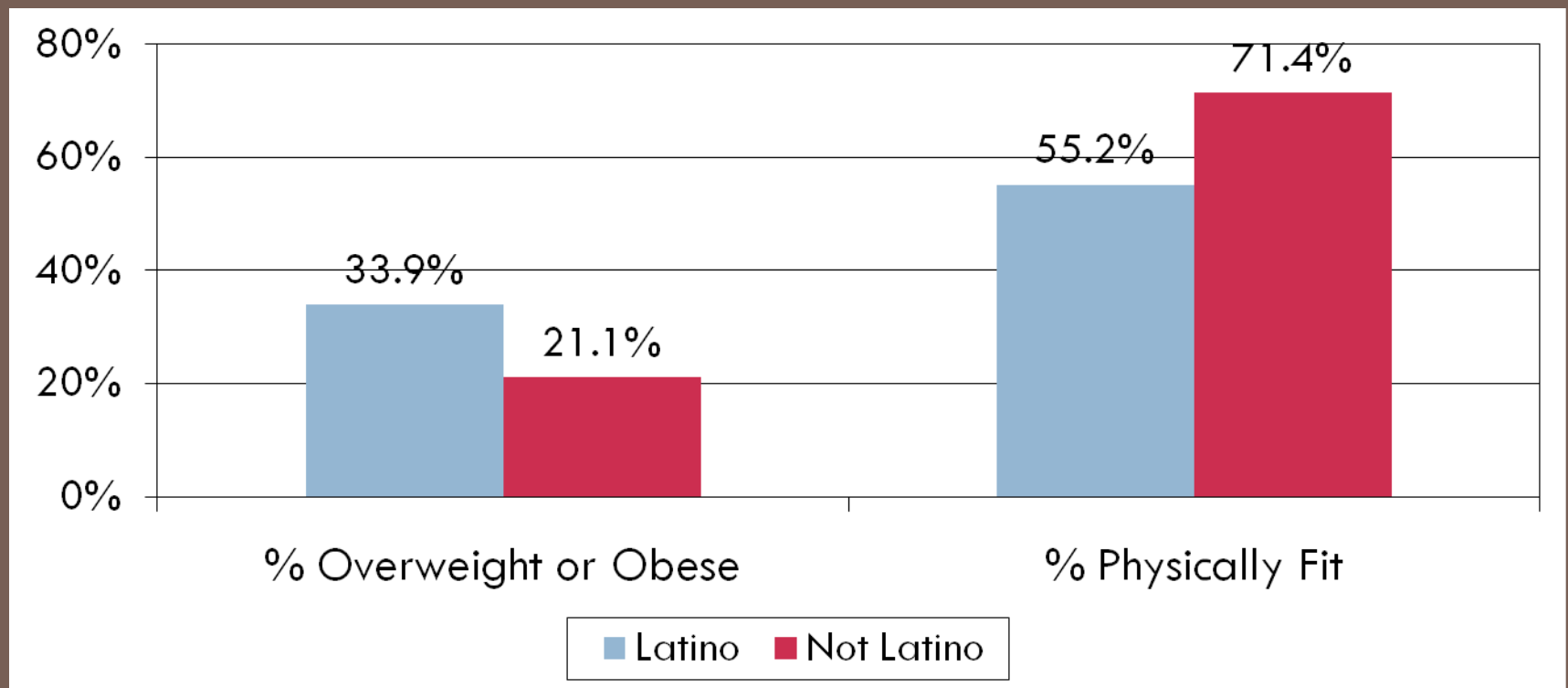
Given to  
Students in  
Grades 5,7,9

Scored in  
Healthy Fitness  
Zones

Test	Fitness Standard	Type of Test
1	Aerobic Capacity	One-Mile Run
2	Body Composition	Body Mass Index
3	Abdominal Strength and Endurance	Curl-Up
4	Trunk Extensor Strength and Flexibility	Trunk Lift
5	Upper Body Strength and Endurance	Push-Up, Modified Pull-Up, Flexed-Arm Hang
6	Flexibility	Back-Saver Sit and Reach, Shoulder Stretch

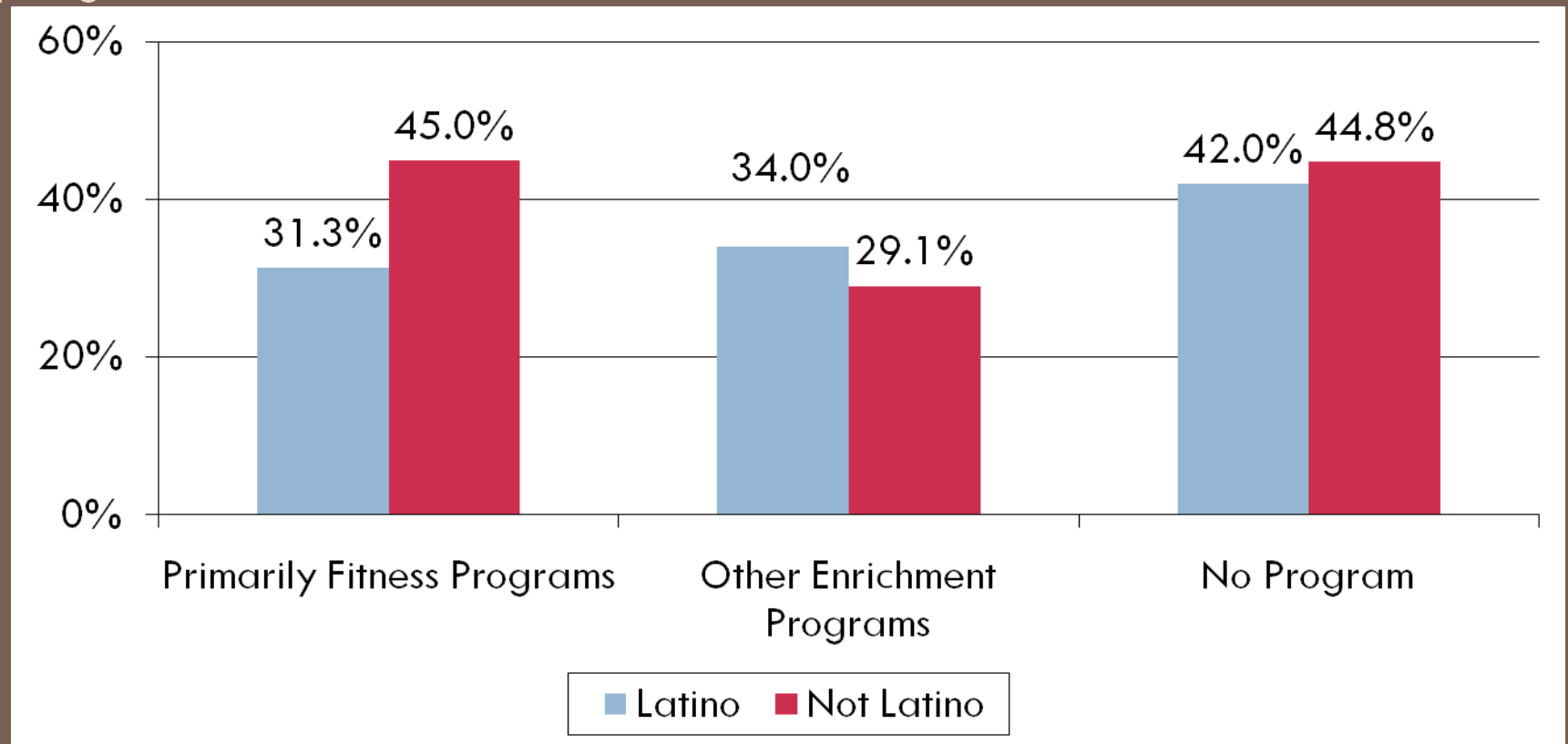
# Project Findings: After School Program Participation and Physical Fitness

- Latino students in 5<sup>th</sup>-9<sup>th</sup> grades are more likely to be overweight or obese and less likely to be physically fit than non-Latino students.



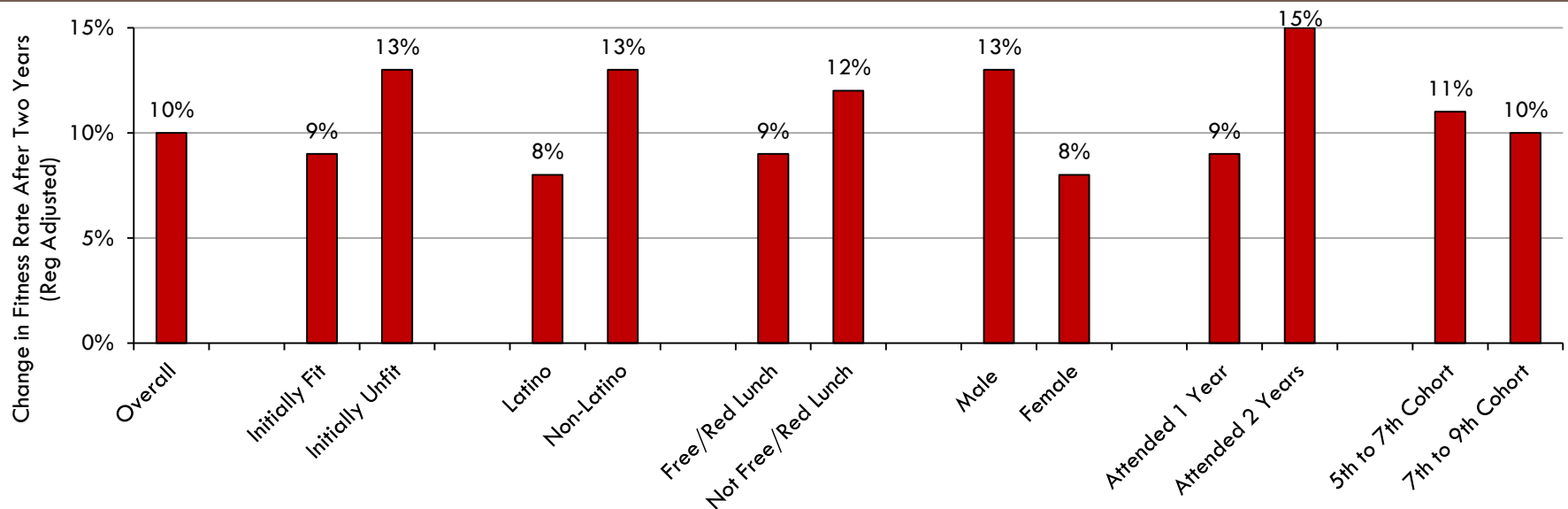
# Project Findings: After School Program Participation and Physical Fitness

- Latino and low-income students were less likely to participate in fitness programs and more likely to participate in other types of programs.



# Project Findings: After School Program Participation and Physical Fitness

- Participating in primarily fitness-focused programs after school was associated with increased overall fitness two years later, controlling for initial fitness and other important factors.
- There were no effects on fitness outcomes from participating in other enrichment programs, even if they had a fitness component.



# Physical Fitness and Academic Outcomes

- Aims to examine the link between academic achievement trajectories and physical fitness trajectories, after controlling for key factors that may affect both.
- Concentrates on adolescents in Redwood City, CA.
- Uses linked administrative data from school districts and after school providers.
- Works closely with community partners.
- Article published in July 2011 *Journal of School Health*.

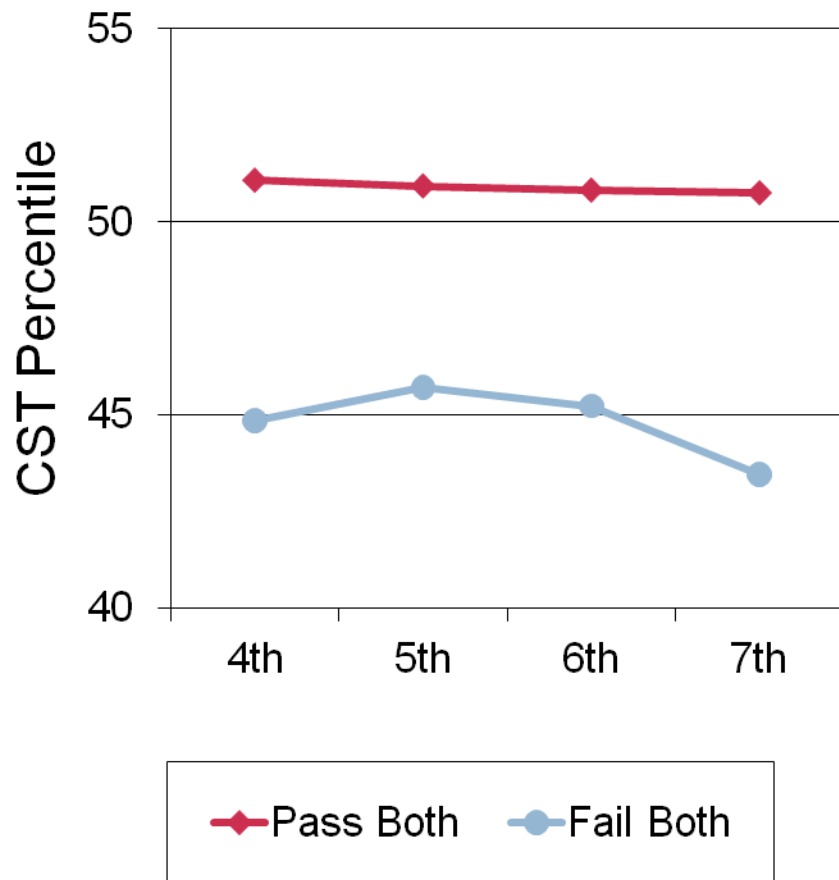


## Fitness Trajectories: 5<sup>th</sup>-7<sup>th</sup> and 7<sup>th</sup>-9<sup>th</sup> Grades

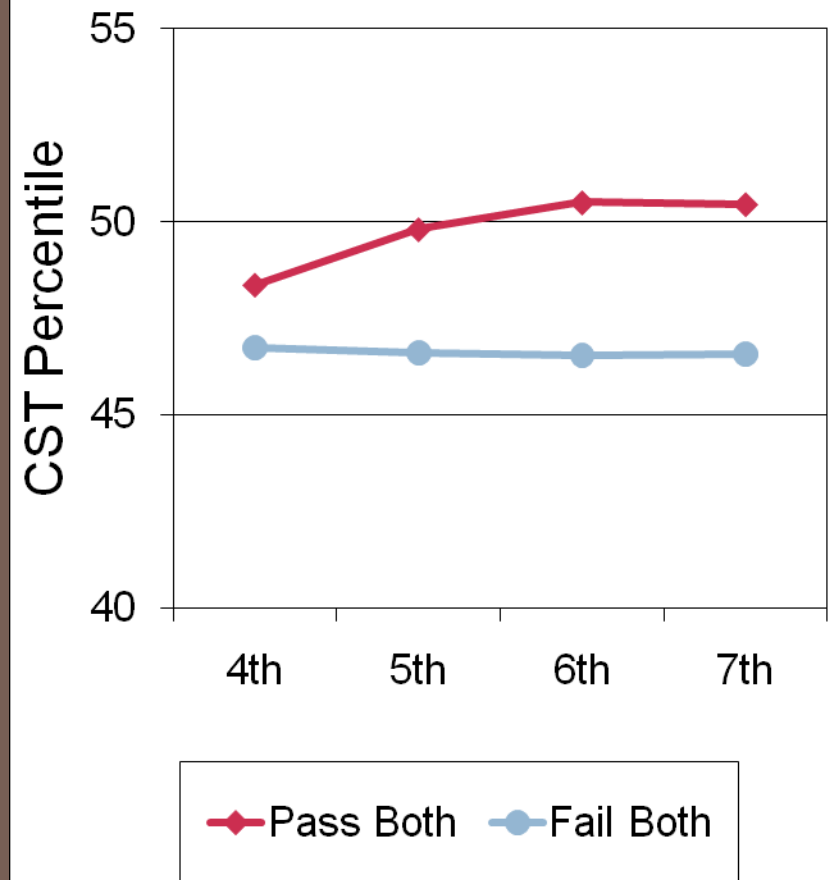
- Pass Both: Passed five of six standards in both years
- Pass→Fail: Passed five of six standards in the first academic year but not the second
- Fail→Pass: Passed five of six standards in the second academic year but not the first
- Fail Both: Did not pass five of six standards in either year

# Project Findings: Physical Fitness and Academic Outcomes, 5<sup>th</sup>-7<sup>th</sup> Grade

## Math

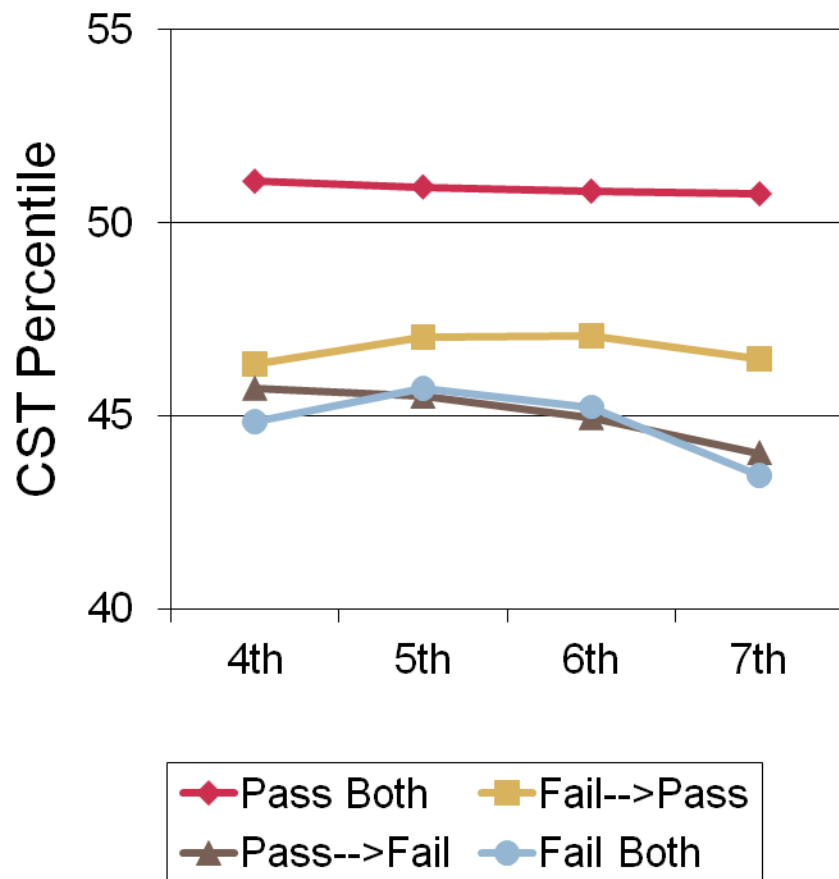


## ELA

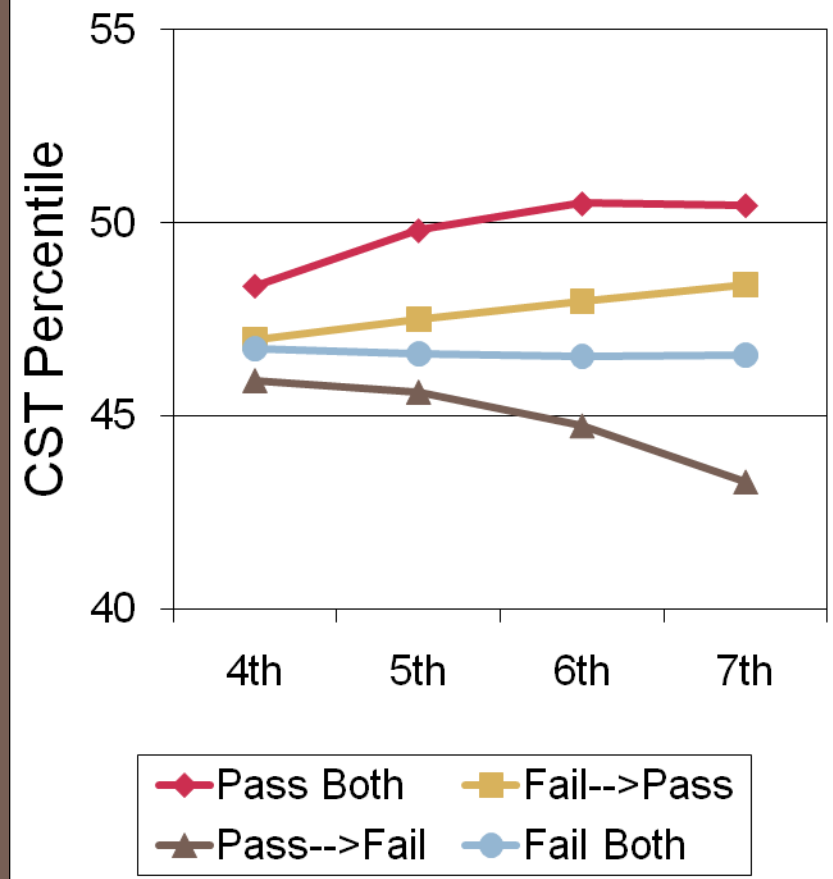


# Project Findings: Physical Fitness and Academic Outcomes, 5<sup>th</sup>-7<sup>th</sup> Grade

## Math

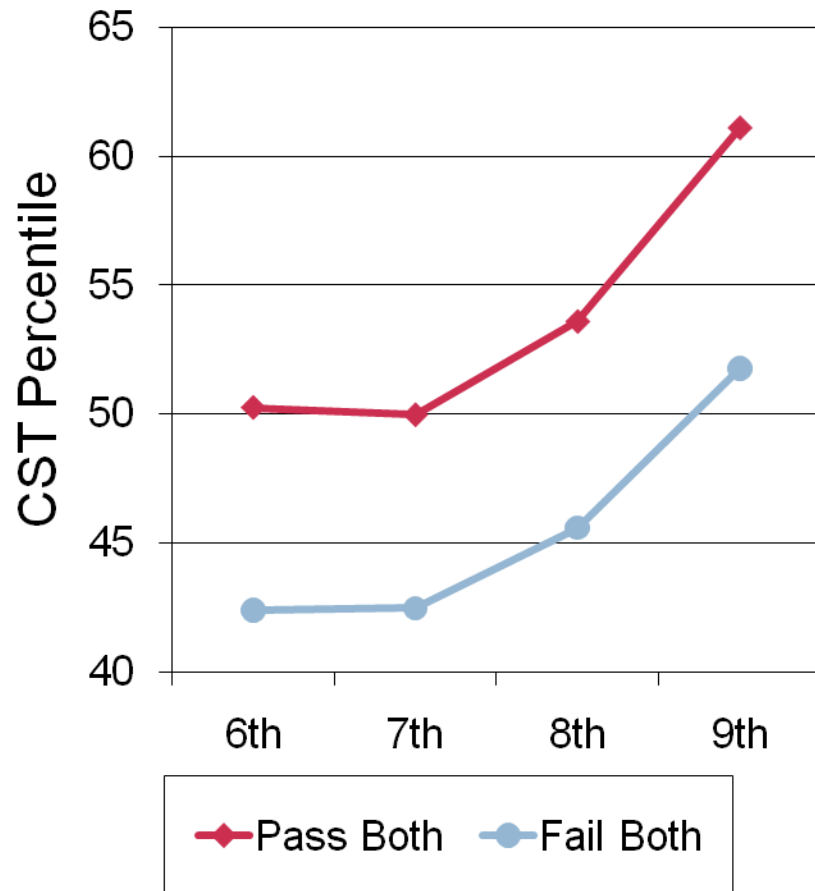


## ELA

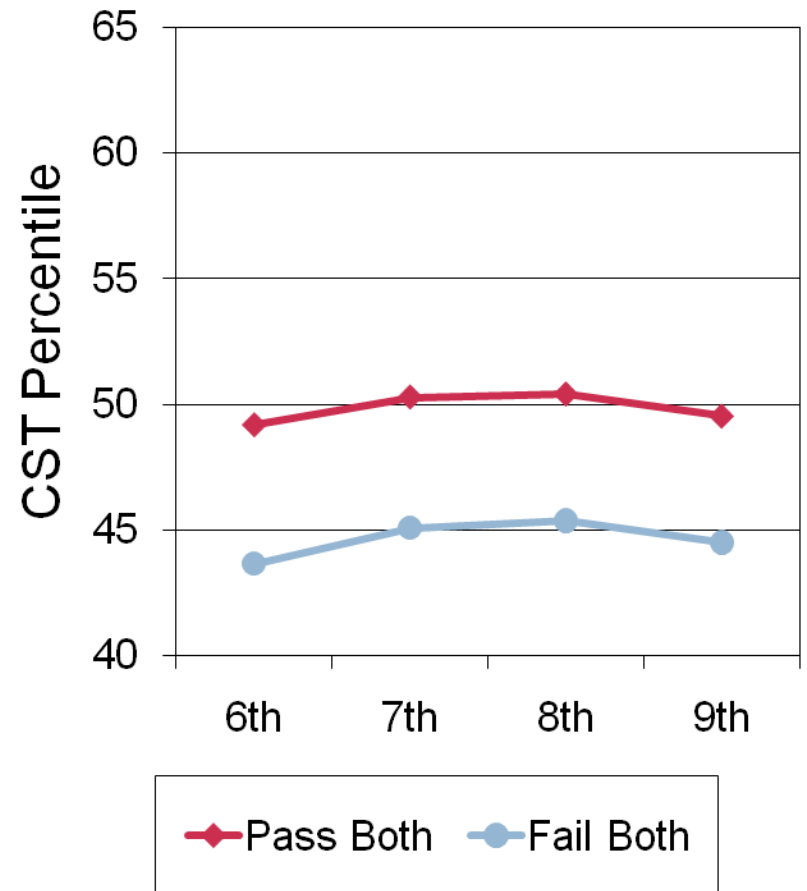


# Project Findings: Physical Fitness and Academic Outcomes, 7<sup>th</sup>-9<sup>th</sup> Grade

## Math

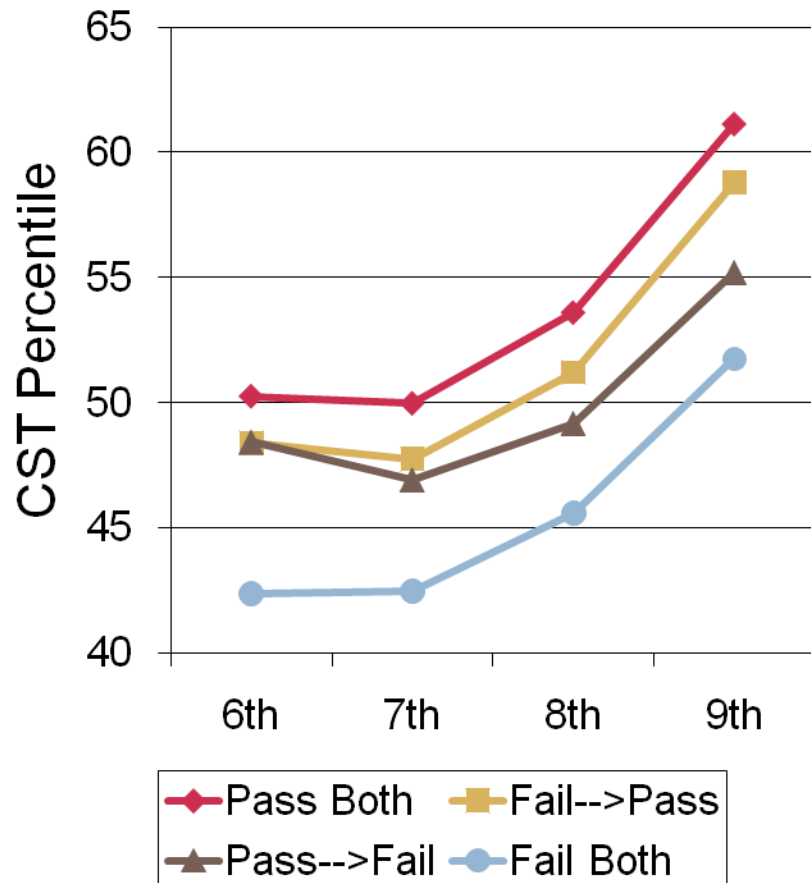


## ELA

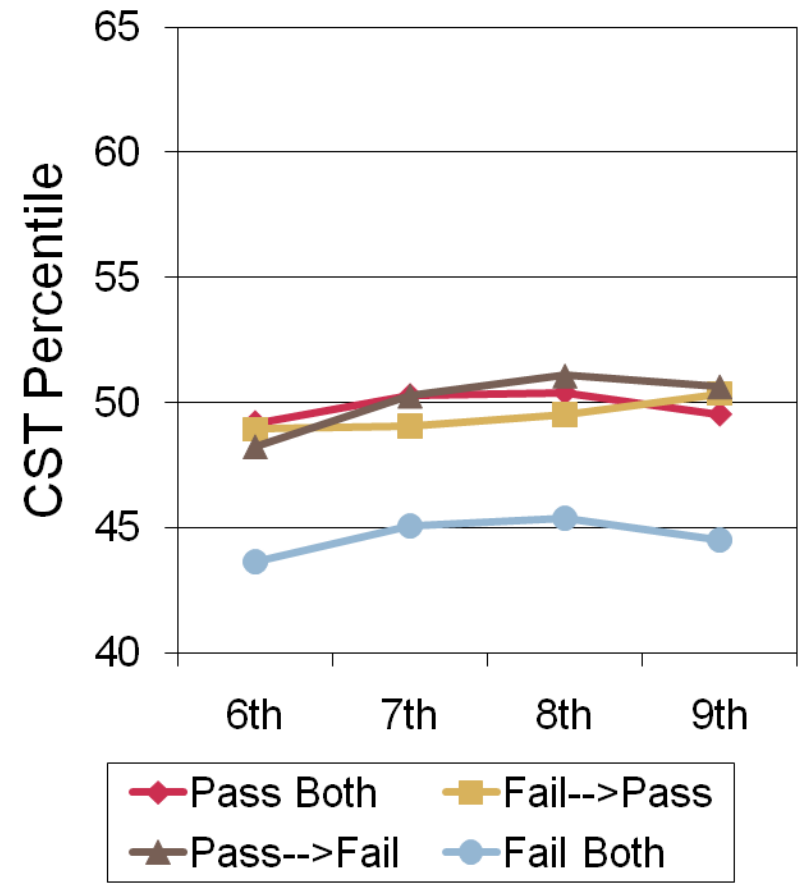


# Project Findings: Physical Fitness and Academic Outcomes, 7<sup>th</sup>-9<sup>th</sup> Grade

## Math



## ELA



# Project Findings: Physical Fitness and Academic Outcomes

- Partners asked about students who didn't fit the mold – those who were high achievers with low physical fitness and low achievers with high fitness.
- Socioeconomic status is the link.
  - Students who passed both PFTs but had low CST scores were more likely to come from disadvantaged backgrounds.
  - Students who failed both PFTs but had high CST scores were more likely to come from higher SES backgrounds.

# Policies Implications for Both Projects

- Use overlapping solutions to tackle both fitness and academic issues.
- Provide additional outreach to students from typically underserved populations for participation in fitness programs.
- Offer fitness programming to students outside of school through school-community partnerships, as well as programs taking place before school or during lunch.



# Publications and Presentations

## Presentations

- Society for Research on Adolescence
- Best of Out-of-School Time (BOOST)
- Five community partner meetings
- Briefing and webinar with California School Boards Association

## Publications

- Policy fact sheet on Let's Move
- Issue brief and snapshot on analysis findings
- Synthesis issue brief combining both sets of findings
- Article submitted to Journal of Policy Analysis and Management
- Two articles in *California School News*, March 2011 and May 2011 issues
- Forthcoming article in CSBA magazine