Youth Physical Fitness, Academic Achievement and After School Programming in Greater Redwood City

BOOST Conference

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JGC

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Agenda

- John W. Gardner Center description
- *Salud America!* grant overview
- Description of the problem this research addresses
- Findings from analysis on after school program participation and physical fitness
- Findings from analysis on physical fitness and academic achievement
- Policy implications

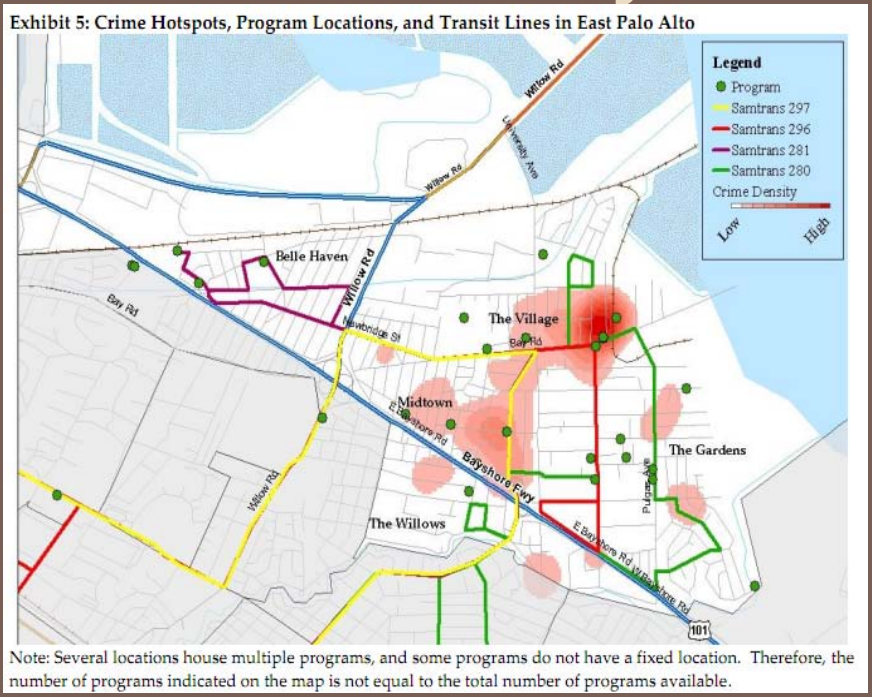
John W. Gardner Center for Youth and Their Communities

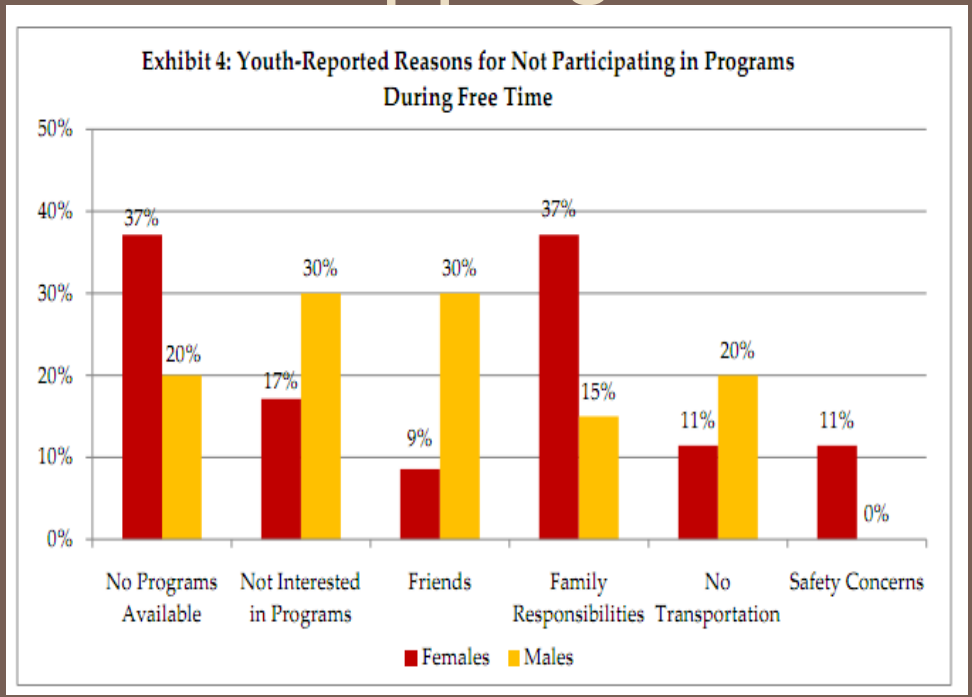
- The JGC partners with communities to:
  - Develop leadership
  - Conduct community-driven research
  - Effect change

  …to improve the lives of youth

Examples of JGC Projects

- Community Resource Mapping





- Community School Resource Initiative

Examples of JGC Projects

- Youth Data Archive
  - Links data on individual youth across organizations
  - Works with community partners to identify and investigate shared questions that individual agencies cannot answer alone
  - The YDA supports partners to understand the resulting analyses and make data-driven policy and programmatic decisions to improve youth outcomes

Salud America! Initiative

- *Salud America!* is the Robert Wood Johnson Foundation research network to prevent obesity among Latino children
- It unites researchers and advocates seeking environmental and policy solutions to the epidemic
- Funded a set of 20 investigations of Latino childhood obesity nationwide, including social scientists and medical researchers
- Produced award winning video at: http://www.salud-america.org/

The Problem: Childhood Obesity and Physical Fitness

- Nationwide: 32% of children ages 2-19 nationwide are overweight or obese
- In California:
  - 31% of California's 5th, 7th, and 9th graders are overweight or obese and 40% are physically unfit
  - Rates are even higher among Latinos – 38% are overweight or obese and 46% are physically unfit compared to 22% overweight and 30% physically unfit among Whites
- Health consequences: childhood overweight and obesity associated with a host of medical conditions that were once associated only with adults – type II diabetes, high cholesterol, high blood pressure

Connections to Schools and After School Programs

- Attention: Students who engage in moderate to vigorous physical activity have improved cognition in school contexts

- Academic achievement: Overweight and obesity has been associated with lower school performance

Connections to Schools and After School Programs

- Physical education: In elementary and middle schools nationwide, 15% offer PE three or more times per week
- Recess: 40% of districts nationwide have cut recess in favor of academic instruction
- After school programs: Those focused on weight reduction and activity have shown positive effects, but little is known about non-targeted programs; even non-fitness programs may improve health outcomes

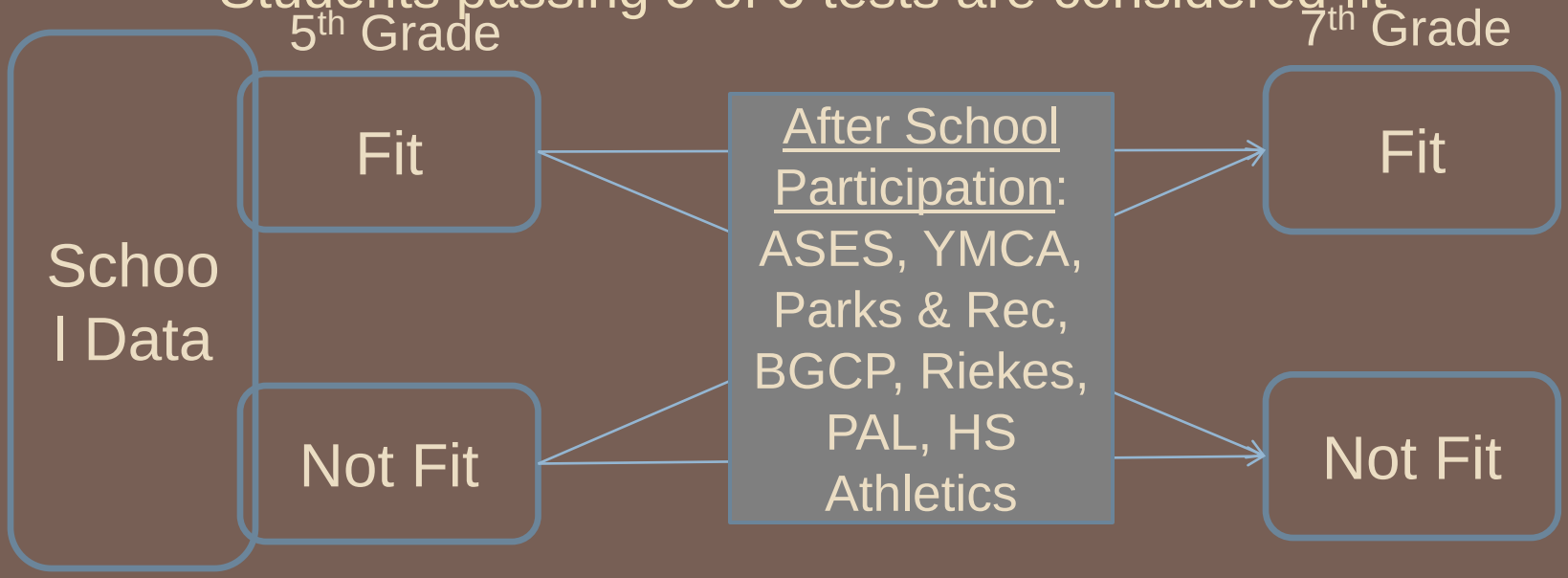
Salud America! Project

- JGC has been working with community partners in Redwood City to understand the effects of participating in community-led after school programs on students' obesity and physical fitness outcomes
- Key questions:
  - To what extent are students in grades five through nine engaged in after school programming, including that focused on physical fitness and other areas?
  - What are the effects of participation on students' physical fitness outcomes? How does this vary for different groups of students?
- Focus on the effects of community-designed and led programs in order to understand how existing resources can be employed to improve fitness outcomes

*Both physical activity and nutrition are important inputs into fitness and obesity, but due to data limitations this analysis could not examine students' nutrition

Analysis Design for After School Program Study

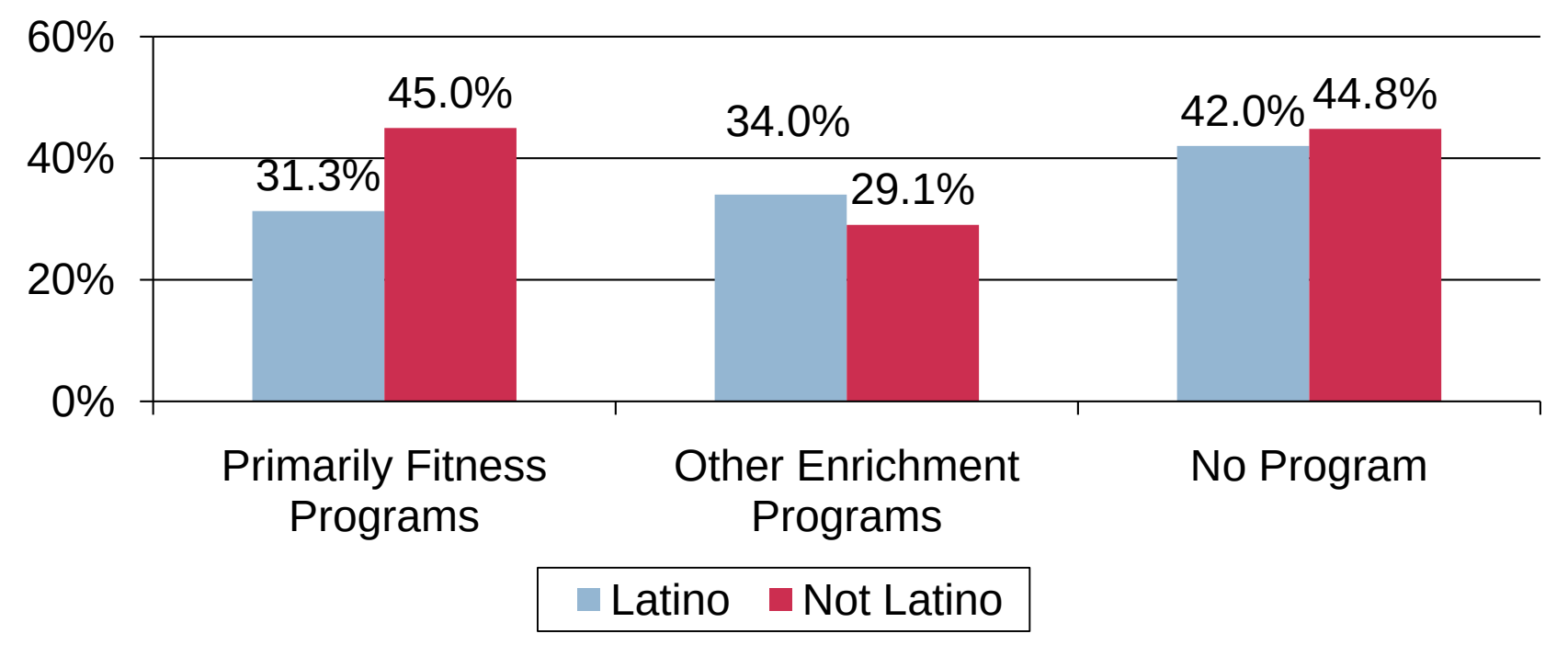
- Physical Fitness Test (PFT) data – 5th, 7th, 9th grade
  - Students passing 5 of 6 tests are considered fit



School Data included ethnicity, English Learner status, FRLP status, parental education, standardized test scores in baseline year, school attendance rate, special education status, schools attended, grade level, and gender.

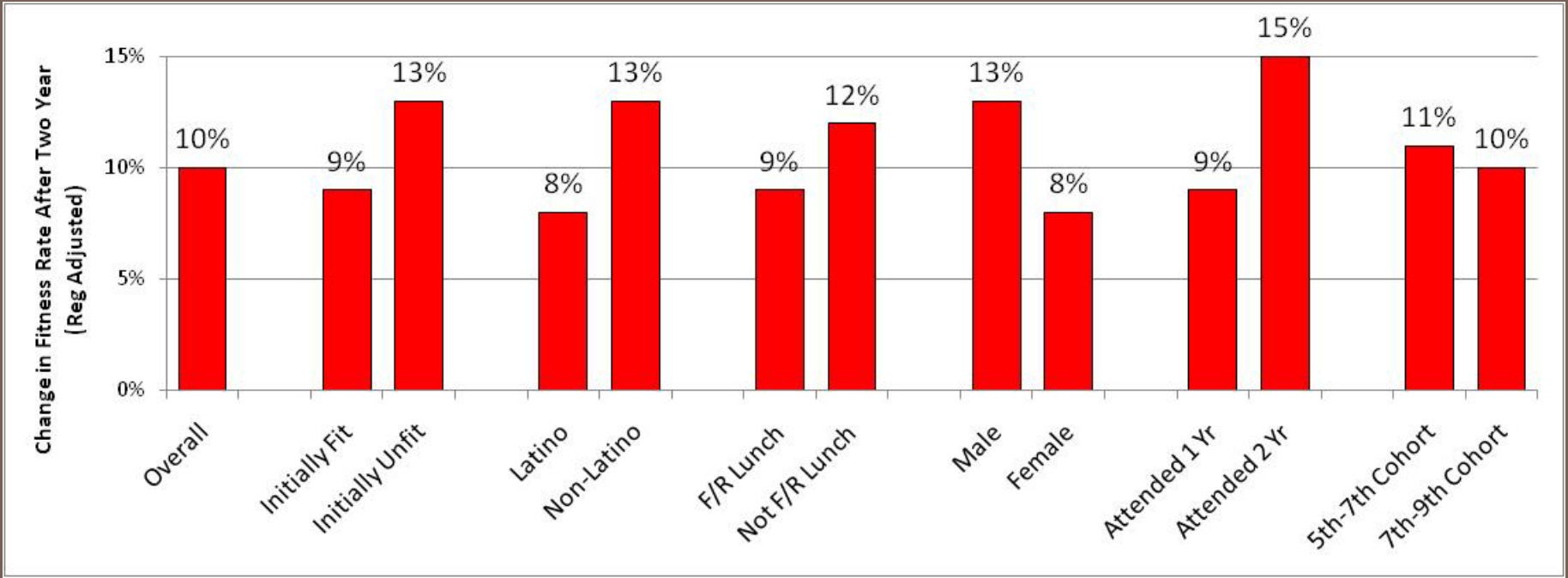
Project Findings: After School Program Participation and Physical Fitness

- Latino students in grades 5, 7 and 9 were more likely to be overweight or obese and less likely to be physically fit than non-Latinos
- Latino and low-income students were less likely to participate in fitness programs and more likely to participate in other types of p



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

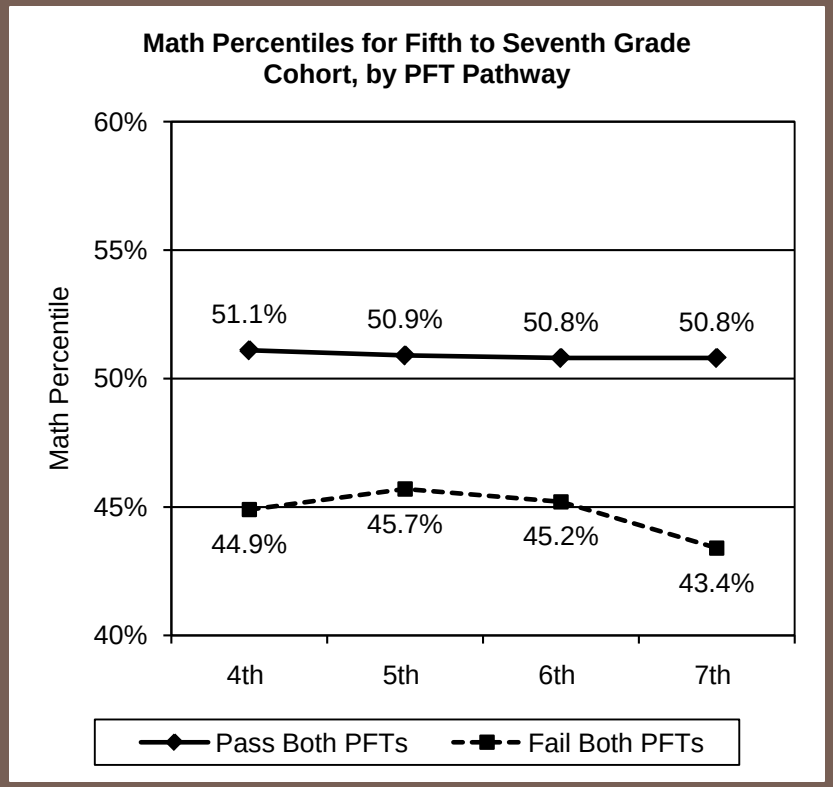


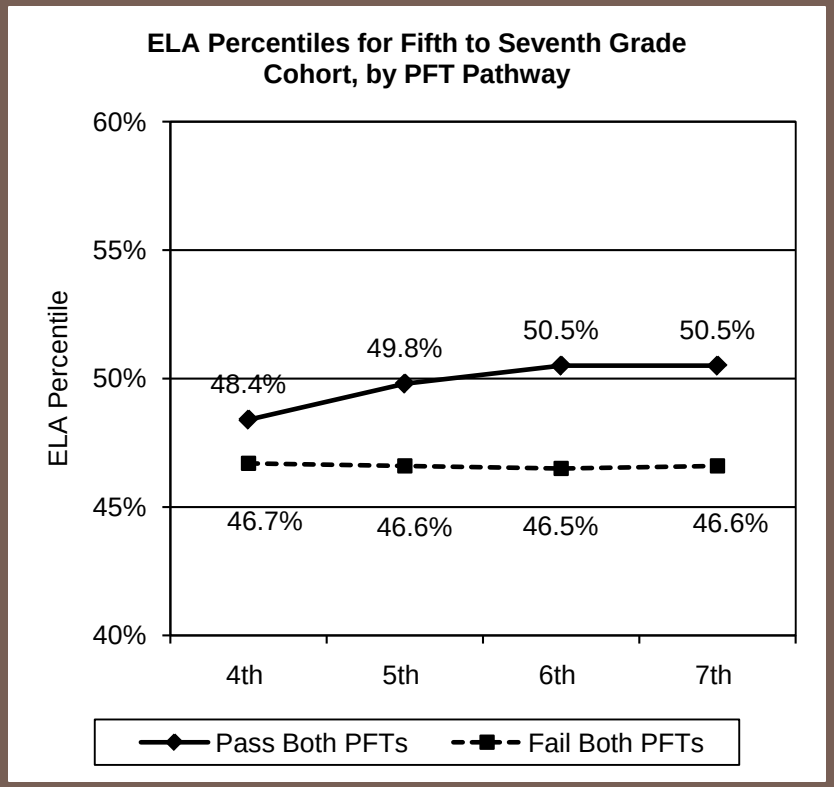
Examining the Link Between Physical Fitness and Academic Achievement

- Community partners were concerned about the effects of health disparities among Latino and other students and requested a study
- Research questions:
  - What are the characteristics of students who are and are not physically fit?
  - After controlling for key factors that may affect academic performance, do students who are physically fit have different academic test score trajectories than those who are not physically fit?

Project Findings: Physical Fitness and Academic Outcomes for Younger Students

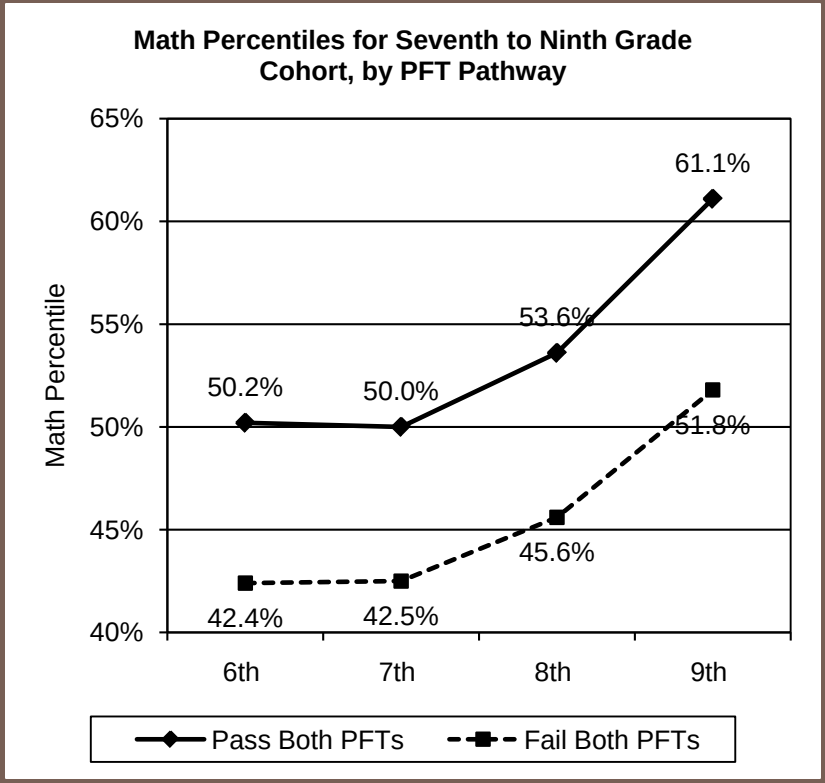
- An achievement gap exists between younger students who are physically fit and physically unfit

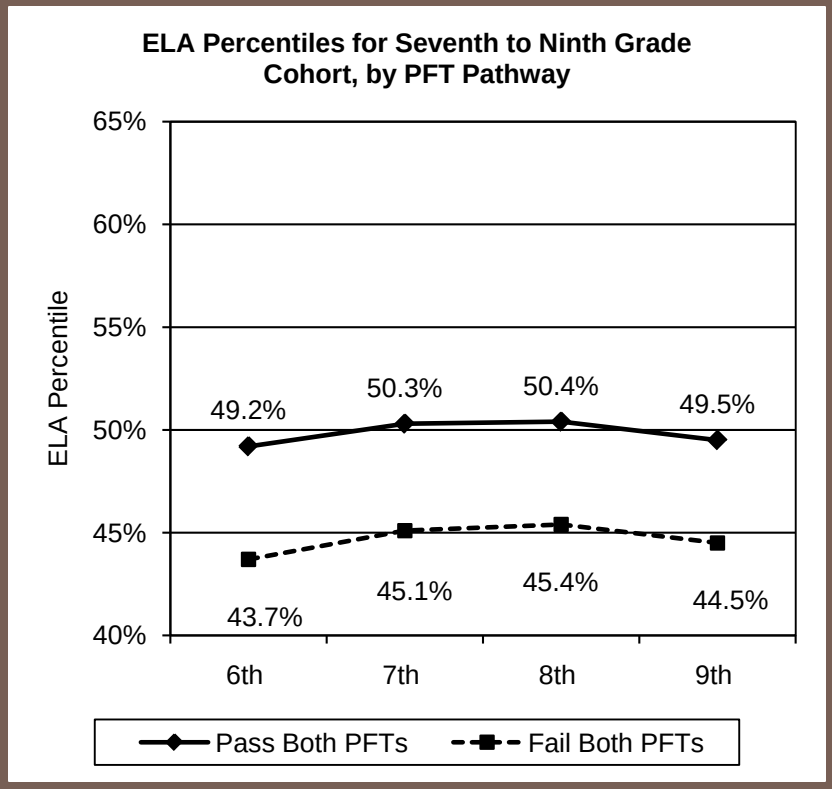




Project Findings: Physical Fitness and Academic Outcomes for Older Students

- An achievement gap exists between older students who are physically fit and physically unfit





Policy Considerations

- Better understand the problem: For example, encourage or require physical fitness testing for younger students and partner with agencies serving preschoolers to ensure coordinated efforts
- Use existing resources as possible: For example, amend ASES funding requirements to delineate the amount and types of physical activity that students engage in after school
- Address equity issues: For example, work with youth sports leagues to hold practices on school sites after school and waive or reduce entrance fees for low income kids
- Provide additional outreach to students from typically underserved populations for participation in fitness programs
- Use overlapping solutions to tackle both fitness and

Pending Legislation

- **SB 614 (Kehoe) Child care: After School Education and Safety Program: age- and gender-appropriate self-defense and safety awareness training**

Extends ASES opportunities for physical activity to include self-defense and safety awareness and for these types of programs to receive priority funding in certain cases.

http://www.leginfo.ca.gov/cgi-bin/postquery?bill_number=sb_614&sess=CUR&house=B&author=kehoe

- **SB 429 (DeSaulnier) Child care: After School Education and Safety Program: supplemental grants**

Provides that any school that establishes a program pursuant to the ASES program or before-school program is eligible to receive a supplemental grant to operate the program in excess of 180 regular schooldays or during any combination of summer, intersession, or vacation periods, up to a maximum of 30% of the total original grant amount.

http://www.leginfo.ca.gov/cgi-bin/postquery?bill_number=sb_429&sess=CUR&house=B&author=desaulnier

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