

# Solving California's Dropout Crisis

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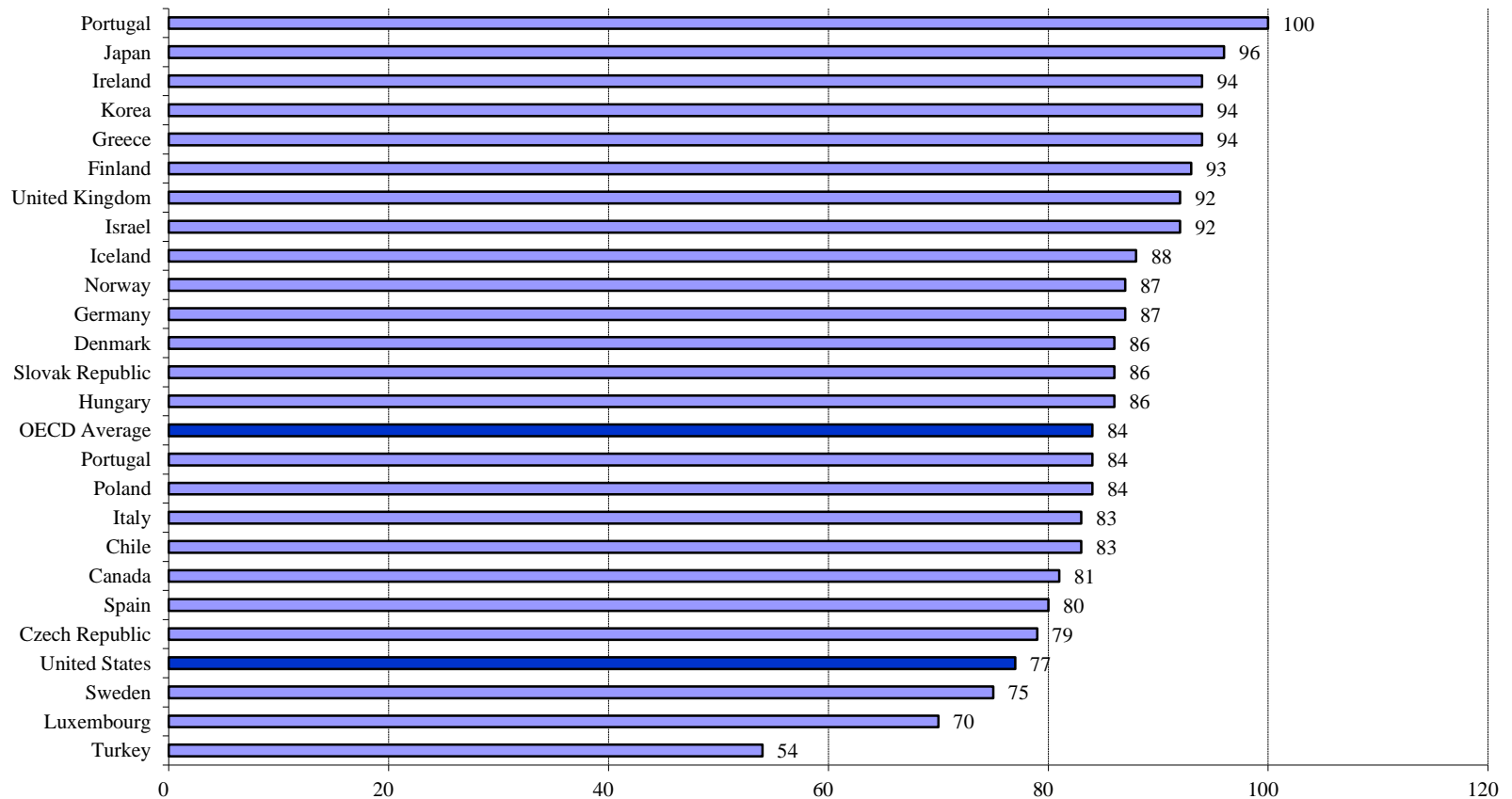
# Urgency for America

*So this is a problem we cannot afford to accept and we cannot afford to ignore. The stakes are too high—for our children, for our economy, and for our country. It's time for all of us to come together—parents, students, principals and teachers, business leaders and elected officials from across the political spectrum—to end America's dropout crisis.*

—Barack Obama, February 24, 2009



# US ranks 22<sup>th</sup> worldwide in high school graduation rate



# Urgency for California

*If current trends persist, in 2025 only 35 percent of working-age adults in California will have at least a bachelor's degree, but 41 percent of jobs will require at least a bachelor's degree. This equates to a shortfall of one million college graduates. Substantial improvements in educational outcomes are needed to meet the demands of tomorrow's economy and ensure the economic prosperity of Californians. Failure to make improvements will result in a less-productive economy, lower incomes for residents, less tax revenue for the state, and more dependence on social services.*

—PPIC, *California 2025* (2012)



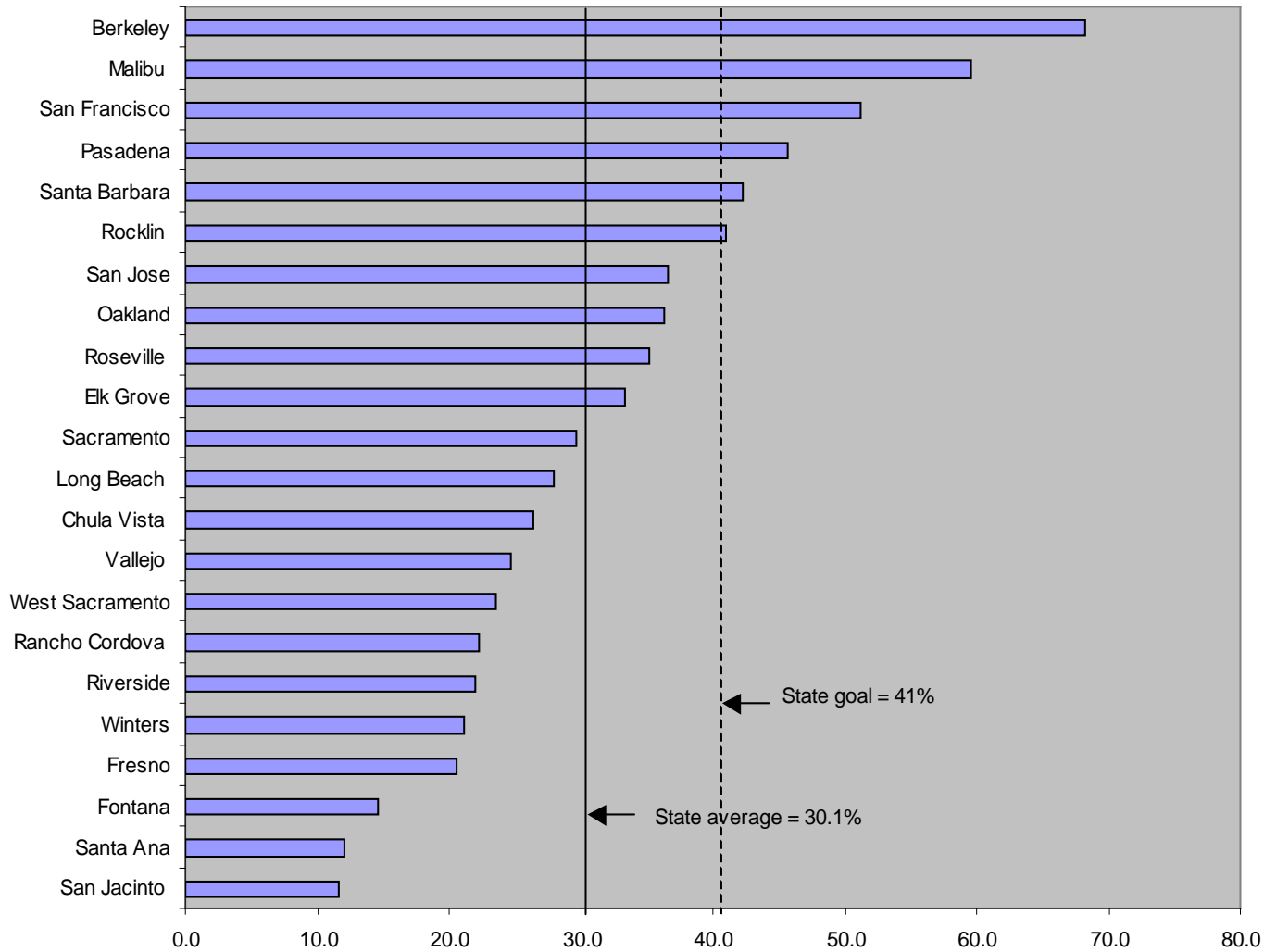
*To produce 1 million new college graduates requires raising California's high school graduation rate by 20 percentage points.*

—Opportunity to Learn Campaign, *2020 Vision Roadmap* (2011)



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### Percent Bachelor's Degree or Higher, Population 25 and older, Select California Cities



SOURCE: American Community Survey.





# California Dropout Research Project

UC Santa Barbara | Gevirtz Graduate School of Education

[cdrp.ucsb.edu](http://cdrp.ucsb.edu)



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# California Dropout Research Project Activities

- New research with a focus on California (research studies, policy briefs, statistical briefs, city dropout profiles)
- Policy recommendations from policy committee (policymakers, educators, researchers)
- Dissemination through mailings, website, presentations, media





# Impact

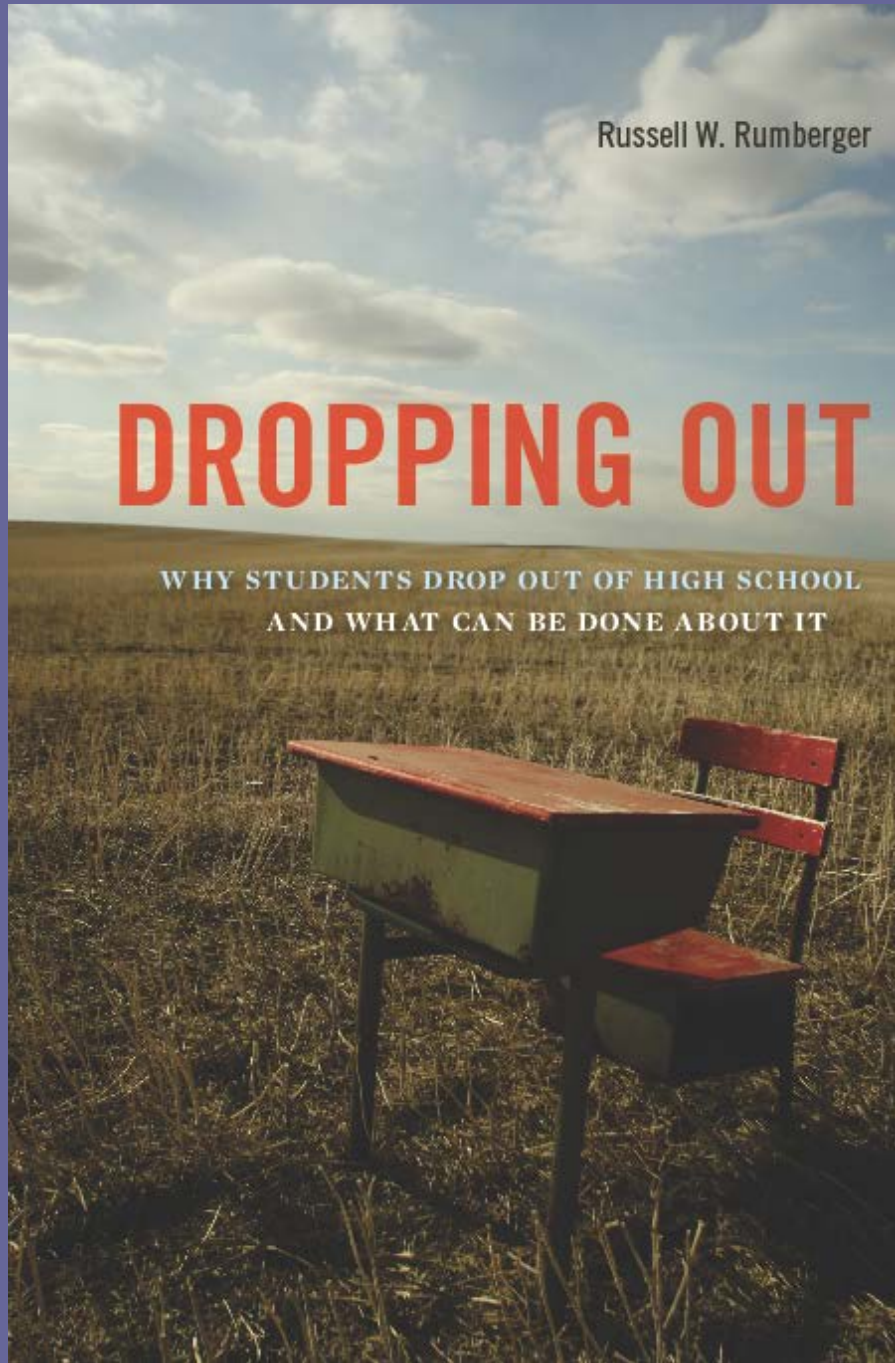
- 94,000 downloads of 93 publications
- Media exposure in newspapers, radio, television at state and national levels
- Six bills that incorporate CDRP recommendations were introduced in the legislature and four were signed into law



Russell W. Rumberger

# DROPPING OUT

WHY STUDENTS DROP OUT OF HIGH SCHOOL  
AND WHAT CAN BE DONE ABOUT IT



# Dimensions of the Dropout Crisis

1. Magnitude and trends
2. Consequences
3. Causes
4. Solutions

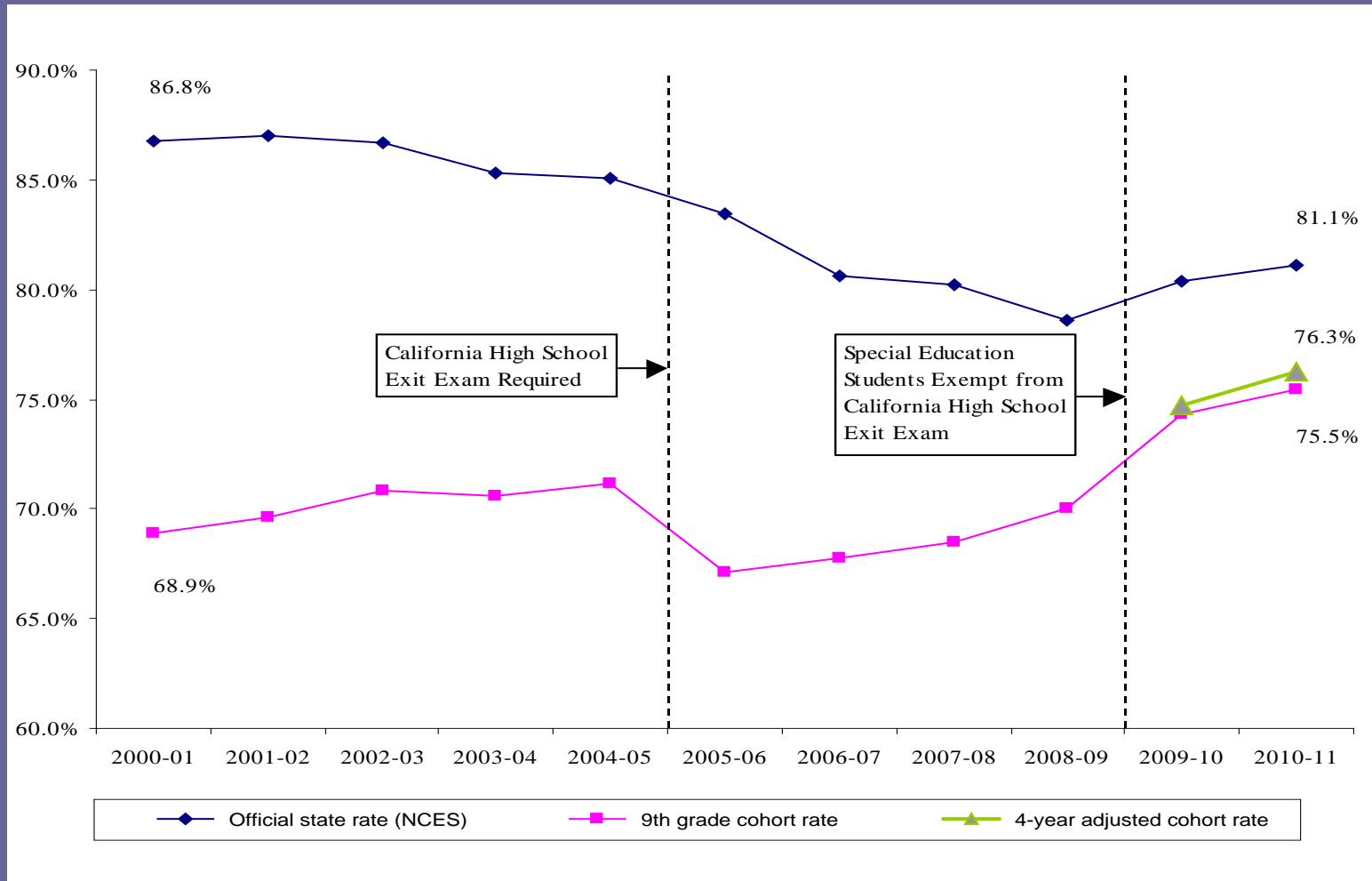


1. The problem is severe and concentrated.

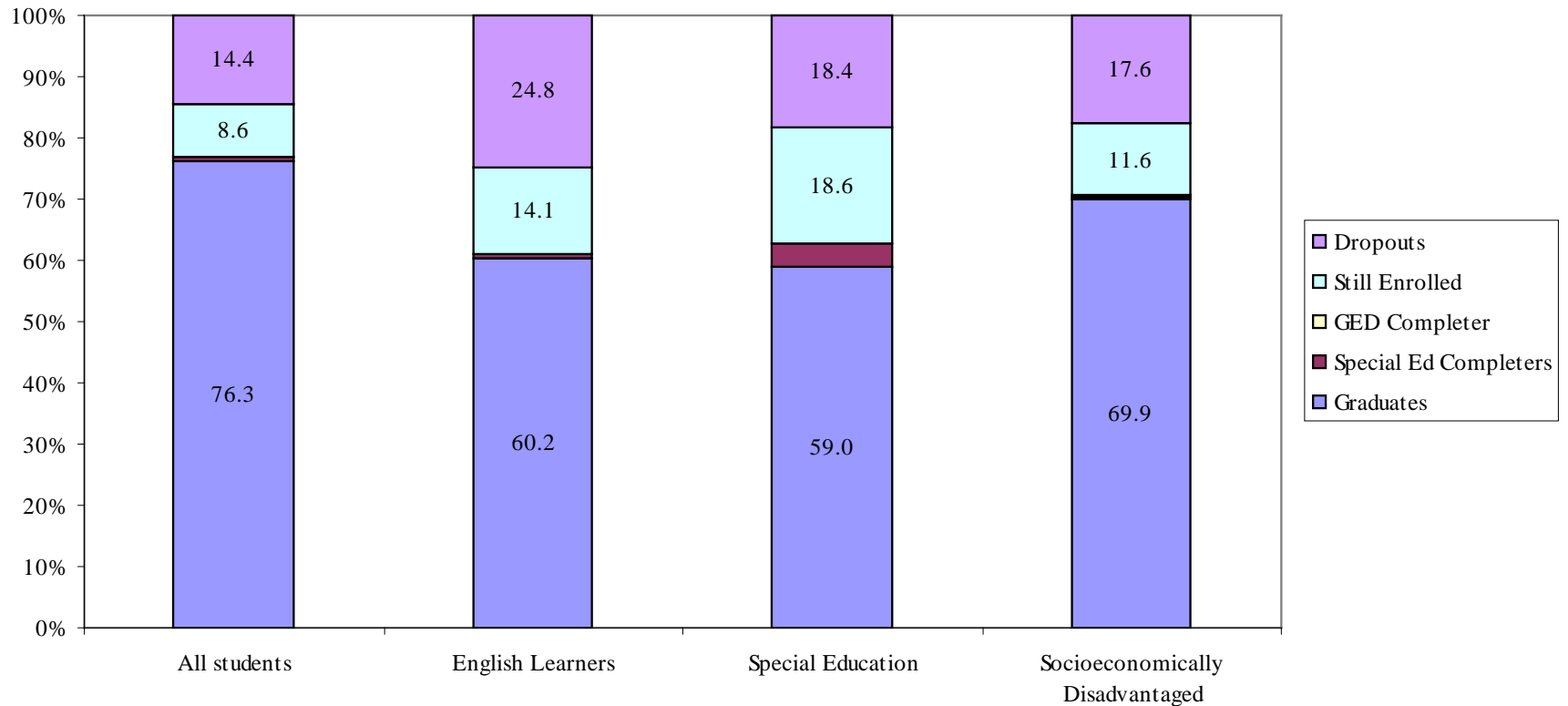


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# California Graduation Rates



# California Graduation Rates

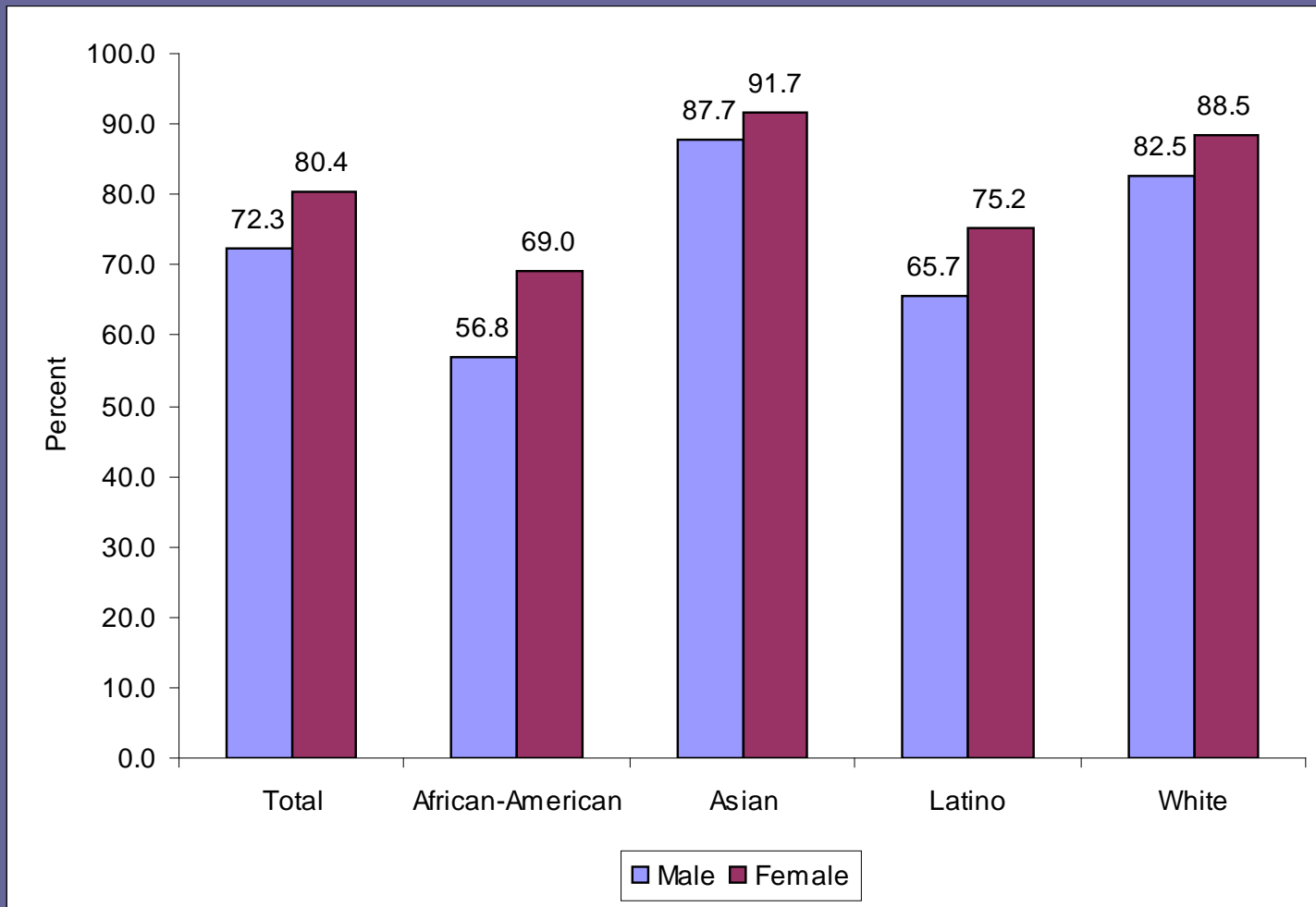


SOURCE: California Department of Education, *Dataquest* (2012).



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# California Graduation Rates



SOURCE: California Department of Education, *Dataquest* (2012).

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# Dropout Factories

- In US, 18% (2,007) of regular and vocational high schools account for 50% of the dropouts (“dropout factories”)
- In California, 1% (25) of all high schools account for 21% of dropouts





## 2. The social and economic costs are staggering



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# Consequences of Dropping Out

- **INDIVIDUAL CONSEQUENCES**

- Lower wages
- Higher unemployment
- Increased crime
- Poorer health
- Reduced political participation
- Reduced intergenerational mobility



- **SOCIAL COSTS**

- Reduced national and state income
- Reduced tax revenues
- Increased social services
- Increased crime
- Poorer health
- Reduced political participation
- Reduced intergenerational mobility



# Consequences of Dropping Out

(Compared to High School Graduates)

- Lifetime earnings half a million dollars lower
- 6 times more likely to be incarcerated
- Life expectancy nine years less
- 2-3 times more likely to receive Medicaid
- More likely to be poor—poor children 2-3 times more likely to become poor adults



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# Computing Gains from Improving Graduation Rates

- Calculate number of dropouts, graduates, violent crime in city
- Estimate economic losses
- Estimate economic and social benefits of cutting number of dropouts in half



# Graduates, Dropouts, Crime

	Sacramento	California
Graduates, 2009-10	4,457	401,084
Dropouts, 2009-10	1,739	99,541
Ratio: graduates/dropouts	2.5/1	4/1
Violent crime, 2009 (homicides, aggravated assaults)	2,380	101,875



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# Lifetime Economic Losses per Dropout

State and local government	\$53,580
Earnings (net of taxes)	\$188,640
Crime (Victim costs)	\$79,890
Other losses	\$69,800
TOTAL	\$391,910



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# Lifetime Economic Losses from One Year's Dropouts, 2009-10

	Sacramento	California
State and local government		\$2.7B
Health care costs	\$4M	\$1.5B
Earnings (net of taxes)	\$164M	\$9.4B
Crime (Victim costs)	\$69M	\$4.0B
Other losses	\$61M	\$3.5B
<b>TOTAL</b>	<b>\$298M</b>	<b>\$19.5B</b>



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# Economic Benefits of Reducing Dropouts by Half

	Sacramento	California
Lifetime economic benefits	\$149M	\$9.8B
Annual reductions in homicides and aggravated assaults	334	10,128



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3. The causes are complex—  
related to students, families,  
schools, and communities



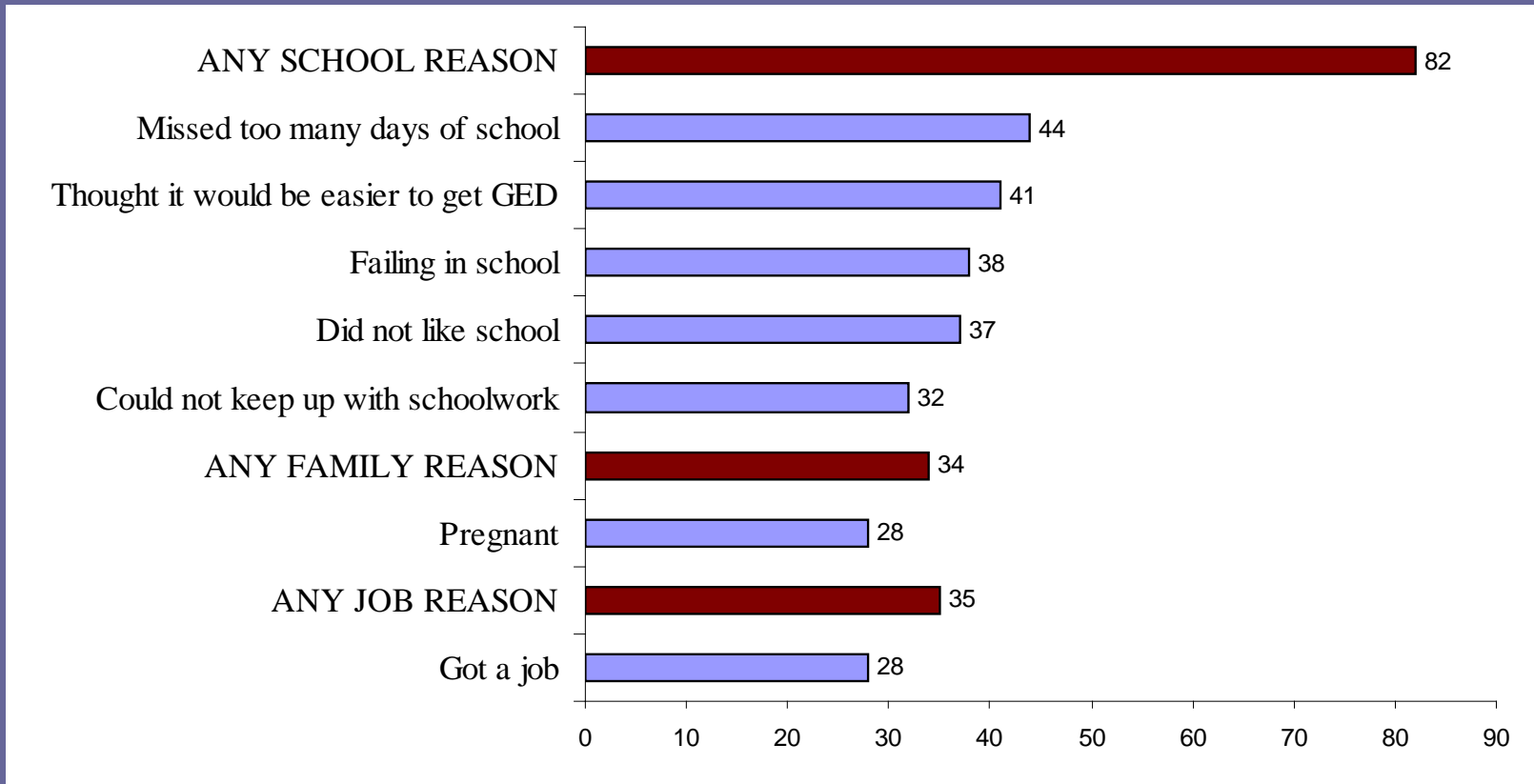
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# Understanding Causes

- Causes vs. reasons vs. predictors
- Individual
  - Demographic (unalterable)
  - Attitudes and behaviors (alterable)
- Institutional: Family, School, Community
  - Resources
  - Practices
- Proximal (high school) vs. distal (before high school)
- Dropout vs. achievement



# Reasons for Dropping Out



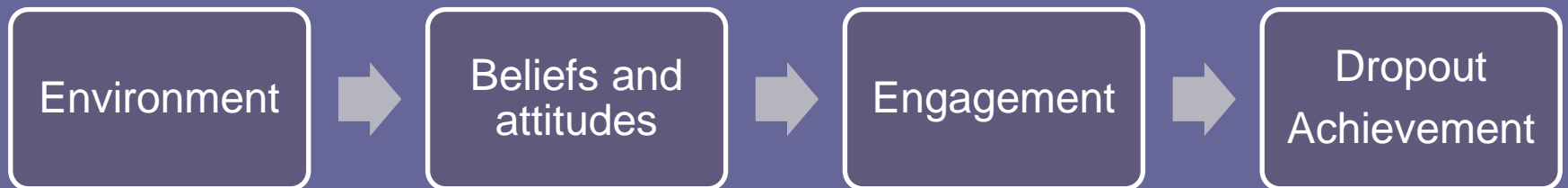
SOURCE: CDRP Statistical Brief 2

# Individual Predictors

- Mobility
- Academic achievement (failed classes)
- Poor attendance
- Misbehavior
- Low educational aspirations
- Retention

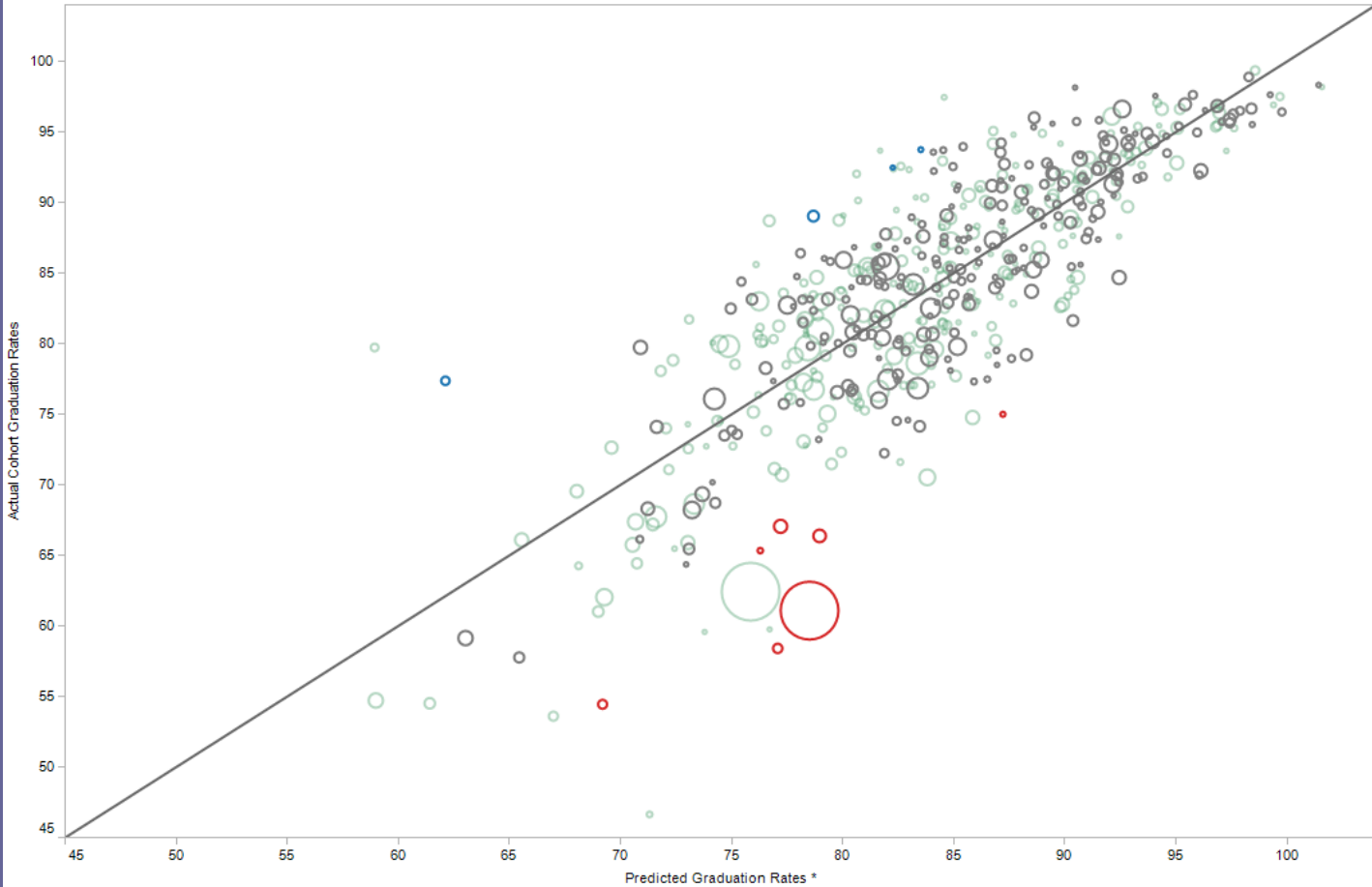


# The Dropout Process



SOURCE: *Engaging Schools* (NRC 2005)

# California School Districts: Actual vs. Predicted Cohort Graduation Rates



**School Year**  
2010-2011  
 Show History

**9th-12th Grade Enrollment**

- 1,000
- 50,000
- 100,000
- 150,000

**Filters**  
Use filters to view the distributions of districts with varying % of students on free and reduced lunch and classified ELL

**Count**

**% Students Classified as ELL**  
0 to 58

**Count**

**% Students on Free and Reduced Lunch**  
0 to 100

**Residual**  
The residual represents the difference between the actual graduation rate and the predicted graduation rate

- 10 or more points above pre..
- Within 10 points above or be..
- 10 or more points below pre..

\* See Methodology [http://www.cdrrp.ucsb.edu/pubs\\_statbriefs.htm](http://www.cdrrp.ucsb.edu/pubs_statbriefs.htm)  
NOTE: Display restricted to districts with 9th - 12th grade enrollment above 1,000 (n = 275)  
SOURCE: California Department of Education <http://www.cde.ca.gov/>



# Implications of Research Findings for Policy and Practice

- Address both academic and social needs of students
- Start before high school—more effective and less costly
- Focus on individual students and institutions that support them (families, schools, communities)



4. There are a range of possible solutions



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# Intervention Strategies

1. Programmatic—focus on students
  - Support programs
  - Alternative programs and schools
2. Comprehensive—focus on schools
  - Comprehensive school reform
  - School/community partnerships
3. Systemic—focus on system
  - State policy (e.g., compulsory schooling age; graduation requirements)
  - School/district /state capacity building



# IES Practice Guide

(US Department of Education, 2008)

1. Utilize data systems to identify students at risk for dropping out
2. Assign adult advocates to students at risk of dropping out
3. Provide academic support and enrichment to improve academic performance
4. Implement programs to improve students' classroom behavior and social skills
5. Personalize the learning environment and instructional process
6. Provide rigorous and relevant instruction to better engage students in learning and provide the skills needed to graduate and to serve them after they leave school



# CDRP Policy Report

*(released February 27, 2008)*

- Policy strategy—pressure and support
- Pressure—modify accountability system, report more useful data
- Support—build capacity of schools, districts, state—rather than implementing programs
- Will improve achievement and other student outcomes
- Improvement requires fiscal, human, and social resources



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# What the State Should Do

1. Fix the accountability system in order to maintain pressure and to allow sufficient time to address the problem.
2. Collect and report more useful data on dropouts and the state's progress in improving graduation rates.
3. Develop high school reform standards and create "lighthouse" districts to implement them in schools with high dropout rates.
4. Undertake middle school reform.
5. Make strategic investments in proven dropout prevention strategies targeting the most disadvantaged students and schools.
6. Re-examine high school graduation requirements.



# Proven Interventions

	Benefit-Cost Ratio
Preschool	2.33
Preschool + Early Childhood	3.59
Class size reduction in grades K-3 (15 to 1)	
--All students	1.29
--Low-income students	2.11
Raise teacher salaries	2.65
High school reform	4.47



SOURCE: Belfield and Levin (2007)

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# What Districts Should Do

1. Marshal the will of the district and community to address the dropout problem.
2. Adopt proven strategies to keep students in school and support their successful graduation.
3. Develop a structured, participatory, and timed process for implementing these strategies in all targeted schools.
4. Develop and use data to monitor the implementation of the strategies and to modify the implementation plan.
5. Partner with outside support organizations to identify strategies and to develop and monitor implementation.



# What Schools Should Do

1. Create a personalized learning environment for both students and teachers.
2. Provide academic and social supports for students.
3. Provide rigorous and meaningful instruction.
4. Create connections to the real world.



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# Implementing Recommendations

- Choosing between strategies, targeted programs, schoolwide programs
- Selecting strategies and programs that are both effective and cost effective
- Matching strategies and programs with local context—populations, resources, capacity
- Evaluating outcomes of locally implemented programs





# What Else is Needed?

1. Redefine high school success
2. Provide incentives to educate all students
3. Build the capacity of the educational system
4. Desegregate schools
5. Strengthen families and communities



# The Importance of Noncognitive Skills

*Both types of skill [cognitive and noncognitive (motivation, tenacity, trustworthiness, perseverance)] are valued in the market and affect school choices... Our finding... demonstrates the folly of a psychometrically-oriented educational policy that assumes cognitive skills to be all that matter.*

*A more comprehensive evaluation of educational systems would account for their effects on producing the noncognitive traits that are also valued in the market.*

—James Heckman, Nobel Laureate, Economics (2001)



SOURCE: James Heckman & Yona Rubinstein. (2001). The importance of noncognitive skills Lessons from the GED testing program. *American Economic Review*, 91, 145-149

# 21<sup>st</sup> Century Competencies

- Cognitive Competencies
  - Cognitive processes and strategies
  - Knowledge
  - Creativity
- Intra-Personal Competencies
  - Intellectual openness
  - Work ethic and conscientiousness
  - Positive core self-evaluation
- Inter-Personal Competencies
  - Teamwork and collaboration
  - Leadership



SOURCE: National Research Council. (2012). *Education for Life and Work: Developing Transferable Knowledge and Skills in the 21st Century*.

# Positive Youth Development

- Personal Flourishing
  - Gratitude
  - Forgiveness
  - Hope
  - Goal Orientation
  - Life Satisfaction
  - Purpose
  - Spirituality
- Flourishing in School
  - Diligence and reliability
  - Educational engagement
  - Initiative taking
  - Trustworthiness and integrity
  - Thrift
- Flourishing in Relationships
  - Positive friendships with peers
  - Positive relationships with parents
- Relationship Skills
  - Empathy
  - Social Competence
- Helping Others to Flourish
  - Altruism
  - Helping family and friends
- Environmental Stewardship
  - Environmental stewardship



SOURCE: Child Trends, *Flourishing Children Project*. Retrieved November 15, 2012, from:  
[http://www.childtrends.org/\\_docdisp\\_page.cfm?LID=0D4A5339-82B7-4F9A-87334D04ED13E922#FCP](http://www.childtrends.org/_docdisp_page.cfm?LID=0D4A5339-82B7-4F9A-87334D04ED13E922#FCP)

# Broader Accountability

- Test scores
- Dropout/graduation rates
- Student Academic Engagement and Progress
  - School attendance
  - Grade retention
  - Course performance (on-track indicator)
  - Rigorous coursework
- Noncognitive skills
  - Conditions for learning (school climate)
  - Discipline
  - Social and emotional learning (SEL)
  - Self-regulation
  - Physical and mental health



SOURCE: AIR. (2012). *Implementing Performance Metrics for Continuous Improvement that Support the Foundational Conditions for Personalized Learning*.

# Websites

[cdrp.ucsb.edu](http://cdrp.ucsb.edu)

[education.ucsb.edu/rumberger/book](http://education.ucsb.edu/rumberger/book)



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