Solving California’s Dropout Crisis

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PACE Seminar
Sacramento, CA

December 14, 2012
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\textsuperscript{th} 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)
Percent Bachelor's Degree or Higher, Population 25 and older, Select California Cities

- Berkeley
- Malibu
- San Francisco
- Pasadena
- Santa Barbara
- Rocklin
- San Jose
- Oakland
- Roseville
- Elk Grove
- Sacramento
- Long Beach
- Chula Vista
- Vallejo
- West Sacramento
- Rancho Cordova
- Riverside
- Winters
- Fresno
- Fontana
- Santa Ana
- San Jacinto

State average = 30.1%
State goal = 41%
cdrv.ucsb.edu
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
DROPPING OUT
WHY STUDENTS DROP OUT OF HIGH SCHOOL
AND WHAT CAN BE DONE ABOUT IT
Russell W. Rumberger
Dimensions of the Dropout Crisis

1. Magnitude and trends
2. Consequences
3. Causes
4. Solutions
1. The problem is severe and concentrated.
California Graduation Rates

December 14, 2012

California Graduation Rates


December 14, 2012
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
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
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

<table>
<thead>
<tr>
<th></th>
<th>Sacramento</th>
<th>California</th>
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</thead>
<tbody>
<tr>
<td>Graduates, 2009-10</td>
<td>4,457</td>
<td>401,084</td>
</tr>
<tr>
<td>Dropouts, 2009-10</td>
<td>1,739</td>
<td>99,541</td>
</tr>
<tr>
<td>Ratio: graduates/dropouts</td>
<td>2.5/1</td>
<td>4/1</td>
</tr>
<tr>
<td>Violent crime, 2009</td>
<td>2,380</td>
<td>101,875</td>
</tr>
<tr>
<td>(homicides, aggravated assaults)</td>
<td></td>
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</table>
## Lifetime Economic Losses per Dropout

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>State and local government</td>
<td>$53,580</td>
</tr>
<tr>
<td>Earnings (net of taxes)</td>
<td>$188,640</td>
</tr>
<tr>
<td>Crime (Victim costs)</td>
<td>$79,890</td>
</tr>
<tr>
<td>Other losses</td>
<td>$69,800</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$391,910</strong></td>
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</tbody>
</table>
# Lifetime Economic Losses from One Year’s Dropouts, 2009-10

<table>
<thead>
<tr>
<th></th>
<th>Sacramento</th>
<th>California</th>
</tr>
</thead>
<tbody>
<tr>
<td>State and local government</td>
<td></td>
<td>$2.7B</td>
</tr>
<tr>
<td>Health care costs</td>
<td>$4M</td>
<td>$1.5B</td>
</tr>
<tr>
<td>Earnings (net of taxes)</td>
<td>$164M</td>
<td>$9.4B</td>
</tr>
<tr>
<td>Crime (Victim costs)</td>
<td>$69M</td>
<td>$4.0B</td>
</tr>
<tr>
<td>Other losses</td>
<td>$61M</td>
<td>$3.5B</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$298M</strong></td>
<td><strong>$19.5B</strong></td>
</tr>
</tbody>
</table>
# Economic Benefits of Reducing Dropouts by Half

<table>
<thead>
<tr>
<th></th>
<th>Sacramento</th>
<th>California</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifetime economic benefits</td>
<td>$149M</td>
<td>$9.8B</td>
</tr>
<tr>
<td>Annual reductions in homicides and aggravated assaults</td>
<td>334</td>
<td>10,128</td>
</tr>
</tbody>
</table>

Sacramento California

December 14, 2012
3. The causes are complex—related to students, families, schools, and communities
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

- ANY SCHOOL REASON: 82%
  - Missed too many days of school: 44%
  - Thought it would be easier to get GED: 41%
  - Failing in school: 38%
  - Did not like school: 37%
  - Could not keep up with schoolwork: 32%

- ANY FAMILY REASON: 34%
  - Pregnant: 28%

- ANY JOB REASON: 35%
  - Got a job: 28%

SOURCE: CDRP Statistical Brief 2
Individual Predictors

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

Environment → Beliefs and attitudes → Engagement → Dropout Achievement

SOURCE: Engaging Schools (NRC 2005)
California School Districts: Actual vs. Predicted Cohort Graduation Rates

School Year
2010-2011

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.

% Students Classified as ELL
0 to 50

% 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 pred.:
Within 10 points above or below:
10 or more points below pred.:

See Methodology: http://www.cde.ca.gov/ds/br/gradrate/gradrate.asp

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/

California Dropout Research Project
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
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

December 14, 2012
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

December 14, 2012
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
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

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Benefit-Cost Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preschool</td>
<td>2.33</td>
</tr>
<tr>
<td>Preschool + Early Childhood</td>
<td>3.59</td>
</tr>
<tr>
<td>Class size reduction in grades K-3 (15 to 1)</td>
<td></td>
</tr>
<tr>
<td>--All students</td>
<td>1.29</td>
</tr>
<tr>
<td>--Low-income students</td>
<td>2.11</td>
</tr>
<tr>
<td>Raise teacher salaries</td>
<td>2.65</td>
</tr>
<tr>
<td>High school reform</td>
<td>4.47</td>
</tr>
</tbody>
</table>

*Source: Belfield and Levin (2007)*
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.
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)
21st 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

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

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

Websites

cдрp.ucsb.edu

education.ucsb.edu/rumberger/book