Why High School Graduation Matters

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Fresno Graduation Dialogue
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
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)
Improving College Graduation Rates Requires Improving High School Graduation Rates

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)
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

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Impact

• 64,000 downloads of 70 publications

• Media exposure in newspapers, radio, television at state and national levels

• Four bills that incorporate CDRP recommendations were introduced in the legislature and three were signed into law
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
What is a Dropout?

- Dropout as a status
- Dropout as an event
- Dropout as a process:

  Enroll $\rightarrow$ Attend $\rightarrow$ Progress $\rightarrow$ Graduate

  $\downarrow$

  Drop Out
What is a Graduate?

- **Graduate** earns a high school diploma
- **Completer** earns diploma or equivalency (GED)
California Graduation Rates

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California Graduation Rates

California High School Exit Exam Required

Fresno Unified School District 66.4%

CDE official state rate (NCES)  
CDE 9th grade cohort rate  
CDE 9th grade cohort rate

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California Graduation Rates

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

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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
# Economic Impact: Fresno

(Adults 25 years and older)

<table>
<thead>
<tr>
<th></th>
<th>Dropouts</th>
<th>Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed or in armed forces</td>
<td>49%</td>
<td>61%</td>
</tr>
<tr>
<td>Annual earnings</td>
<td>$15,130</td>
<td>$22,801</td>
</tr>
<tr>
<td>Poverty rate</td>
<td>37%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Source: U.S. Census Bureau, 2008-2010 American Community Survey

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Fresno Dropouts
Employment Status of 16-19 Year-old Dropouts, 2008-10

Source: U.S. Census Bureau, 2008-2010 American Community Survey

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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

<table>
<thead>
<tr>
<th></th>
<th>Fresno</th>
<th>California</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduates, 2009-10</td>
<td>5,594</td>
<td>401,084</td>
</tr>
<tr>
<td>Dropouts, 2009-10</td>
<td>2,577</td>
<td>99,541</td>
</tr>
<tr>
<td>Ratio: graduates/dropouts</td>
<td>2/1</td>
<td>4/1</td>
</tr>
<tr>
<td>Violent crime, 2009 (homicides, aggravated assaults)</td>
<td>1,762</td>
<td>101,875</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Category</th>
<th>Fresno</th>
<th>California</th>
</tr>
</thead>
<tbody>
<tr>
<td>State and local government</td>
<td></td>
<td>$2.6B</td>
</tr>
<tr>
<td>Health care costs</td>
<td>$5.9M</td>
<td>($1.5B)</td>
</tr>
<tr>
<td>Earnings (net of taxes)</td>
<td>$243.1M</td>
<td>$9.4B</td>
</tr>
<tr>
<td>Crime (Victim costs)</td>
<td>$102.9M</td>
<td>$4.0B</td>
</tr>
<tr>
<td>Other losses</td>
<td>$89.9M</td>
<td>$3.5B</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$442M</td>
<td>$19.5B</td>
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</tbody>
</table>

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Economic Benefits of Reducing Dropouts by Half

<table>
<thead>
<tr>
<th></th>
<th>Fresno</th>
<th>California</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifetime economic benefits</td>
<td>$221M</td>
<td>$9.8B</td>
</tr>
<tr>
<td>Annual reductions in homicides and aggravated assaults</td>
<td>278</td>
<td>10,128</td>
</tr>
</tbody>
</table>

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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
Risk Indicators

Graduation Rates by Courses Failed

- Blue = Middle School
- Purple = High School

SOURCE: CDRP Research Report 14

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Student and School Predictors
(Predicted 10th grade graduation rates by student and school SES, 2002)

SOURCE: Preliminary analysis of data from Education Longitudinal Study: 2002
The Dropout Process

Environment → Beliefs and attitudes → Engagement → Dropout Achievement

SOURCE: Engaging Schools (NRC 2005)
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
1. Programmatic Solutions

- Advantages
  - Easier to design, fund, implement, evaluate

- Disadvantages
  - Limited impact—only appropriate where dropout problem is small
  - Adds to programmatic “overload” at local level
  - Few proven programs—What Works Clearinghouse has identified five proven programs
2. Comprehensive Solutions

• **Advantages**
  – Potential to impact more students—more appropriate in “dropout factories”
  – Potential to impact multiple educational outcomes (test scores and dropout rates)

• **Disadvantages**
  – More difficult to reform schools
  – Few proven comprehensive school reform models—Comprehensive School Reform Quality Center identified 3 out of 18 models that significantly improved graduation rates
  – Unclear what incentives, resources, and support needed to improve schools

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3. Systemic Solutions

• Advantages
  – Potential to impact more students
  – Potential to impact multiple educational outcomes (test scores and dropout rates)

• Disadvantages
  – More difficult to alter families, schools, and communities
  – Mixed impact from systemic reforms
  – Unclear what incentives, resources, and support needed to improve school, district, and state capacity
What Works Clearinghouse
(US Department of Education, 2008)

• Reviewed 84 studies of 22 dropout interventions
• Only 23 studies of 16 interventions had rigorous evaluations
  – Seven effective in reducing dropout rates
  – Six effective in improving student progress toward graduation
  – Four effective in improving completion (including GED) rates
  – Zero effective in improving graduation rates
## Proven Interventions

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Benefit-Cost Ratio</th>
</tr>
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<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)
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

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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.

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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.

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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 (2001)
Nobel Laureate, Economics
The Challenge

In some part, the difficulties and complexity of any solution derive from the premise that our society is committed to overcoming, not merely inequalities in the distribution of educational resources (classroom teachers, libraries, etc.), but inequalities in the opportunity for educational achievement.

This is a task far more ambitious than has even been attempted by any society: not just to offer, in a passive way, equal access to educational resources, but to provide an educational environment that will free a child’s potentialities for learning from the inequalities imposed upon him by the accident of birth into one or another home and social environment.

–James Coleman (1967)
Websites

cdrp.ucsb.edu

education.ucsb.edu/rumberger/book