#### The Challenge of Universal High School Completion

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



## Urgency

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

Improving College Graduation Rates Requires Improving High School Graduation Rates

To produce 8.2 million new college graduates by 2020 requires raising the nation's high school graduation rate by 17.5 percentage points.

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

## California Dropout Research Project

UC Santa Barbara | Gevirtz Graduate School of Education

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## **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.

## What is a Dropout?

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

#### Enroll → Attend → Progress → Graduate ↓ Drop Out

## What is a Graduate?

- Graduate earns a high school diploma
- Completer earns diploma or equivalency (GED)

## **Enrollment and Graduation Rates**



SOURCE: Snyder, et al., Digest of Education Statistics (2011)

## **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

## Lifetime Economic Losses per Cohort of 20-year-old Dropouts, 2004

	Losses per dropout	Losses per cohort (Billions)
Taxes	\$139,000	\$98
Crime	\$26,000	\$19
Welfare	\$3,000	\$2
Health	\$40,500	\$29
TOTAL	\$209,200	\$148

SOURCE: Belfield and Levin (2007).

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



## **Individual Predictors**

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

## **Risk Indicators**



## **Student and School Predictors**

(Predicted 10<sup>th</sup> grade graduation rates by student and school SES, 2002)



SOURCE: Preliminary analysis of data from Education Longitudinal Study: 2002

## The Dropout Process



SOURCE: National Research Council, Engaging Schools (2005).



SOURCE: Rotermund (2010).

### Implications of Research Findings for Policy and Practice

- Address both academic and social needs of students
- Start before high school
- 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

## 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

- 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 (incl. GED) rates
  - Zero effective in improving graduation rates

#### Dropout Prevention 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
- 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

## Benefit-Costs of 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)

## Limitations of Current Efforts

- 1. Insufficient targeting of true dropout factories.
- 2. Insufficient funding to develop and implement dropout prevention and recovery strategies.
- 3. Lack of attention to costs, sustainability, and scalability.

## 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)

## 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, *Education for Life and Work: Developing Transferable Knowledge and Skills in the 21st Century* (2012).

## 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