

Dropout Prevention

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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

My Background on Dropouts

- “Dropping Out of High School” (AERJ, 1983)
- *Engaging Schools: Fostering High School Student’s Motivation to Learn* (NRC, 2005)
- *Solving California’s Dropout Crisis* (CDRP, 2008)
- *Dropout Prevention: A Practice Guide* (IES, 2008)
- *Improving Measures of High School Dropout, Graduation, and Completion Rates: Better Data, Better Measures, Better Decisions* (NRC, 2010)
- *Dropping Out: Why Students Drop Out of High School and What Can be Done About It* (Harvard University Press, 2011)



California Dropout Research Project

UC Santa Barbara | Gevirtz Graduate School of Education

cdrp.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

- 64,000 downloads of 70 publications
- Media exposure in newspapers, radio, television at state and national levels
- Four bills based on CDRP recommendations, with three signed into law

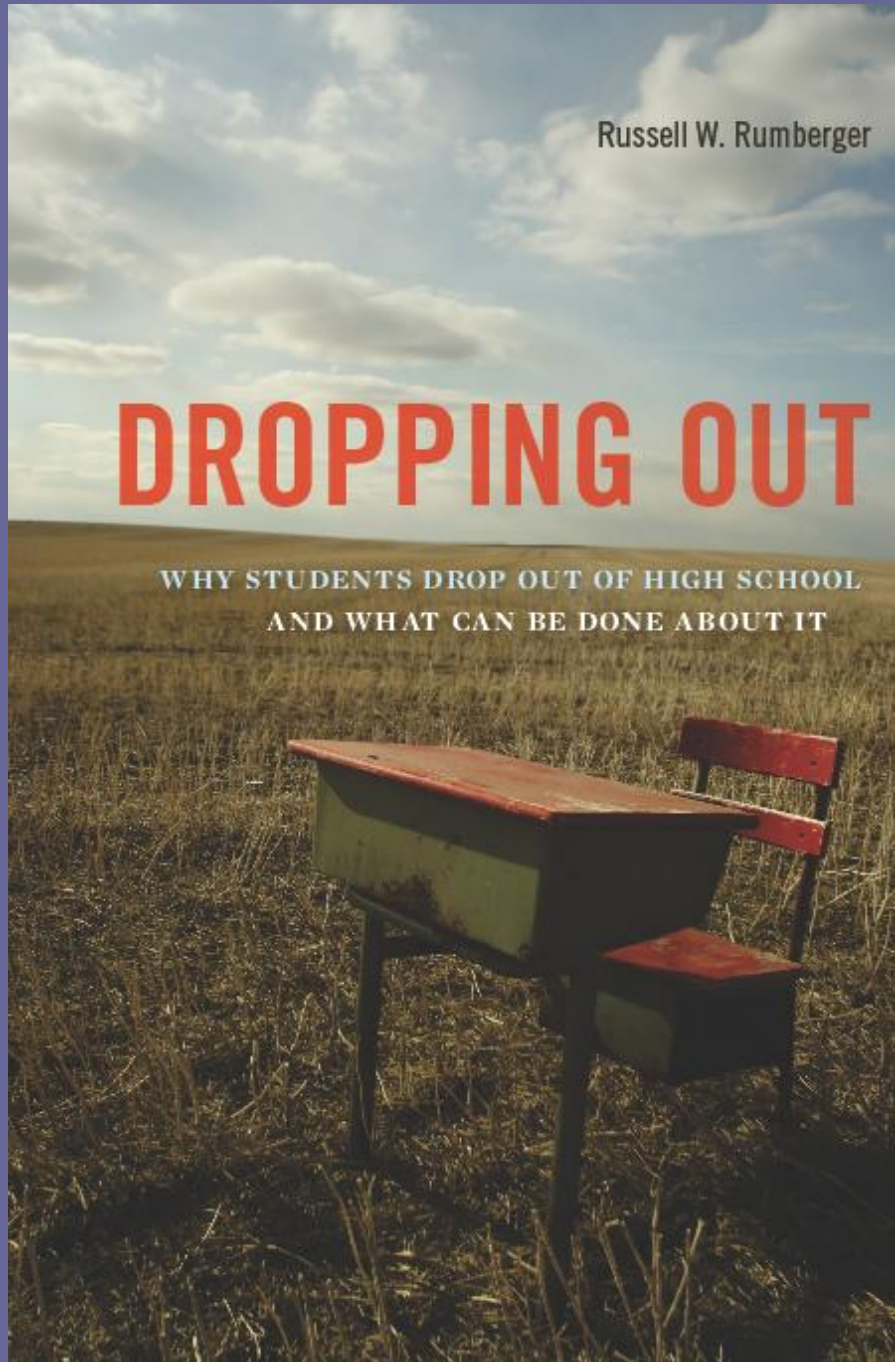
Dimensions of the Problem

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

Russell W. Rumberger

DROPPING OUT

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



What Works Clearinghouse

US Department of Education

(<http://ies.ed.gov/ncee/wwc/>)

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

Overview of Practice Guides

- Provide guidance to practitioners on best-practices
- Based on wide array of evidence from rigorous evaluations to expert opinion
- Level of evidence determined for each recommendation

IES PRACTICE GUIDE

WHAT WORKS CLEARINGHOUSE

Dropout Prevention

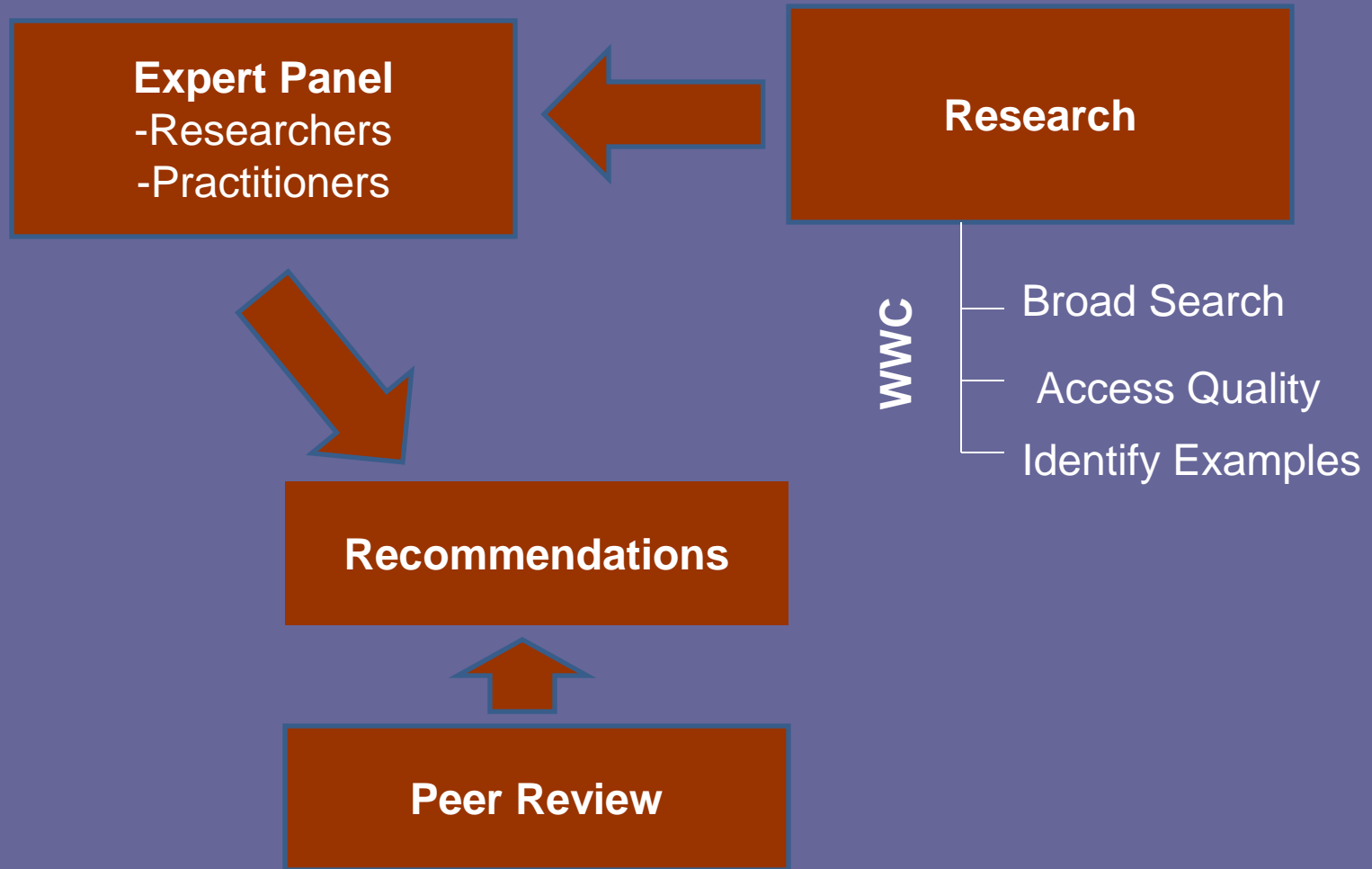


(released September 2008)

Panel Members

- **Mark Dynarski**
(Chair)
Mathematica Policy Research
- **Linda Clark**
City of Houston
- **Brian Cobb**
Colorado State University
- **Jeremy Finn**
State University of NY, Buffalo
- **Russell Rumberger**
UC Santa Barbara
- **Jay Smink**
National Dropout Prevention Center
- **Staff: Kristin Hallgren, Brian Gill**
Mathematica Policy Research

How Practice Guides are Developed



Levels of Evidence

- Strong—rigorous evaluations (meeting What Works Clearinghouse standards)
- Moderate—less rigorous evaluations (not meeting WWC standards)
- Low—based on expert opinion

Measures of Effectiveness

- Staying in school
- Progressing in school
- Completing school

Recommendation 1

- Utilize data systems that support a realistic diagnosis of the number of students who drop out and that help identify individual students at high risk of dropping out (diagnostic).
- *Level of evidence: Low*

1. How to carry out this recommendation

1. Use longitudinal, student-level data to get an accurate read of graduation and dropout rates.
2. Use data to identify incoming students with histories of academic problems, truancy, behavioral problems, and retentions.
3. Monitor the academic and social performance of all students continually.
4. Review student-level data to identify students at risk of dropping out before key academic transitions.
5. Monitor students' sense of engagement and belonging in school.
6. Collect and document accurate information on student withdrawals.

Recommendation 2

- Assign adult advocates to students at risk of dropping out (targeted intervention).
- *Level of evidence: Moderate*

2. How to carry out this recommendation

1. Choose adults who are committed to investing in the student's personal and academic success, keep caseloads low, and purposefully match students with adult advocates. Use data to identify incoming students with histories of academic problems, truancy, behavioral problems, and retentions.
2. Establish a regular time in the school day or week for students to meet with the adult.
3. Communicate with adult advocates about the various obstacles students may encounter—and provide adult advocates with guidance and training about how to work with students, parents, or school staff to address the problems.

Recommendation 3

- Provide academic support and enrichment to improve academic performance (targeted intervention).
- *Level of evidence: Moderate*

3. How to carry out this recommendation

1. Provide individual or small group support in test-taking skills, study skills, or targeted subject areas such as reading, writing, or math.
2. Provide extra study time and opportunities for credit recovery and accumulation through after school, Saturday school, or summer enrichment programs.

Recommendation 4

- Implement programs to improve students' classroom behavior and social skills(targeted intervention).
- *Level of evidence: Low*

4. How to carry out this recommendation

1. Use adult advocates or other engaged adults to help students establish attainable academic and behavioral goals with specific benchmarks.
2. Recognize student accomplishments.
3. Teach strategies to strengthen problem-solving and decision-making skills.
4. Establish partnerships with community-based program providers and other agencies such as social services, welfare, mental health, and law enforcement.

Recommendation 5

- Personalize the learning environment and instructional process (schoolwide intervention) .
- *Level of evidence: Moderate*

5. How to carry out this recommendation

1. Establish small learning communities.
2. Establish team teaching.
3. Create smaller classes.
4. Create extended time in classroom through changes to the school schedule.
5. Encourage student participation in extracurricular activities.

Recommendation 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 (schoolwide intervention) .
- *Level of evidence: Moderate*

6. How to carry out this recommendation

1. Provide teachers with ongoing ways to expand their knowledge and improve their skills.
2. Integrate academic content with career and skill-based themes through career academies or multiple pathways models.
3. Host career days and offer opportunities for work-related experiences and visits to postsecondary campuses.
4. Provide students with extra assistance and information about the demands of college.
5. Partner with local businesses to provide opportunities for work-related experience such as internships, simulated job interviews, or long-term employment.

Implementing Recommendations

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

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
 - School/district capacity building
 - State policy (e.g., compulsory schooling age; graduation requirements)

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 alter families, schools, and communities
 - 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 school and district capacity

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
 - 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
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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

Current Efforts

- National level
 - School Improvement Grants
 - Dropout Prevention Programs
 - Grad Nation
- State level
 - Dropout Summits
 - NGA, NCSL
- Local level
 - Dropout Summits (55 cities)

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.

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.

Fundamental Changes Required

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.

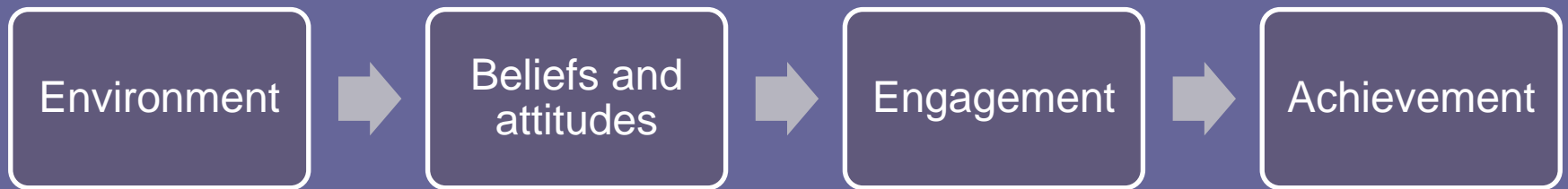
Noncognitive skills

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.

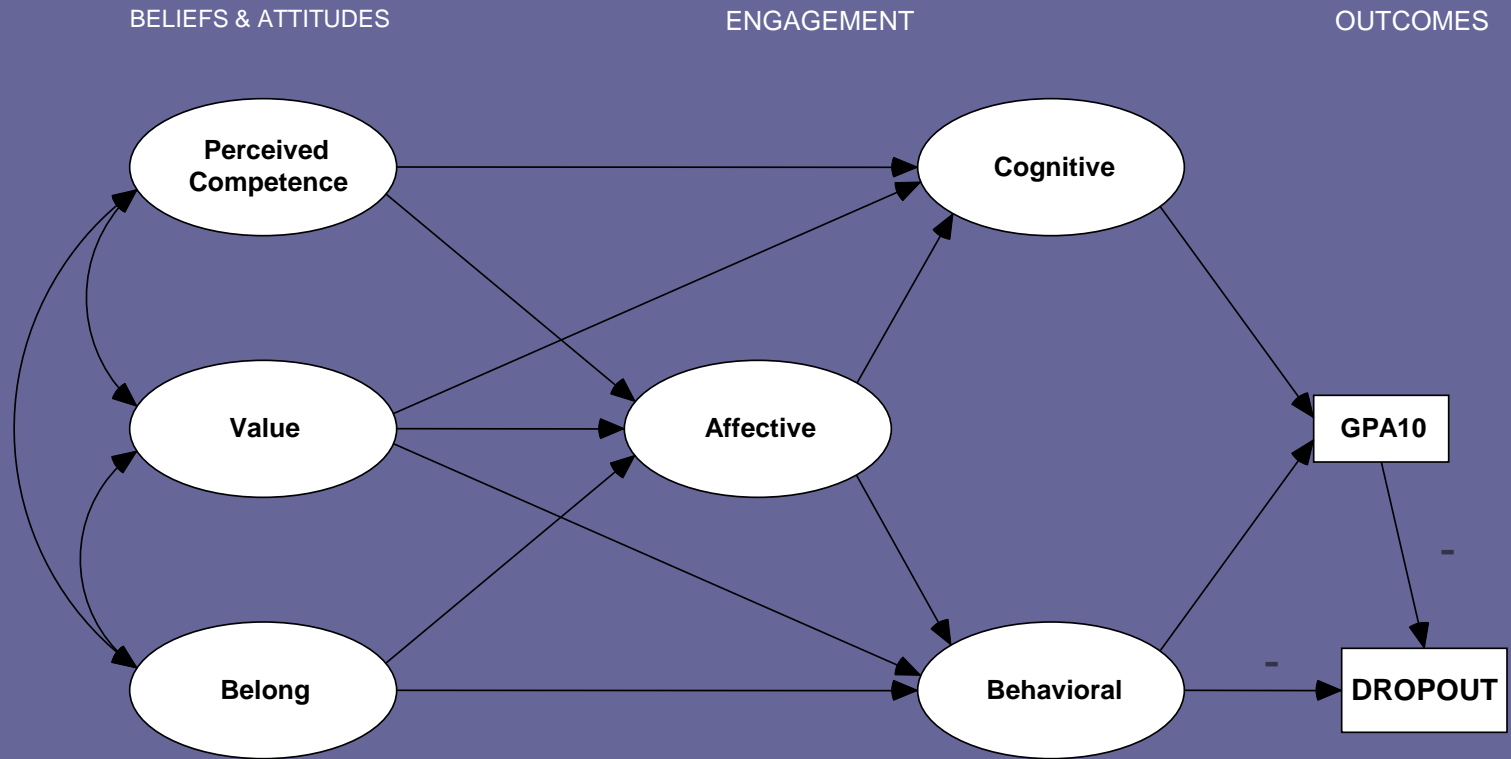
A more comprehensive evaluation of educational systems would account for their effects on producing the noncognitive traits that are also valued in the market.

James Heckman (2001, pp. 146, 148)
Nobel laureate, Economics

A Model of Engagement



SOURCE: *Engaging Schools* (NRC 2005).



SOURCE: Rotermund (2010).

REFERENCES

Fredricks, J.A., Blumenfeld, P.C., & Paris, A.H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74, 59-109.

National Research Council, Committee on Increasing High School Students' Engagement and Motivation to Learn. (2005). *Engaging Schools Fostering High School Students' Motivation to Learn*. Washington, D.C. The National Academies Press.

Rotermund, S. The Role of Psychological Precursors and Student Engagement in a Process Model of High School Dropout. (2010). Ph.D. dissertation, University of California, Santa Barbara.

Rumberger, R. W. (2008). *Solving California's Dropout Crisis. Report of the California Dropout Research Project Policy Committee*. Santa Barbara California Dropout Research Project, University of California, Santa Barbara. Retrieved May 1, 2011 from http://cdrp.ucsb.edu/dropouts/pubs_policyreport.htm

Rumberger, R. W. (2011). *Dropping Out: What Students Drop Out of School and What Can be Done About It*. Cambridge, MA: Harvard University Press.