

D R O P O U T P O L I C I E S: Research-Based Strategies

Imagine antibiotics sitting unused in a cabinet while generation after generation of children perished from easily preventable infections. That is not unlike the situation we face in our schools today. Educational research has uncovered proven remedies with the potential to lower dropout rates. Yet Colorado's dropout problem continues at epidemic rates.

Approximately 30 percent of Colorado's students fail to graduate within four years of starting high school.¹ This dropout crisis is costly to our state and is seriously harming children, families, local communities, and the state as a whole. Students without high school diplomas lack the skills and knowledge needed to maintain a sound economy and healthy democracy for future generations.

Which students are most likely to drop out?

The graph on the right suggests that some students are more likely to drop out than others. We know that risk factors include poor academic performance and disengagement from school. We also know that these traits are more likely to arise among identifiable groups of students, such as those who repeat a grade, those who are from low socioeconomic backgrounds, those who speak English as a second language, those who are gay, and those who become pregnant. Programs and policies that assist these students are likely to correspondingly assist in reducing dropout rates.

Identifying these factors and characteristics, however, is only a first step. The next step is to understand what we can do to help.

I Swanson, C. B. (2004) Who Graduates? Who Doesn't? A Statistical Portrait of Public High School Graduation, Class of 2001. Washington, D.C.: The Urban Institute, www.urban.org/UploadedPDF/410934_Who Graduates.pdf. See also Greene, J. P., and Winters, M.A. (2005). Public High School Graduation and College-Readiness Rates: 1991–2002. New York: The Manhattan Institute for Policy Research. www.manhattaninstitute.org/pdf/ewp_08.pdf



High School Graduation Rates of Colorado Students by Gender and Ethnicity

SOURCE: Swanson, C. B. (2004). Who Graduates? Who Doesn't? A Statistical Portrait of Public High School Graduation, Class of 2001. Washington, D.C.: The Urban Institute.²

2 Asian American and Native American numbers were too small for Swanson to disaggregate by gender. However, the overall numbers for each group are as follows: Asian American = 73 percent; Native American = 41 percent. Note also that the Swanson estimation approach tends to show lower rates than other estimation approaches. For example, Greene & Winters (2005) estimate the graduation rate in Colorado to be 72 percent, as opposed to Swanson's estimate of 69 percent.



What should Colorado do?

No one policy or program will, by itself, meaningfully address Colorado's dropout problem. However, each of the following research-based approaches should be thought of as one piece of the puzzle, helping to create a comprehensive dropout policy for Colorado's children.



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Dropout Prevention through Early Childhood Education

Early Reading Focus

Schools should have formal programs to provide high-quality reading instruction for grades $\kappa\text{--}_3.$

At Teller Elementary in Denver, reading time was described as "sacred time," set aside daily and without fail. At Dunn Elementary in Fort Collins, a 2004 report found that each student reads to the principal twice per year so she could see how everyone was progressing. Both schools had higher Colorado Student Assessment Program (CSAP) scores than similar schools.³

Universal Early Childhood Education

Universal early childhood preschool programs help increase achievement, decrease dropout rates, and lessen the need for special education. These programs should last for at least one year, and should be for at least half a day. They should provide a foundation for reading instruction.

Colorado Preschool Program classes teach letters, numbers, and social skills each year to more than 12,000 children whose family backgrounds place them at risk of later dropping out of school. Program alumni have a high school graduation rate of 87 percent. Similar students have a graduation rate of 38.5 percent. Unfortunately, 6,336 children who were eligible for the program in 2004 could not attend because there wasn't enough space.

English Plus

Students have higher achievement when they are allowed to use their native language as they learn English. In dual-language immersion programs, English and non-English speakers become fluent in one another's languages. Such programs are more likely to engage English language learners and reduce dropout rates. Moreover, learning a second language requires time. It takes up to seven years to read and write English well enough to completely understand school work.

Spanish-speaking students at Bryant-Webster Elementary told researchers that they had learned to both speak and read the language during their time at the northwest Denver school. Bryant-Webster received a federal grant that helped teachers earn master's degrees through the University of Colorado. A 2004 study identified Bryant-Webster as a school that consistently earned higher Colorado test scores than schools with similar populations.









3 These examples and those following from Colorado schools are from sources available at education.colorado.edu/epic/dropcites.htm.

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Supportive, Challenging, and Relevant Schooling

Reading Across the Curriculum

All teachers should be reading teachers. Teachers need to understand how students develop as readers and what they can do to help.

Two of Littleton High School's four school-wide "power standards" focus on literacy: writing/speaking and information literacy. Teachers of virtually every subject are expected to incorporate these standards into their lessons and student evaluations.

Home and Community Connections

Schools have more motivated students when they develop deep relationships in all the settings where students spend their time-including home, places of worship, and community organizations. Such relationships help instill a consistent message about the importance of school and community.

Low-income parents enrolled in the Colorado Even Start program may attend GED or English classes while their children are in preschool, often in the same building. During Parent and Child Together time, teachers assist both parents and children with learning activities. Even Start graduates in Trinidad were more likely than their classmates to read at or above grade level. Colorado teachers said that Even Start parents were likely to be involved in their children's educations.

During the registration process at the beginning of each school year, 95 percent of parents at Denver's Lake Middle School sign up their children to use the school-based health care center, which is sponsored by St. Anthony's Hospital. The children benefit from preventive medical care and sports physicals, violence prevention counseling, asthma treatment, and even acute medical care, all in support of their readiness to learn.

Problem-Solving Skills

Schools should provide students with interpersonal relations instruction that focuses on developing problem-solving skills.

At North and South middle schools in Aurora, the "Alternative to Suspension" program removed disruptive students from their classrooms and helped them with behavioral issues, school work, and problem solving. During the first four years of the program, out-of-school suspensions decreased 52 percent at North and 15 percent at South.











Relevance and Rigor

Schools need a challenging curriculum that is individualized and focused on understanding in order to increase student motivation, confidence, and achievement. Such a challenging curriculum should:

- 1. Build on students' preexisting interests, culture, real-world experiences, knowledge, and understanding;
- 2. Emphasize meaning and understanding;
- 3. Use assessments to provide regular monitoring and feedback for teachers, principals, parents, and students;
- 4. Make students active rather than passive participants; students should be experimenting rather than observing experiments, debating rather than watching debates on TV;
- 5. Be connected and consistent; what is taught in language arts should be reinforced in math;
- 6. Communicate high expectations with challenging but achievable tasks, grounded in teacher knowledge of individual student skill levels;
- 7. Be sensitive to cultural practices; and
- 8. Provide the support necessary for all students to be successful, including tutoring, after-school activities, and summer school.

At the Cesar Chavez Academy charter school in Pueblo, 63 percent of students qualify for free and reduced-price meals. Although most high-poverty schools in the state perform relatively poorly on the CSAP exam, Cesar Chavez received the state's highest academic rating of "excellent" in 2005. The school combines a rigorous curriculum, small classes, and one-on-one tutoring with a "unique emphasis on the history, culture, and native language" of the Hispanic students who comprise the majority of the school's population.

Colorado high school seniors surveyed in 2001 were motivated to learn when "the classroom instruction is delivered through a variety of strategies and methods," and when the teacher was knowledgeable (79 percent) and enthusiastic (80 percent). "I like the class because the teacher was enthusiastic about the subject, joked around with the students, and encouraged everyone to participate," one student said. Sixty-five percent reported that they were bored in school at least half the time. Seventy-four percent said they were motivated by "a chance to apply active, hands-on lessons." "I enjoyed the class because there were a lot of activities to keep me busy so I didn't just sit there and get bored," one student said. Only 20 percent found lectures motivational.

"I found I liked physics because it applied to the career I want to pursue, becoming a pilot."

"I hated math but I ended up liking algebra because my teacher applied it to real life."

-Colorado high school seniors

Service Learning

Students respond well to participation in volunteer or service programs and individual counseling and assistance.

"After my internship at the Molly Brown House and a great history teacher, I am going to major in anthropology and history, specializing in museum studies."

-Colorado high school senior







Strengthening Teacher Quality

Teacher Preparation

Teacher preparation programs should, among other things, help future teachers understand the following:

- 1. The content they are teaching;
- 2. How to continually improve their teaching through critical reflection;
- 3. How children learn within particular social environments;
- 4. How to best teach children of all skill levels and cultural backgrounds.

Induction and Professional Development

School districts should provide high-quality professional development and mentors in order to recruit and retain the best teachers.



The Colorado Partnership for Educational Renewal pairs universities with more than 50 partner schools in an effort to improve both teacher preparation and K–12 schools.

A 2005 study found that Fountain-Fort Carson had been a leader in reducing the achievement gap between white students and minorities and that good professional development was likely contributing to the success. One district school, Mesa Elementary, dismissed students early one afternoon per week so teachers had time to analyze test results and student progress. During these discussions, teachers talked about what worked and what needed more work.

The Education Commission of States reviewed 91 studies and found that more minorities and academically talented individuals needed to be recruited into the teaching profession. The report also found that science and math teachers need more support if districts are to successfully curb attrition.



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References

The recommendations contained herein are derived from authoritative studies of the U.S. government and respected non-governmental organizations, such as the Government Accountability Office, the National Academy of Education, the National Research Council, the National Center for Education Statistics, and RAND. For further information, we recommend the following publications:

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POLICY STEPS

The National Academy of Sciences has identified policy strategies for creating high schools with meaningful engagement and genuine improvements in achievement.⁴ These recommendations are all consistent with the recommendations here, and several deserve mention as actions that policy makers at the state and school district level can take to facilitate implementation of the strategies set forth in this brief.

- Schools need to be able to provide the *support and resources* necessary to help all students meet challenging standards.
- Tests used to evaluate schools, teachers, and students should assess *high-level, critical thinking*.
- Districts should restructure comprehensive urban high schools to create *smaller learning communities* that foster personalized, continuous relationships between teachers and students.
- Both formal and informal *tracking by ability should be eliminated*. Alternative strategies should be used to ensure appropriately challenging instruction for students who vary widely in their skill levels.
- Schools should make greater efforts to *identify and coordinate social and health services* in the community and to work with other adults in the various settings where adolescents spend their time, including homes and religious institutions.

4 National Research Council. (2003). Engaging Schools: Fostering High School Students' Mativation to Learn. Committee on Increasing High School Students' Engagement and Motivation to Learn, Washington, D.C.: National Academy Press. The bullet points are quotes and paraphrases of five of the 10 recommendations set forth in the report.

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