

WHY STUDENTS DROP OUT OF SCHOOL: A REVIEW OF 25 YEARS OF RESEARCH

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Highlights:

- ▶ **Dropping out is more of a process than an event—a process that, for some students, begins in early elementary school.**
- ▶ **Poor academic achievement, as early as elementary school, is one of the strongest predictors of dropping out.**
- ▶ **Preschool improves school readiness and early school success, positively affecting student outcomes, including high school completion.**
- ▶ **Grades are more consistent than test scores in predicting which students will leave school without graduating.**
- ▶ **Several behaviors both in and out of school—including absenteeism, delinquency, and substance abuse—are strong indicators of dropping out.**
- ▶ **A stable home environment and access to social and financial resources strongly influence the likelihood that a student will graduate.**

California and the nation are facing a dropout crisis. About one-quarter of all students who enter the ninth grade fail to earn a diploma four years later. To address this crisis requires a better understanding of why students drop out.

Dropouts themselves report a variety of reasons for leaving school (see *CDRP Statistical Brief 2*), but these reasons do not reveal the underlying causes. Multiple factors in elementary or middle school may influence students' attitudes, behaviors, and performance in high school prior to dropping out.

To better understand the underlying causes behind students' decisions for dropping out, we reviewed the past 25 years of research on dropouts. The review was based on 203 published studies that analyzed a variety of national, state, and local data to identify statistically significant predictors of high school dropout and graduation. Although in any particular study it is difficult to demonstrate a causal relationship between any single factor and the decision to quit school, a large number of studies with similar findings does suggest a strong connection.

The research review identified two types of factors that predict whether students drop out or graduate from high school: factors associated with *individual characteristics* of students, and factors associated with the *institutional characteristics* of their families, schools, and communities.

▶ Individual Predictors

Individual factors that predict whether students drop out or graduate from high school fall into four areas: (1) educational performance, (2) behaviors, (3) attitudes, and (4) background.

Educational Performance. Several aspects of educational performance have been widely identified in the research literature as strong predictors of dropping out or graduating:

- test scores and grades in high school;
- academic achievement in both middle and elementary school (with grades a more consistent predictor than test scores);
- non-promotional school changes (student mobility) during middle and high school; and,
- retention (being held back one or more grades), in elementary, middle, and high school.

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Behaviors. A wide range of behaviors both in and out of school have been shown to predict dropout and graduation. One of the most important is student engagement, which includes students' active involvement in academic work (e.g., coming to class, doing homework) and the social aspects of school (e.g., participating in sports or other extracurricular activities).

Research consistently finds that high absenteeism—one specific indicator of engagement—is associated with higher dropout rates. Misbehavior in high school and delinquent behavior outside of high school are both significantly associated with higher dropout and lower graduation rates. In addition, drug or alcohol use during high school is associated with higher dropout rates. Teenage parenting and childbearing increase the odds of dropping out. Having friends who engage in criminal behavior or friends who have dropped out also increases the odds of dropping out, with such associations appearing as early as the seventh grade.

Finally, a number of studies have found that students who work more than 20 hours a week are significantly more likely to drop out.

Attitudes. Although a substantial body of research has explored the relationship between student achievement and a wide range of student beliefs, values, and attitudes, far less research has explored the links between these factors and dropping out. The dropout literature has generally focused on a single indicator—educational expectations (how far in school a student expects to go)—and has found that higher levels of edu-

cational expectations are associated with lower dropout rates.

Background. A number of student background characteristics—including demographics and past experiences—are linked to whether students drop out or graduate. Dropout rates are generally higher for males than for females, and they are higher for Blacks, Hispanics, and Native Americans than for Asians and Whites; yet these differences may be related to other characteristics of students as well as characteristics of their families, schools, and communities.

Some studies have found that second generation students (one parent foreign-born), especially Latino students, have higher graduation rates than either first generation (foreign-born) or third generation (native-born students and parents). Higher English language proficiency also lowers the odds of dropping out.

One past experience—participation in preschool—has been the subject of extensive, rigorous research and has been shown to not only improve school readiness and early school success, but also to affect a wide range of adolescent and adult outcomes, including high school completion, crime, welfare, and teen parenting.

► Institutional Predictors

Research on dropouts has identified a number of factors within students' families, schools, and communities that predict dropping out and graduating.

Families. Three aspects of families predict whether students drop out or graduate: (1) family structure, (2)

family resources, and (3) family practices.

Students living with both parents have lower dropout rates and higher graduation rates, compared to students living in other family arrangements. More important, changes in family structure, along with other potentially stressful events (such as a family move, illness, death, adults entering and leaving the households, and marital disruptions) increase the odds of dropping out.

Students in homes with more family resources—as measured by parental education, parents' occupational status, and family income—are less likely to drop out of school. A number of parenting practices—sometimes referred to as *social resources* or *social capital*—have been shown to reduce the odds of dropping out, including:

- having high educational aspirations for their children;
- monitoring their children's school progress;
- communicating with the school; and,
- knowing the parents of their children's friends.

Finally, students are more likely to drop out if they have a sibling who dropped out.

Schools. Although student and family characteristics account for most of the variability in dropout rates, about 20 percent can be attributed to four characteristics of schools: (1) the composition of the student body, (2) resources, (3) structural features, and (4) policies and practices.

Research finds that the odds of dropping out are lower in schools

with more advantaged students, but the effects appear to be indirect, through the association with other school characteristics.

Research does not find that school size has a consistent effect on dropout and graduation rates.

Attending a Catholic high school improves the odds of graduating; yet studies have also found that Catholic and other private schools lose as many students as public schools because students attending private schools typically transfer to public schools instead of dropping out.

Relatively few studies found significant effects of school resources on dropout and graduation rates, at least in high school. But there is strong evidence that small classes (15:1) in grades K-3 improve high school graduation rates.

School policies and practices in high school do matter. Students are less likely to drop out if they attend schools with a stronger academic climate, as measured by more students taking academic courses and doing homework. On the other hand, students are more likely to drop out in schools with a poor disciplinary climate, as measured by student disruptions in class or in school.

There does not appear to be a consistent effect of exit exams on dropout rates, although more recent high school exams appear to lower high school completion rates.

Additionally, requiring students to attend school beyond age 16 leads to lower dropout and higher completion rates.

Communities. Communities play a crucial role in adolescent development along with families, schools, and peers. Population characteristics of communities are associated with

dropping out, but not in a straightforward manner: living in a high-poverty neighborhood is not necessarily detrimental to completing high school, but rather living in an affluent neighborhood is beneficial to school success. This suggests that affluent neighborhoods provide more access to community resources and positive role models from affluent neighbors.

► Summary and Implications

As interest in the topic of dropping out has grown, so has the research literature, especially in the last 10 years; yet most research studies focus only on specific aspects of the problem. In contrast, this review of the research—the most comprehensive to date—examines *all* the factors that have been studied over the last 25 years, from individual factors to institutional factors in families, school and communities.

The review yielded valuable insights:

- 1) No single factor can completely account for a student's decision to continue in school until graduation. Just as students themselves report a variety of reasons for quitting school, the research literature also identifies a number of factors that appear to influence the decision.
- 2) The decision to drop out is not simply a result of what happens in school. Clearly students' behavior and performance in school influences their decision to stay or leave, but students' activities and behaviors outside of school—particularly engaging in deviant and criminal behavior—also influences their likelihood of remaining in school.
- 3) Dropping out is more of a process than an event; for many stu-

dents, the process begins in early elementary school. A number of long-term studies that tracked groups of students from preschool or early elementary school through the end of high school were able to identify early indicators that could significantly predict whether students were likely to drop out or finish high school. The two most consistent indicators were early academic performance and academic and social behaviors.

- 4) Contexts matter. The research literature has identified a number of factors within families, schools, and communities that affect whether students are likely to drop out or graduate from high school. They include access to not only fiscal and material resources, but also social resources in the form of supportive relationships in families, schools, and communities.

One implication of this review is that there are a variety of leverage points for addressing the problem of high dropout rates. Intervention in preschool and early elementary school is clearly warranted. Rigorous experimental evaluations of high quality preschool programs and small classes in early elementary school have proven to improve high school graduation rates. Such programs are also cost-effective—they generate two to four dollars in economic benefits for every dollar invested.

But there are other leverage points as well. Even high school is not too late—both targeted programs serving a limited number of high-risk students and comprehensive school reform models have been proven to increase graduation rates and are also cost-effective.

Research Reports and Policy Briefs in Print

1. **THE ECONOMIC LOSSES FROM HIGH SCHOOL DROPOUTS IN CALIFORNIA** (*August 2007*)
2. **THE RETURN ON INVESTMENT FOR IMPROVING CALIFORNIA'S HIGH SCHOOL GRADUATION RATE** (*August 2007*)
3. **DOES STATE POLICY HELP OR HURT THE DROPOUT PROBLEM IN CALIFORNIA?** (*October 2007*)
4. **CAN COMBINING ACADEMIC AND CAREER-TECHNICAL EDUCATION IMPROVE HIGH SCHOOL OUTCOMES IN CALIFORNIA?** (*November 2007*)
5. **STUDENT AND SCHOOL PREDICTORS OF HIGH SCHOOL GRADUATION IN CALIFORNIA** (*December 2007*)
6. **CALIFORNIA SCHOOLS THAT BEAT THE ODDS IN HIGH SCHOOL GRADUATION** (*December 2007*)
7. **ALTERNATIVE PATHWAYS TO HIGH SCHOOL GRADUATION: AN INTERNATIONAL COMPARISON** (*January 2008*)
8. **GIVING A STUDENT VOICE TO CALIFORNIA'S DROPOUT CRISIS** (*March 2008*)
9. **BUILDING SYSTEM CAPACITY FOR IMPROVING HIGH SCHOOL GRADUATION RATES IN CALIFORNIA** (*April 2008*)
10. **IMPROVING CALIFORNIA'S STUDENT DATA SYSTEMS TO ADDRESS THE DROPOUT CRISIS** (*May 2008*)
11. **STRUGGLING TO SUCCEED: WHAT HAPPENED TO SENIORS WHO DID NOT PASS THE CALIFORNIA HIGH SCHOOL EXIT EXAM?** (*June 2008*)
12. **CAN MIDDLE SCHOOL REFORM INCREASE HIGH SCHOOL GRADUATION RATES?** (*June 2008*)
13. **MIDDLE SCHOOL PREDICTORS OF HIGH SCHOOL ACHIEVEMENT IN THREE CALIFORNIA SCHOOL DISTRICTS** (*June 2008*)
14. **WHAT FACTORS PREDICT HIGH SCHOOL GRADUATION IN THE LOS ANGELES UNIFIED SCHOOL DISTRICT?** (*June 2008*)
15. **WHY STUDENTS DROP OUT: A REVIEW OF 25 YEARS OF RESEARCH** (*October 2008*)

All of the above Research Reports and Policy Briefs, as well as Statistical Briefs, are available at www.lmri.ucsb.edu/dropouts

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