Dropout Prevention: Indicators and Effective Practices

Introduction

This paper is intended as a brief and reader friendly introduction to the causes and effects of high school dropout, as well as an outline of evidence-based best practices for lowering the dropout rate. Much research and analysis has been done on this issue in the past 30 years, and various major educational institutions have created meta-analyses (compilations of research and findings from many studies) to determine best practices. This paper will examine and compile five meta-analyses from the following organizations: The Center for Public Education, The National High School Center, The National Center on Secondary Education and Transition, The National Dropout Prevention Center, and the U.S. Department of Education's What Works Clearinghouse. Through this analysis, a common set of the most agreed upon and successful dropout prediction and prevention practices will be listed.

Definitions

Dropout: There is often confusion over the term "dropout." A dropout is a student who leaves school before graduation. Many assume that if a student doesn't drop out, they automatically complete high school. This isn't the case, however. A student might not drop out, but could still be prevented from graduating based on inadequate grades or failure to pass exit exams. Therefore, although some practices might keep students from dropping out (and thus making it more likely that they will graduate), there is no guarantee that they will actually complete high school if they didn't drop out. Those who drop out and obtain a GED at a later time are still considered dropouts.

Completion: A student is considered to have completed high school if they 1) graduate with a diploma or 2) obtain a GED. Both are considered to have completed high school, although a student who obtains a GED is not considered a graduate. The graduating diploma and the GED do not seem to have equal value in terms of employment; GED completers fare significantly worse in terms of employment and wages than graduates.

The Dropout Epidemic

The high school dropout rate has been coined as an "epidemic." Each year, over 500,000 students drop out of high school, a rate of one every 9 seconds per school day. Consequences to the individual students are severe and include: increased risk of unemployment or underemployment (especially as a greater number of jobs require more skills), increased chances of incarceration (75% of federal prisoners are dropouts), earnings \$9000 less in annual income than students who receive a diploma, and life expectancy nearly ten years shorter than graduates. Consequences to society manifest primarily in tax dollars, with high school dropouts contributing about half the tax revenue as graduates. They also tend to utilize more government assistance such as food stamps, housing, and welfare. These problems are likely to be exacerbated by the increased need for skilled labor even in low paying jobs. In the past, it was possible for someone without a high school diploma to make a living wage, but in the technical climate of the 21st century, it is becoming extremely difficult.

Why students drop out

The process of dropping out is rarely a snap decision, but rather a process of cognitive, psychological, behavioral, and social disengagement that can begin as early as elementary school. Usually multiple factors influence a student's decision to drop out. Several large scale survey efforts revealed the most common reasons for dropping out included: Did not like school, was unmotivated/bored, missed too many days, was failing school, could not keep up with schoolwork, could not get along with teachers, became pregnant, thought it easier to get a GED.

Predicting who will drop out

Many studies have shown that students who drop out exhibit various warning signs or have risk factors, many of which can be identified in middle school. Identification and tracking of potential dropouts is the first step in implementing dropout prevention:

1. School Related Factors

Raising academic standards without providing supports: While increased rigor has been associated with increased engagement in school for many students, raising academic expectations and difficulty for already struggling and unsupported students can make completion seem even more impossible.

Negative school climate: Schools in which students do not feel supported or do not feel a sense of belonging tend to produce more dropouts.

School size/class size: Large school and class size is associated with higher dropout risk.

Relationships: Poor relationships with teachers and classmates indicate increased dropout risk.

Frequent use of suspension: Suspension can lead to disconnect from coursework and alienation from school culture, and schools that use suspension often tend to have higher dropout rates.

2. Student Related Factors

Age: Students who are older than their peers tend to have higher rates of dropout.

Gender: Males are more likely to drop out. One of the main reasons for female dropout is pregnancy.

Ethnicity: The dropout rate is higher for African American, Latino, and Native American students.

Academic Success: Poor grades, especially in core subjects, put students at much higher risk of dropping out. Falling behind in course credits is also a factor.

Failure to be promoted to the next grade: Students who are "held back" drop out at a higher rate.

Disengagement from school in various forms: absences, boredom, lack of classroom participation, and behavioral problems are warning signs.

Disabilities: Particularly learning, emotional, or behavioral disabilities put students at greater risk of dropping out.

Pregnancy: A major risk factor for female dropout.

Changes in success: Sharp decline in academic success upon transition from elementary to middle school or middle school to high school is a strong indicator of dropout risk.

Language: Students who speak English as a second language are at higher risk of dropout.

3. Family Related Factors

Income: Students who drop out tend to come from low-income families.

Relocation: Students who move from school to school frequently are at higher risk of dropping out.

Single-Parents: Students with single parents are at higher risk.

Parenting: Non-supportive and permissive parenting have been associated with increased dropout risk.

It should be noted that these factors are often not reliable, and have failed to predict a significant percentage of dropouts in several studies where many of the dropouts exhibited none of the above indicators. They are, however, a good place to start. Ultimately, it may be up to the teacher and the student's parent(s) to make the determination and initiate dropout prevention. The more risk factors, the more at-risk is the student.

Fortunately, factors that fall under the influence of the school are the most predictive of likelihood of dropout and can also be changed, unlike other aspects such as race, gender, or income. The strongest predictors are: Poor attendance, bad grades (especially in English and Math), lack of engagement in academics and school culture, poor parent-education connection, a sharp decline in grades upon transitioning from elementary to middle or from middle to high school, failure to promote in grade level, bad behavior, and negative student attitudes toward school. These alterable factors are more predictive than age, race, gender, or personal circumstances.

Effective Practices

The following is a compilation of the most effective and commonly used dropout prevention measures evidenced so far:

1. Development of a predictive/early warning system and data collection system

- Collect and document dropout and graduation rates.
- Track students over time for academic performance, attendance, grade promotion, and behavioral issues.
- Check data continually, noting patterns or changes that might indicate students are at high dropout risk.
- Identify students who exhibit multiple risk factors (above section), especially as they transition from middle to high school.
- Develop methods of assessing individual student engagement, sense of belonging, and attitude toward the school.
- Collect data on the effectiveness of the intervention strategies used.

2. Creating a caring and supportive environment

Consistently one of the most critical and evidenced intervention strategies, this has two components:

Mentoring

- Assign committed adult advocates to at risk students, keeping caseloads low.
- Establish a regular meet time.
- Research and implement effective mentoring practices.
- Provide training for the advocates to handle obstacles students might encounter.
- Extend the duties of homeroom teachers or advisors to help fill this role.
- Help ease student transitions into middle school and high school.

Academic support

- Provide intensive individual or group tutoring in specific subject areas such as math, reading, or writing, and in more general skills such as test taking, problem solving, or study skills.
- Provide extra study time and ability to regain lost credits through summer programs, after school programs, or Saturday school.

3. Individualizing instruction

- Understand that at risk students often struggle to learn in a traditional classroom.
- Take diverse learning needs into account, including learning styles and intellectual strengths; many students who drop out do not learn well in a traditional classroom setting.
- Use active and "experimental" learning strategies such as: hands-on learning, projects, journaling, peer tutoring, cooperative learning, and inquiry.

4. Engaging students in school and addressing their attitudes

- Address reasons why students do not "like" school.
- Create a sense of belonging.
- Encourage participation in clubs, sports, music, or other extracurricular activities.
- Avoid alienating practices such as suspension when possible.
- Understand student motivation for learning and participation: What would motivate a student to stay in school? What would motivate them to drop out?

5. Personalizing the learning environment

- Keep class sizes as small as possible.
- Establish team teaching and small learning communities.
- Encourage positive student-student and teacher-student relationships.
- Recognize student accomplishments.

6. Creating a strong balance between relevance and rigor

• Understand that increasing academic rigor for the purposes of preparing students for an increased number of demanding occupations can actually lower dropout rate.

- Understand the importance of Career and Technical Education in eliminating the separation between academic skills and vocational skills.
- Keep up with academic standards and industry needs.
- Combine academic content with real-world career and skill-based themes.
- Provide academic support, including catch up time and tutoring, so that increased academic demand does not result in discouragement.
- Connect academia to the real world through career exploration, career days, college information, job shadows, volunteer work, and internships.
- Inform students of the future relevance of their education, making sure that it actually is relevant first.

7. Fostering family involvement

- Understand and let parents know that family involvement is the best predictor of a student's general success in school.
- Reach out to families in a more intensive manner, allowing more involvement.
- Create an understanding of partnership towards a common goal.

8. Utilizing effective teachers

- Inform teachers that evidence consistently shows that a teacher is a major variable in a student's drop out decision and that highly effective teachers can greatly increase academic success and even close the achievement gap of economically disadvantaged students.
- Give at-risk students access to the highest quality teachers. Often, at-risk schools tend to have teachers who are less experienced and qualified than teachers in successful schools.
- Teachers need to feel supported and have resources to increase knowledge and skill.
- Provide long-term in-depth professional development, including working with different student populations.

9. Improving Early Childhood Education

- Understand that many future dropouts can be identified as early as elementary school.
- Intervene early for students who are struggling with core academic skills, especially in reading, writing, and mathematics.
- Begin a trend of positive school experiences as soon as students enter school.
- Know that evidence suggests that children ages 0-5 can have advanced brain development through academic enrichment.
- Though outside the control of schools, schools can encourage parents to begin purposeful education before their children enter school

10. Offering alternative schooling

- Alternative education provides an option to complete high school for students who do not succeed in a traditional school setting.
- Research and development should be implemented to create the most successful alternative schooling possible.

Although some of the above programs and strategies may already be implemented at many schools, research suggests that intensity is key. Low intensity, infrequent interventions, such as sporadic tutoring and counseling, do not show any indication of lowering dropout rates. The most important thing to note is that the idea that schools have no power in preventing dropping out is a myth. Although extensive research and testing still need to be done to determine with greater evidence the efficacy of many of the above methodologies, they are the most promising so far.

Model programs

A brief description of two programs which have the highest rates of success (excerpted from the National High School Center's Approaches to Dropout Prevention: Heeding Early Warning Signs with Appropriate Interventions document):

Achievement for Latinos through Academic Success provides student-level supports and also builds bridges between homes and schools. The program employs counselors who provide a set of coordinated supports to students and parents, monitor students and report to parents about attendance and truancy on an as-needed daily basis, and express a personal interest in students through a variety of ways, including positive reinforcements and group bonding activities (Jerald, 2007). The counselors follow up with teachers to keep them informed about how students and parents decide to address problems, and counselors provide parents with direct instruction and modeling on how to participate in their child's schooling and manage adolescent behavior (Jerald, 2007).

The research-based *Check & Connect* intervention provides trained monitors to small groups of students. The monitors closely follow tardiness, absenteeism, behavioral referrals, and academic performance and meet with individual students each week, staying in touch with students' family members about progress. The personalized attention often involves arranging for transportation and community services. *Check & Connect* tracks attendance from period to period and is so informed about students' needs that program leaders know who has trouble waking up on time and who needs help negotiating alternatives to out-of-school suspensions (Jerald, 2007). Intensive interventions such as *Check and Connect* can cut dropouts by as much as half, but they are even more effective when implemented with schoolwide reforms (Jerald, 2007). Interventions that have the capacity to be oriented around individual student needs, and that work in tandem with schoolwide interventions able to adjust around grade-level needs, hold promise as an effective combination.

The *Coca-Cola Valued Youth Program* (VYP) was evaluated using a quasi-experimental design showing one percent dropout compared to 12 percent dropout in comparison groups. The key to this program is intensive tutoring that focuses on academic achievement as well as engaging students, and includes student tutors and cross-age tutoring groups (Fashola & Slavin, 1998; Intercultural Development Research Association, 2004). As early as first grade, Philadelphia mandates 120 hours of instructional intervention for any student falling behind— which basically requires schools to develop individualized education plans for struggling students. Additionally, in many of Philadelphia's middle schools, students two years older than their fellow students receive instruction in core academic subjects in self-contained classrooms with only 15 students, as well as more individualized social services in after-school and extended-day learning settings (Jerald, 2007).

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