

Establishing Early Warning Systems

National High School Center

Nearly one-third of all high school students leave the public school system before graduating (Swanson, 2004), and the problem is particularly severe among students of color and students with disabilities (Greene & Winters, 2005). One important element of dropout prevention efforts is the early identification of students at highest risk for dropping out and the targeting of resources to keep them in school. An early warning system that uses indicators based on readily accessible data can predict, during students' first year in high school, whether the students are on the right path toward eventual graduation.

Research is clear that ninth grade is a "make or break" year. More students fail ninth grade than any other grade in high school, and a disproportionate number of students who are held back in ninth grade subsequently drop out (Herlihy, 2007). The most powerful predictors of whether a student will complete high school include course performance and attendance during the first year of high school (Allensworth & Easton, 2005; 2007). Therefore, systematic collection of student attendance and course performance data can be used to develop an effective early warning system that can also be tailored to local contexts.

There are several ways to use course performance information to gauge students' likelihood of graduating or dropping out. One of the most powerful is to calculate a version of the "on-track indicator" that has been customized to fit local contexts. The Consortium on Chicago School Research introduced the "on-track indicator" in 2005 by combining two highly predictive ninth-grade risk factors: course credits earned and course grades. First-year high school students in the Chicago Public Schools are classified as "on track" if they earn (a) at least five full-year course credits and (b) no more than one F in one semester in a core course during the first year of high school. On-track students are more than 3.5 times more likely than students who are off track to graduate from high school in 4 years (Allensworth & Easton, 2005). The on-track indicator reflects students' ninth grade academic performance. Additionally, attendance during the first year of high school is also directly related to high school completion rates. Even moderate levels of absences (1-2 weeks in the first semester of high school) are associated with lower rates of high school graduation (Allensworth & Easton, 2007). The biggest risk factor for failing ninth grade is the number of absences during the first 30 days of high school, and failing ninth grade is one of the most important predictors of dropping out (Neild & Balfanz, 2006).

Action Principles

For State

1. Use and monitor aggregate on-track rates to identify high schools and districts with high proportions of students at risk of dropping out in order to prioritize allocation of resources.
2. Create state-level data systems that incorporate on-track indicators and that allow incorporation of local data.
3. Provide professional development for district and school staff on how to conduct their own data analysis.
4. Identify context-specific early warning signs and use the data to the fullest extent.

For District

1. Create data collection systems that allow schools to easily collect key early warning data.
2. Use data to identify students at each school who are at the highest risk of dropping out.
3. Support continuous data analysis at the school level, across schools, and district-wide.
4. Provide data collection and analysis training to school level staff.
5. Target district funding and resources to support schools in identifying students early, intervention strategies for at-risk students, and collaboration among high schools across the district or region.

6. Develop continuous improvement strategies, so that indicators can be refined to improve their predictive power in the local context.
7. Include the “on-track” indicator or a local adaptation of it as an accountability measure for the schools in the district (e.g., as done in Chicago Public Schools, see Allensworth & Easton, 2005).

For School

1. Develop or ascertain an early warning system based on evidence-based indicators (Heppen & Therriault, 2008; Heppen, O’Cummings, & Therriault, 2008).
2. Assign staff to create a plan to monitor indicators of risk over the course of the school year.
3. Identify and evaluate intervention strategies that support students most at risk for dropping out.
4. Use the data to tell the story and make the case for intervention programs/practices. For example, use the “on-track” indicator data to apply for additional local or state resources, to communicate needs, and identify common needs among at-risk students in the school.
5. Refine the early warning system indicators to reflect local context (see Jerald, 2006).

References and Resources

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