FutureEd

Early Warning Systems

This is one of a series of evidence-based strategies to help states and school districts invest Covid relief aid effectively. Read all 18 strategies in FutureEd's Covid Relief Playbook.

As money pours in from the American Rescue Plan to help students make up for lost learning time, schools and districts must find reliable ways to track which students need extra support. Researchers in Chicago and Baltimore have identified three signs that students are headed off track for graduation. These warning signs, which can emerge as early as middle school, are chronic absenteeism, suspensions for misconduct, and failure rates in key courses. Typically, school data teams review trends in student records to identify individuals who are becoming disengaged and falling behind in the credits needed for graduation. Educators then intervene and monitor those students' progress. Research shows that setting up digital early warning systems to track these indicators can improve students' attendance and achievement.

THE RESEARCH

Through the Regional Education Laboratory Midwest, the American Institutes for Research randomly assigned some middle schools in Pennsylvania to implement an early warning system during the 2014-15 school year. After one year of implementation, schools with the system had a four percentage-point drop in the number of chronically absent students and a five percentage-point drop in course failures, compared to schools without the system.

Ninth grade seems to be a critical year: The University of Chicago Consortium on Chicago School Research worked with Chicago Public Schools to help keep ninth-graders on track for graduation. They began with data

reports on attendance, behavior, and grades helping high school administrators and teachers identify at-risk students. Schools developed their own responses to help students flagged by the system, included mentoring, summer institutes and reaching out to families when students were absent.

Between 2007 and 2014, the percentage of ninth-graders on track for graduation rose from 57 percent to 82 percent across the school district. The researchers took a deeper look at 20 high schools to see if the gains at ninth grade were sustained. They found that the positive impact of the schools' responses persisted through high school and led to higher graduation rates, with increases ranging from eight to 20 percentage points depending on the school.

WHAT TO CONSIDER

Early warning systems may be particularly helpful in supporting students with disabilities and those at risk of dropping out. School districts can spend Covid relief dollars to set up and manage data systems and train staff members to interpret data. To avoid implementation challenges, schools and districts should dedicate staff to the project who have experience using data and are unlikely to leave their positions. If no staff is available, schools and districts should partner with a local university or recruit community volunteers with relevant experience. Each school should create an early warning team to review the data at least every two weeks and recommend action to support students.

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Continued

RESEARCH

- **Getting Students on Track for Graduation: Impacts of the Early Warning Intervention and Monitoring System After One Year: MODERATE**

- **Preventable Failure: Improvements in Long-Term Outcomes When High Schools Focused on Ninth Grade: PROMISING**

RESOURCES

- **Early Warning System: How to Prevent Reading Disabilities**

- **Dropout Prevention: Early Warning Indicator Systems**

- **Early Warning Intervention and Monitoring System Seven Step Process**

- **A Practitioner's Guide to Implementing Early Warning Systems**

- **Addressing Early Warning Indicators**