



Saving Students

New tool from DPI helps schools identify students at risk of dropping out

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As State Superintendent Tony Evers put forth in his comprehensive education initiative, Agenda 2017, “Every child must graduate ready for further education and the workforce. We must align our efforts so all our students are prepared to succeed in college or a career.”

Implicit in that message is that students need to progress through their K-12 education developing the knowledge, skills, and attitudes necessary to successfully negotiate whatever path they choose after high school. Further implicit is the fact that students must graduate from high school, and that is not always the case.

The latest available data shows that about 5,300 students dropped

out during the 2011-12 school year. In order to help schools identify potential dropouts and intervene to help them get back on track, the Wisconsin Department of Public Instruction (DPI) has developed a system to assist schools in identifying students at risk of not graduating.

The Dropout Early Warning System (DEWS), available through the state’s secure WISEdash tool, helps schools find these children and

ensure they can be helped earlier and more effectively than ever before.

The idea of an early warning system is not new. Several large districts, including Chicago, Philadelphia, and Milwaukee, have developed their own systems. Each was initiated at a different grade level, and each used different criteria to identify students. DEWS is unique in that it identifies students earlier, uses criteria reported at the state level, and is available to districts statewide.

In creating DEWS, the DPI subscribed to the principles vital to any effective early warning system. The system must be transparent, scalable, and accurate. Further, the

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Number of Wisconsin Public School Students Who Have Dropped Out

(2008-09 thru 2011-12)

2011-12	5,361
2010-11	5,794
2009-10	6,434
2008-09	6,678

Source: Department of Public Instruction

system needs to identify at-risk students early in their education, and be reproducible.

Wisconsin's Dropout Early Warning System uses clearly defined criteria to measure risk for 200,000 middle-level students in 1,000 schools. The process can be repeated in future years and provides the same results given the same data.

In order to be as accurate as possible, DEWS uses a predictive statistical model to calculate student scores using a combination of demographic and student outcome measures. Depending on the data available, the factors included in the model will change, as will their weight in predicting the outcome.

The system is flexible, so it can expand as new data comes online, and as more longitudinal data is available on student cohorts. The variables currently used are: attendance, disciplinary events, assessment scores, and student mobility.

Every student's risk of dropping out is calculated using these variables, and DEWS provides a score from 0-100. The score represents the rate at which students similar to the current student graduated. For example, a score of 75 means that 75 percent of prior students with similar characteristics graduated on time.

Currently, DEWS scores are available in WISEdash for current seventh-, eighth-, and ninth-grade students.

Students are classified as "at-risk" if their score crosses a threshold set by DPI. These thresholds can be modified as the model becomes more fully developed and more student graduation data is

realized. In the earlier example of a student with a DEWS score of 75, this student's risk level would be classified as "Moderate."

DEWS is not meant to be the only source of information used to identify students at risk of not graduating. Rather, it is designed to be an educational "check engine" light of sorts, raising schools' awareness of potential student issues. The school can then use their local knowledge — e.g., academic status, behavior data, teacher input, program context, parent input, and any other special circumstances — to determine the student's real-time status and design appropriate interventions as necessary. It is important to remember that DEWS is not to be used alone, but must be combined with

other local data to give schools the most complete picture.

Several resources are available through DPI to assist districts in using DEWS. The first stop for anyone wanting more information should be the DEWS website, http://wise.dpi.wi.gov/wise_dashdews. Here you will find some basic information and links to other useful resources; including a DEWS Fact Sheet and checklist. The most comprehensive resource on accessing, interpreting, and using the DEWS scores is found in the DEWS Action Guide, wise.dpi.wi.gov/files/wise/pdf/wi-dews-actionguide2013.pdf. ■

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TIPS for Using an Early Warning System

As schools use the Department of Public Instruction's new **Dropout Early Warning System** (DEWS) to help identify at-risk students, there are a few key concepts to keep in mind when using an early warning system.

- **Focus** on effective intervention, not just identification. Finding these students is not the total desired outcome. Finding them and intervening to diminish the barriers to graduation is the goal.
- **Recognize** and build on student strengths. DEWS only uses four variables in its model. Students are much more complex than can be illustrated in four variables.
- **Match** resources to student needs, but practice intervention discipline. Intervention overload should be avoided, and the best way to do that is to evaluate the effectiveness of interventions.
- **Remember**, teachers and administrators can get started with just the local data currently available in their schools.

View and use the Dropout Early Warning System at:

http://wise.dpi.wi.gov/wise_dashdews