Center on Innovations in Learning

Wise Ways®

Core Function: High School/ Leadership and Decision Making

Effective Practice: Make decisions to assist students based on data

**Indicator:** The Leadership Team implements, monitors, and analyze results from an early warning system at the school level using indicators (e.g., attendance, academic, behavior monitoring) to identify students at risk for dropping out of high school. (5151)

**Explanation:** The evidence review suggests that Leadership Teams in high performing high schools monitor and analyze results from a flexibly responsive early warning system that identifies those students most at risk for academic and social struggle. Effective early warning systems track indicators to inform staff about student academic and social successes as well as red flagging those students in jeopardy of academic and/or social failures. Key indicators allow the school to track the progress or lack of advancements of all students and in response offer specific and targeted interventions to struggling students. In doing so, dropout rates decrease and on time graduation rates increase.

**Questions:** What process will the school and Leadership Team use to monitor and analyze results from a flexibly responsive early warning system that identifies those students most at risk for academic and social struggle? How will the school collect the academic, dropout, attendance, tardiness, and behavior data of their students? When and how frequently will the Leadership Team assemble to review this collected data? What process will be used to align interventions to the red flagged students? What process will be used to monitor the interventions for success?

The dropout crisis in America, while improving slightly over time, is still at an unthinkable level. Approximately one quarter of all high school students and 40 percent of minority students fail to graduate on time, if at all. These figures are even higher in disadvantaged schools and communities in both rural and urban areas (Bruce, et al., 2011). This means that approximately 1.5 million students are dropping out of high school every year (Kennelly & Monrad, 2007). However, researchers have found that fewer than five percent of students drop out during their first year of high school, giving high schools an enormous opportunity to intervene from the start of freshman year (Jerald, 2006).

There are many family background and social indicators that have been associated with higher dropout rates; students who are male, low-income, or a racial minority, or those who have experienced homelessness, abuse, neglect, or high mobility, are all more likely to drop out of high school (Jerald, 2006; Kennelly & Monrad, 2007). Yet there is not much that a school team can do to mitigate these factors. Fortunately, it has been shown that academic indicators are even better predictors of a student dropping out than his or her background or history. Educators can act on the academic data that they already have access to in order to balance out the effects of factors they cannot control (Pinkus, 2008).

The research community has converged around three categories of academic data, which have been shown to be the most powerful predictors of whether or not a student will drop out in the future. These data points have become known as the "ABC's" – attendance or absenteeism, behavior problems, and course performance or failure (Mac Iver & Mac Iver, 2009; Bruce, et al., 2011). The ABC's present an opportunity for schools to monitor student progress early and intervene to help students get on track to graduation. Formalized methods of tracking this data and providing interventions are known as early warning systems.

*What is an early warning system?*

According to Bruce, et al. (2011), an Early Warning Indicator and Intervention System (EWS) is a collaborative process of data usage that allows school teams and communities to identify students at risk of dropping out, assign appropriate and timely interventions, and monitor students to ensure that the interventions are effective. The data used in an EWS is typically stored electronically, to allow for analysis and manipulation by different members of the school staff or leadership team (Jerald, 2006). While school districts may be better positioned to develop a data warehouse or database, individual schools may find that simpler displays of the data are suitable for their needs.

Neither piece of an EWS – the data or the interventions – can exist in isolation, as it is the careful study of their connections that has the most impact on students. This work must be done in "real time," or as close to it as possible, in order to reach at-risk students before it is too late. Importantly, there is no "one size fits all" formula for how schools should construct their systems of data, collaboration, and intervention – it is actually critical for team members to have input on how the processes will work to fit the needs of their own environments.

*What are some recommended practices in using an early warning system?*

The implementation of an EWS often begins prior to the start of the school year, with time spent gaining staff buy-in and enriching their understanding through professional development. This early collaboration allows leadership teams to parse through processes, roles, responsibilities, and questions before the school year begins (Herzog, et al., 2012). This may also be a time for schools to analyze historical data of past graduating classes or the incoming ninth graders, if the data is available (Pinkus, 2008).

During the school year, the leadership needs to meet frequently, at least twice a month, to review the data on students and their progress (Mac Iver & Mac Iver, 2009). The data must be shared with classroom teachers as well, but as Bruce, et al. (2011) note, it is important to understand that too much data can be overwhelming. Some schools and districts have found that organizing the data through specialized lists, data dashboards, or color coding can help teams sort large datasets of at-risk students to quickly hone in on individual students' barriers or struggles. Regardless of the systems or codes used, checks should be in place to ensure that the data is consistently accurate and current. As data is updated and circumstances change, Herzog, et al. (2012) recommend that the focus list of students being targeted should be similarly dynamic and open to change as new needs arise or progress is made.

While the ABC's are a general guideline for the type of data that should be tracked for students, there are additional data points that are particularly telling of student struggles (Bruce, et al., 2011; Heppen & Therriault, 2009). These include:

- Failing core subjects in middle school
- Being absent for 20 days (10 percent) or more of a school year
- Having more than two behavioral infractions
- Earning a grade point average below 2.0
- Failing one or more courses in ninth grade

One addition indicator that may get overlooked is when a student is unable to read at grade level after third grade. As students get older and struggle with reading, they are unable to access the course content found in textbooks and grade-level material. They often see misbehaving or missing school as options preferable to being unable to compete academically with their peers (Pinkus, 2008).

To summarize all of these data points, some schools and districts create an "on-track indicator," which reflects a few of the above indicators. Heppen and Theirrault (2009) note that a high school freshman is considered "off-track" if he or she has not accumulated the number of credits needed for promotion to tenth grade or has failed one or more courses in ninth grade. Identifying students early as "on-track" or "off-track" for graduation can create a triage system for early interventions.

*How can leadership teams intervene for students identified by an early warning system?*

An EWS presumes that there is also an existing system of tiered interventions at the school, in which the first tier has established a strong foundation for all students. Pinkus (2008) calls activities in this tier, such as attendance and behavior policies or ninth grade transition activities, "preventive strategies." The second tier,

"group strategies," should focus on the 10 to 20 percent of students who may need additional supports beyond the school wide approaches. The final tier of "individual strategies" are for the five to 10 percent of students whose needs are so extensive that they need one on one supports, such as tutoring or counseling (Mac Iver & Mac Iver, 2009; Pinkus, 2008). If the number of students identified for second and third tier interventions exceeds 30 percent, then the first tier strategies must be reexamined to provide more baseline supports for all students (Mac Iver & Mac Iver, 2009). These tiers may have different names – Nield, et al. (2007) refer to them as whole-school preventive measures, targeted interventions, and intensive interventions, respectively – although much of the research agrees on their purposes and distribution.

Mac Iver and Mac Iver (2009) recommend compiling a "second team of adults," made up of partner organizations, community members, and social service professionals, to provide services to targeted students. Teams are encouraged to leverage all available resources, such as community partnerships, to surround students with support (Bruce, et al., 2011). The authors recommend that some these adults be "near peers," who are close in age to the students and can be positive role models for them. It is important to note that when schools use and share data, they must adhere to the privacy rights guaranteed to students and families by the Family Educational Rights and Privacy Act (FERPA) (Bruce, et al., 2011). While community members, volunteers, and others may provide critical support and interventions, they may not be privy to viewing the actual data pertaining to the student. However, their support, with the leadership team's data-driven guidance, can help a school's at-risk students to remain on track to graduate.

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