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Early Warning Intervention and Monitoring System District Implementation Guide

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Acknowledgments

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💬 Introduction to Early Warning Intervention and Monitoring Systems

An early warning intervention and monitoring system (EWIMS) is an evidence-based process for identifying, supporting, and monitoring students who show signs they may not graduate from high school or meet other key educational milestones (Faria et al., 2017). This process provides a data-driven decision-making approach, through using a critical component called a data-inquiry cycle to systematically identify students who are showing signs of being off track in school, match these students with appropriate interventions, and monitor their progress within those interventions. This cycle of data analysis and action is embedded within a continuous improvement process and is described through the following seven steps of the EWIMS process:

1. Establish roles and responsibilities.

2. Use an early warning data tool.

3. Review early warning data.

4. Interpret early warning data.

5. Assign and provide interventions.

6. Monitor students and interventions.

7. Evaluate and refine the EWIMS process.

It is important to emphasize that the EWIMS process does not identify students based on their demographics (e.g., race/ethnicity, gender, status as an English learner) or other factors outside of student and school control (e.g., students with disabilities, socioeconomic status, member of a single-parent household). Rather, EWIMS identifies students based on data on one or more research-based early warning indicators related to changeable behaviors and conditions, such as attendance rate or absenteeism, behavior concerns, course performance, or students' experiences with connectedness as part of the culture and climate within a school.

EWIMS: An Essential Component of a Student Success System

Student success systems are unified systems that build from the structure, process, and contextual factors of multiple research-based frameworks, including early warning systems and early warning indicators and interventions, on-track, and multi-tiered system of supports (MTSS). Student success systems integrate, extend, and increase the capacity of existing student support system efforts.

High-quality student success systems are transformative. They are inclusive; fueled by strong, positive relationships; guided by improvement science; and shaped by student-centered

mindsets. They enable school teams to integrate what is known from data about well-being, belonging, and connectedness with real-time, research-based predictive indicators of academic success. The foundation of data integration is combined with teacher, school staff, student, and family and caregiver insights to drive supportive actions and improvements, which propel student success. Districts that have support from all their schools for using a proactive approach to create student success systems have opportunities to achieve efficiency and effectiveness and, in the end, can better serve those students and reduce burden on staff.

Student success systems combine four essential elements (i.e., supportive community relationships; holistic real-time actionable data; an adaptive analysis, response, and improvement system; and a shared set of student-centered mindsets) so that secondary schools, in an inclusive way, are empowered to graduate all students on a pathway to postsecondary success. Schools and districts are likely already implementing aspects of student success systems; yet there is room to expand and improve. For example, most schools are using attendance, behavior, and course performance data to identify students who may benefit from additional supports, but the use of school climate data or student perception data is not as widespread.

EWIMS can be an integral part of implementing a student success system. EWIMS was originally developed to respond to the need for a process of creating action and continuous improvement using the valuable data identified through early warning systems. The research on early warning indicators established which data were most important to use in making decisions but did not indicate how to create meaningful action using those data. Following more than a decade of experience in implementing EWIMS and other student support systems, the GRAD Partnership for Student Success developed a definition and framework (n.d.) for a new approach to ensuring student success—the student success system. EWIMS aligns with the overarching goals of the student success system, and the activities of the EWIMS process can be seen in the core components of supportive community relationships; holistic real-time actionable data; an adaptive analysis, response, and improvement system; and a shared set of student-centered mindsets. The new framework represented by these core components also presents an opportunity to ensure EWIMS implementation is fully reflective of the student success system.

Using the EWIMS District Implementation Guide

The purpose of this district implementation guide is to provide district leaders and teams with a resource to help them integrate EWIMS into existing district priorities and support schools on their EWIMS implementation journey. The guide begins by setting the context of EWIMS and student success systems and the research that supports them. The Getting Started With EWIMS section prepares district leaders to implement EWIMS and the necessary district structures and actions, as

well as the supports for school implementation. The guide then follows with a brief introduction to each of the seven steps.

💬 Making the Case for EWIMS

It is extremely rare for a student to suddenly decide they do not want to graduate high school. It is far more likely that a student shows signs of disengagement long before dropping out. Research has found there are specific data points that are predictive of students moving in the direction of, or showing signs of risk for, dropping out far ahead of time. Research has identified early warning indicators that predict this risk, such as a decreased interest in school and a reduction in attendance across time (Balfanz, 2009). Allensworth et al. (2014) found that middle grade attendance and grade point average were the best indicators for identifying students in danger of failing ninth grade, earning low grades in high school, and not remaining on track in high school. Using research-based indicators as a starting point for actionable data, EWIMS creates a structure to examine student data, engage students, parents and caregivers, teachers, and the school community to understand and respond to student needs and sets out a process to turn data into action that responds to those needs and monitor how the system is working.

Research Evidence for EWIMS

The What Works Clearinghouse's *Preventing Dropout in Secondary Schools* practice guide (Rumberger et al., 2017) recommends monitoring the progress of all students and proactively intervening when students show early signs of risk because of attendance or behavioral or academic problems. The EWIMS process provides a systematic and schoolwide approach for educators to implement this practice. Through EWIMS, educators identify students who are showing symptoms of risk, support students by assigning interventions, and monitor their progress in interventions.

A 2017 randomized controlled trial demonstrated strong evidence that the EWIMS process could improve student outcomes by helping students get back on track for graduation in Grades 9 and 10 (Faria et al., 2017). In the study, 73 high schools were randomly assigned to implement EWIMS during the 2014–15 school year. After 1 year of implementation, schools that implemented EWIMS reduced the percentages of students with chronic absences and course failures in experimental schools compared with schools that did not implement EWIMS (control schools). These results are encouraging because chronic absence and course failure are two key early warning indicators that students are in danger of not graduating on time. The study provided rigorous evidence that using a comprehensive early warning system approach can reduce the percentage of students displaying key indicators of risk (Faria et al., 2017). Mac Iver et al. (2019) conducted a similar randomized control trial with 41 schools across 2 years and

found that ninth grade students in schools using an early warning indicator model were significantly less likely than control school students to be chronically absent.

Evidence Base for Student Success Systems

Student success systems create a cohesive system built in large part on the understanding of early warning systems and MTSS. At the same time as the research base on early warning indicators was being developed, another framework (MTSS) to identify and respond to student needs was spreading and deepening implementation in elementary schools. Although MTSS and early warning systems were developed in response to different needs and meant to be implemented at different grade levels, they are highly aligned and consistent with each other. Separately, these frameworks support groups of students in specific grades and schools. Adapting district practices to create a student success system allows these frameworks to work together as part of a continuous support from kindergarten (and sometimes prekindergarten) through high school graduation.

Student success systems developed through research on existing student support systems, as well as from the lessons learned during implementation, and by considering what is needed to move systems of student support and success into the future. Recent research focusing on the importance of relationships and mindsets within schools is what pivots student success systems toward the future. Supportive relationships with and among adults and students provide the foundation for student and school success. Studies show that students who have high-quality relationships with their teachers are more likely to stay in school (Center for Promise, 2015), demonstrate high social-emotional competencies (Syvertsen et al., 2023), and be more academically motivated (Scales et al., 2022). Similarly, these relationships are important for educators. Individuals who enter the teaching profession often consider the connection with young people as a core value (Scales, 2013). A positive school culture may also affect teachers' emotional health and desire to remain in the profession (Grayson & Alvarez, 2008).

However, not all relationships are created equal. As Scales et al. (2022) reported, students experience better outcomes when they are given agency in relationships at school and feel as though they belong. The Search Institute's Developmental Relationships Framework describes the elements of a strong relationship between students and adults—express care, challenge growth, share power, provide support, and expand possibilities (Search Institute, 2023). Despite the importance of these relational elements, less than half of students feel they have shared power. In a recent study, as few as 47% of students shared that they rarely or only sometimes are given the opportunity for sharing power in relationships with adults (Chamberlain et al., 2020; Scales et al., 2022).

Getting Started With EWIMS at the District Level

District leadership plays a critical role in planning, developing, and guiding implementation of cohesive and continuous student success systems and EWIMS. District leaders set the direction and develop structures for implementation and help to create the environment needed for school-level implementation. Although most EWIMS activities take place within schools, district leaders make a key difference in success for schools and the system. A district team is uniquely positioned to listen, coordinate, and identify and reduce barriers at the system level.

Effective long-term EWIMS implementation and sustainability in schools requires focused and intentional district-level efforts, including establishing a shared districtwide vision; empowering school teams; aligning policies, practices, and resources; and providing the efficient data systems and protocols.

Establishing a Shared Vision and Language

Successfully implementing EWIMS (or any approach to a student success system) requires a shared vision for implementation that serves as a foundation to guide work across the district. The district's vision sets the direction the work will go and is the basis for consistent language shared by schools, connecting the nuances in implementation from building to building. The district helps to ensure school leaders and teachers understand and are able to articulate the purpose of EWIMS and how it supports achieving goals for students and that they are able to discuss progress. By signaling the priority of having a student success system, district leaders can encourage school leaders and school leadership teams to create space for the work and to focus time, effort, and resources on building a student success system.

District leadership is also able to set the tone and articulate the work, connecting language (such as using asset-based language) to existing practices and clarifying alignment. With an established tone and vision for student success systems, schools can build shared mindsets on the importance of being proactive to student needs and adopting an asset-based approach.

District Sponsorship and Empowered Schools

A shared vision and language create conditions for schools to move toward common goals and expectations. Districts setting the vision and language includes districts ensuring schools have the time, space, resources, and agency to lead the work in their buildings. Through clear and consistent communication, the district reinforces the importance of addressing student needs, encourages the use of shared language, and creates the opportunity and expectation for schools to lead in their contexts.

The district furthers EWIMS implementation by identifying someone in leadership to sponsor or champion EWIMS. Ideally, this individual or group should have decision-making authority within the district, be invested in EWIMS efforts, and be able to keep schools accountable for EWIMS progress. Through district sponsorship the district contributes to "living" the shared vision for EWIMS by providing systemic investment and a representative who can advocate for school needs.

Although a district sponsor sets expectations and models EWIMS at the district level, schools lead their own implementation. Schools should be empowered by their sponsor (and by association, the district) to lead EWIMS initiatives on their own and tailor their efforts to the needs of their local contexts. Districts should model the use of data to inform their approach by instituting pulse checks of overall climate across the district and how school leaders and staff perceive and experience district support. In addition, districts can reinforce a focus on student voice by including students in decision making (i.e., including student positions on the school board).

Policy and Practice Review and Alignment

As EWIMS is planned and implemented, the district has a responsibility to review alignment between the direction of EWIMS and the district's current policies and practices. The district can then identify and remove barriers to implementation, create structures for growth, and align practices. The district considers documents and routines that are in place as they relate to the core components of the student success systems (supportive community relationships; holistic real-time actionable data; an adaptive analysis, response, and improvement system; and a shared set of student-centered mindsets). The district looks at the relationship between graduation plans and policies, graduation and career counseling, and career and technical education for how they will interact with identifying and supporting students through EWIMS. During this review, the district considers the alignment of different response systems (e.g., response to intervention, MTSS, positive behavioral interventions and supports) across schools, which practices should be consistent, and which practices can be customized to the schools.

Existing district policies and plans can facilitate or hinder EWIMS practices. EWIMS can also provide a leverage point for improving existing practices, such as alignment with school improvement planning. Once the district has reviewed current plans and policies and has revised them to align with the steps of the EWIMS process, embedding those same beneficial practices can create greater efficiency and effectiveness.

Cataloging Existing Interventions and Data

Districts help schools identify the full range of supports and interventions available for students by creating an intervention catalog. At the district level, the intervention catalog creates an inventory of the intervention programs and supports the district provides to all schools or groups of schools. This

comprehensive inventory helps the district and schools better understand the services being provided across the district and allows the district team to support schools with their implementation. The interventions in the catalog will interact with the **adaptive analysis, response, and improvement system** and should be framed to support **a shared set of student-centered mindsets**.

Each school then develops its own intervention catalog that builds from what is available from the district to develop a comprehensive understanding of the school's own supports for students. Districts further support schools by coordinating across schools and reduce the burden of gathering information on each intervention provided across the district.

> **District intervention catalogs help district leaders to**
> - identify available interventions aligned with specific early warning indicators and student agency, belonging, and connectedness;
> - examine the alignment of interventions and supports across tiers of support and grade-level bands; and
> - identify gaps in district-provided programs and help schools fill those gaps.

Data Use and Management

To be useful, data need to be actionable, connecting to **holistic real-time actionable data**. Districts catalog the data systems that are being used and the types of data that are already being collected and assessed across the district as part of **an adaptive analysis, response, and improvement system**. Doing so can help schools understand the data that are available for analysis and highlight gaps in data that may be helpful in student success systems. Individuals or teams may need access to systems they have not had in the past, and data use, rights, and restrictions can impact how teams interact with district data systems. Based on research, when school teams have ready access to the following three types of data, they are most able to take informed actions:

- Academic and well-being indicator data (i.e., attendance, course performance, and student experience data) that reliably signal that students may need additional supports or different experiences for school success and educational attainment

- Data that help school teams understand the most effective level (i.e., school, grade, classroom, small group, individual) to respond to the indicator data

- Insights from the people who know your students the best: fellow teachers and school staff, parents and caregivers, and students themselves

The district also uses available data to help determine early warning indicators and thresholds for risk. Behavior is one area for which additional definition is often needed (see the Appendix for more information), and districts may want to define whole-child indicators, such as student agency, so that there is consistency across the district and to help schools focus on appropriate measures.

Professional Learning and Training

For many schools, establishing a formal EWIMS system and process will be new or require new thinking related to existing systems of support. School leaders and teachers may need professional learning opportunities (e.g., training, coaching) to develop capacity, achieve consistent understanding of the purpose and expectations, and ensure everyone involved is prepared to implement. The district provides opportunities for professional learning and training that focuses on the purpose and steps of implementing EWIMS and may include developing technical knowledge and skills related to **holistic real time actionable data** and **an adaptive analysis, response, and improvement system**. The goal of the professional learning process is to create opportunities to develop skills and knowledge and to promote developing **supportive community relationships** and adopting **shared student-centered mindsets** and approaches to the work that foster strong relationships.

Many schools would benefit from formalized training on how to use data systems and interpret student data. Teachers may be used to data being collected and analyzed at the leadership level, rather than at the instructional staff level. Professional training can ensure that teachers understand their critical role in data systems and begin using data for classroom and school improvement. The district, in collaboration with school leaders, can reinforce this expectation through a shared vision and check-ins with teachers on how they are using data and identifying interventions.

The EWIMS Seven-Step Process

Districts support the work of EWIMS by first having a foundational understanding of the steps school teams will engage in and actions they will take as part of the process. The EWIMS process provides a systemic strategy to identify, diagnose, monitor, and continually improve implementation toward improved outcomes for students. Each step plays a unique role in moving the work forward, always going through cycles of data analysis and action that start with indicators of elevated signs of risk. The district role is to support the environment needed for successful implementation and participate in the continuous improvement process. Continuous improvement is the framework for the EWIMS process; however, the driver of action through EWIMS is the data-inquiry cycle.
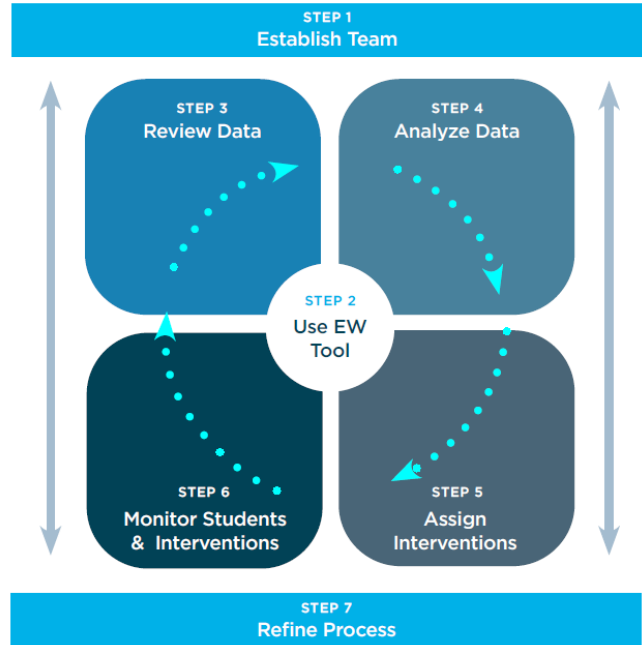
Data-Inquiry Cycle

The data-inquiry cycle begins every time the team looks at new early warning indicator data. The data-inquiry cycle is composed of Steps 3, 4, 5, and 6 of the EWIMS cycle—the EWIMS team will be examining student data, assigning students to interventions, and monitoring student progress within those interventions. The majority of EWIMS team meetings will be dedicated to going through the mini-cycle, and the team will complete several mini-cycles throughout the school year. Because the district supports schools with these steps, the district team engages in the same steps using district data. The district team participates in cycles of data review and analysis looking at district trends, monitoring progress of districtwide interventions and programs, providing schools with support, and applying what is learned to district practices and approaches for continuous improvement.

STEP 1: Establish Roles and Responsibilities

Step 1 signals that the district and sponsor are committed to implementing EWIMS. Districts create the space and set the expectation for the schools to identify team members (either by creating a new team or aligning an existing team to embed EWIMS) and begin meeting. Districts engage in many of these same activities, alongside schools, creating a new team or integrating

responsibility for EWIMS into an existing team and ensuring the right people are at the table to engage in modeling and coordinating activities for the district (e.g., cataloging available interventions and looking at student data trends). The district team is responsible for completing the technical activities of the EWIMS process and for ensuring that work connects to the student success system core components.

Doing the Work

During each step of the work, both the districts and schools carry out actions to engage in the EWIMS process. At the district level, those actions develop practices and capacities for the district and support practices and conditions for the schools.

What schools are doing	What districts are doing
Give the team agency and responsibility to carry out the work. - Create a new team or integrate EWIMS into an existing team. - Establish team membership with roles and responsibilities. - Set team structures (meeting time, norms, communication, and protocols). - Commit and protect regular time for meetings. - Create a catalog of available school interventions (including applicable district interventions). - Model activities and behaviors to develop strong relationships and student-centered mindsets.	*Districts build their own capacity.* - Establish a team and a district sponsor to model the EWIMS process. - Build consensus for EWIMS that includes developing strong relationships and student-centered mindsets. - Create a district team or integrate EWIMS into an existing team. - Create a catalog of available districtwide interventions. - Ensure communication, feedback, and coordination across the district. *Districts support school implementation.* - Assist the schools with identifying roles, responsibilities, and team leads. - Underscore the importance of meeting time and activities. - Identify and reduce barriers to team meetings and conflicting responsibilities. - Clearly communicate change and agency of the team to schools. - Model the importance of establishing the team and commitment to completing EWIMS.

What Successful Implementation Looks Like

Successful implementation requires a team at each school with the agency and responsibility to carry out EWIMS. Districts will be able to observe schools achieving results related to establishing their teams—schools achieving results will have completed the following tasks:

- Identified roles and responsibilities (e.g., leading the analysis, response, and improvement system) that facilitate carrying out EWIMS activities and make timely decisions

- Created and followed a meeting calendar with dedicated time to meet at least once per month to review student data

- Established common meeting routines and expectations that allow meetings to be efficient, productive, and focused on meeting goals

- Demonstrated understanding of the purpose of EWIMS and the relationships and mindsets related to participating in the work

- Created an intervention catalog

- Established communication and feedback methods that inform all stakeholders at the school about the EWIMS process so that they can provide input or feedback

- Drafted an intervention catalog with information about the available interventions and helped team members assign students to appropriate interventions and identify gaps in available interventions

- Adopted student-centered language, incorporated student voice in their decisions, and included relationship-building strategies to support interventions

- Measured student autonomy, sense of belonging, and connectedness

Step 2: Use an Early Warning Data Tool

Effective and efficient use of tools and data across district offices and schools is often a consistent concern for district leadership teams. Selecting, building, or integrating an extension for an early warning data tool allows for more efficient and dynamic data use. The data tool may be a new platform (developed or purchased) or a customized add-on or view for an existing system. Whatever approach the district chooses provides for real-time (or regularly updated) data on early warning indicators and can be used in connection with EWIMS as part of an adaptive analysis, response, and improvement system.

Doing the Work

During each step of the work, both the districts and schools carry out actions to engage in the EWIMS process. At the district level, those actions develop practices and capacities for the district and support practices and conditions for the schools.

What schools are doing	What districts are doing
The EWIMS team uses the early warning data tool to identify students who are showing signs of not graduating high school on time. • Create a way of organizing and accessing early warning indicator data and thresholds (develop, purchase, or modify an existing data system). • Ensure the data tool uses readily available student data related to attendance, course performance, behavior, and agency that includes a way to easily identify those students who pass predetermined thresholds. • Create and maintain access and use of the data tool.	***Districts build their own capacity.*** • Develop or select a data management tool with buy-in from school-level staff. • Ensure the district data tool (or systems supporting the data tool) has the technical capacity to organize data related to early warning indicators and identify students according to thresholds at the school level. • Maintain the data tool. • Create a dashboard or another way to aggregate early warning indicator data and progress-monitoring and intervention-fidelity data at the district level. • Adapt a holistic approach to student data, ensuring a way to measure student agency, connectedness, and belonging. ***Districts support school implementation.*** • Provide technical expertise and professional learning to schools related to use of the data tool. • Ensure adequate access to the data tool at the school level. • Create feedback loops to ensure data are useful and easy to use by school teams.

What Successful Implementation Looks Like

School teams work with an early warning data tool to facilitate the data analysis (and sometimes information tracking) throughout the EWIMS process. Districts will be able to observe schools achieving results related to being organized and prepared to use data—schools achieving results will have completed the following tasks:

- Developed a shared understanding of the use and basic features of the selected early warning data tool to identify students who have met or passed thresholds in research-based indicators related to attendance, course performance, and behavior

- Designated an individual responsible for regularly uploading (or checking for automated updates) student data so that the early warning data tool remains current (this individual may be a district-level employee who has this responsibility for all EWIMS schools)

- Regularly accessed or provided with real-time or up-to-date data summaries and/or visualizations from early warning data tool and in advance of each meeting

- Ensured appropriate access to student data for those individuals who need the information

- Incorporated a measure of student agency, sense of belonging, and/or connectedness

Step 3: Review Early Warning Data

Districts are always balancing the demands of serving students effectively with limited resources in time, money, and human capacity. During this step, teams identify students who have passed thresholds showing they are at risk of not graduating, including attendance, behavior, student engagement, student–teacher relationships, peer relationships, adult relationships, and course performance within the school. Step 3 makes use of actionable early warning data and develops questions for deeper understanding that reflect shared student-centered mindsets.

Doing the Work

During each step of the work, both the districts and schools carry out actions to engage in the EWIMS process. At the district level, those actions develop practices and capacities for the district and support practices and conditions for the schools.

What schools are doing	What districts are doing

School teams review early warning data to identify students who are showing signs of not graduating on time.
 	
• Look at data on early warning indicators and thresholds to identify individual students.
• Look at data on early warning indicators and thresholds to identify groups of students.
• Look at data on early warning indicators and thresholds to identify trends over time.
• Develop questions for further investigation.
	Districts build their own capacity.
	
	• Compare and align EWIMS efforts with district processes for data analysis to create efficiency and remove redundancy.
	• Review early warning indicator data for trends across the district.
	• Identify a measure for student agency, sense of belonging, and connectedness to incorporate into the early warning indicator review process.
	
	Districts support school implementation.
	
	• Provide technical expertise and professional learning on low-inference data analysis so that schools are better prepared to
	   – identify what the data say in patterns and trends,
	   – message and gain buy-in related to the importance of data-based decision making, and
	   – use early warning indicators to understand which students are most in need of support.

What Successful Implementation Looks Like

School teams look across student data related to early warning indicators at the start of each data-inquiry cycle. Districts will be able to observe schools achieving results related to their use of early warning indicator data—schools achieving results will have completed the following tasks:

- Identified, using research-based predictive indicators, individual students who show signs of not meeting key educational milestones

- Articulated patterns by aggregating and disaggregating student data and looking at trends over time

- *Prepared for Step 4* by identifying questions to answer that will help uncover underlying needs and additional information to better understand reasons that students were flagged for specific early warning indicators; assigned responsibilities to gather those data; discussed needs with teachers, parents and caregivers, and students

Step 4: Interpret Early Warning Data

When assigning students to interventions, teams often go straight from readily available indicators to determining a response (i.e. all students failing a course are assigned to tutoring). This approach creates inefficiency in the system and reduces the chances students get the support that responds to their needs. Taking the time for robust data analysis creates a process that intentionally brings data analysis to the student level and engages a variety of data sources (including human insights). Districts can greatly improve the chances that interventions meet student needs, create a more inclusive and asset-based approach, and reduce overall burden on staff by ensuring the support provided to students responds to underlying needs. Completing this level of analysis depends on strong relationships to uncover the most likely root cause and on being able to connect EWIMS activities to what is happening outside the team as part of the analysis and response system.

Doing the Work

During each step of the work, both the districts and schools carry out actions to engage in the EWIMS process. At the district level, those actions develop practices and capacities for the district and support practices and conditions for the schools.

What schools are Doing	What districts are doing

The team engages in data analysis to understand the needs of students identified as showing signs of risk.
 	
• Analyze multiple sources and types of data.
• Discuss student needs with teachers, students, and parents and caregivers.
• Use a process to facilitate data analysis and identify potential root causes.
	Districts build their own capacity.
	
	• Engage in data analysis to understand trends across the district.
	• Uncover potential root causes for groups of students or student data trends.
	
	Districts support school implementation.
	
	• Remove barriers and provide training (if needed) for schools to
	   – access data,
	   – engage in deeper analysis of the data,
	   – design measures and processes for soliciting student feedback, and
	   – find time to consistently collaborate.

What Successful Implementation Looks Like

Schools will engage in a deeper analysis of data to uncover potential root causes for signs of elevated risk. Districts will be able to observe schools achieving results related to engaging in effective data analysis—schools achieving results will have completed the following tasks:

• Gathered the needed data for analysis and to make informed decisions about student needs

• Engaged in deeper analysis of student data, such as root cause analysis

• Used data on students' experiences and actively requested student feedback to inform decision making

Step 5: Assign and Provide Interventions

Step 5 is "where the rubber meets the road" and the transition between data analysis and data-based action takes place. Districts have a great capacity for understanding the interventions and programs that are available to schools and how those options align with student needs. Districts are able to use that data to understand how districtwide practices support or limit universal districtwide and schoolwide support, remove barriers, and leverage success. Interventions are assigned with students and their parents and caregivers to help address students' needs and meet their goals.

Doing the Work

During each step of the work, both the districts and schools carry out actions to engage in the EWIMS process. At the district level, those actions develop practices and capacities for the district and support practices and conditions for the schools.

What schools are doing	What districts are doing
Assign and provide interventions and research-based strategies to support students who are showing signs of risk. • Assign students to evidence-based programs that target specific skills or content gaps. • Create interventions as needed (e.g., schema-based instructions to support students experiencing difficulty with word problems). • Support students with strategies that meet underlying needs but are not packaged into formal programs.	***Districts build their own capacity.*** • Monitor districtwide intervention availability and progress. • Communicate regularly across the district regarding available interventions and supports and how they can be used to meet student needs and identify and implement districtwide universal (Tier 1) practices to better serve schools and students in following the EWIMS process. ***Districts support school implementation.*** • Provide technical expertise and professional learning on available interventions and how they can meet student needs. • Assist schools in understanding the strengths and gaps in their intervention catalog and closing existing gaps. • Providing a format for schools to share information about available interventions across buildings.

What Successful Implementation Looks Like

School teams ensure students are assigned to interventions that meet their needs. Districts will be able to observe schools achieving results related to students being matched with and receiving support that responds to their needs—schools achieving results will have completed the following tasks:

• Produced and made use of a complete intervention catalog that allows school teams to take action assigning students to available and appropriate interventions and identified gaps in available interventions

• Assigned students to supports and interventions regularly, based on the data and insights gathered on students identified as showing signs of risk and in response to the identified needs

• Developed and communicated the intervention plan with the larger school community and impacted individuals

Step 6: Monitor Students and Interventions

Districts commit a lot of resources to supporting student needs. By monitoring use of those resources, districts and schools can ensure they are contributing to improved conditions and outcomes. Implementing Step 6 across schools provides an opportunity for districts to gather information on student progress and intervention effectiveness. This information can provide the foundation for district-level data-inquiry cycles. Districts monitor whether schools are using

early warning interventions data to identify student needs, the appropriateness of the matched interventions, and whether those interventions are having the desired impact. The districts monitor the use and success of district interventions and programs as a critical step in any analysis and response system.

Doing the Work

During each step of the work, both the districts and schools carry out actions to engage in the EWIMS process. At the district level, those actions develop practices and capacities for the district and support practices and conditions for the schools.

What schools are doing	What districts are doing
Monitor the progress of students who are identified to see if the assigned intervention is helping them get back on track. • Review data to monitor student progress toward goals. • Review data to monitor intervention implementation to evaluate the impact of interventions.	***Districts build their own capacity.***
	• Review data to monitor student progress trends. • Review data to monitor intervention implementation trends to evaluate the impact of interventions. • Define implementation fidelity for districtwide interventions.
	Districts support school implementation.
	• Provide schools with technical expertise and professional learning on implementation fidelity of interventions. • Facilitate opportunities for schools to share learning across buildings.

What Successful Implementation Looks Like

Schools are monitoring progress by using data regarding students and interventions once there has been time for interventions to be carried out and to see results from those interventions. Districts will be able to observe schools achieving results related to knowing whether students are reaching their desired goals and interventions are meeting student needs—schools achieving results will have completed the following tasks:

• Defined and considered implementation fidelity

• Set student goals

• Created and used plans for measuring student progress

• Communicated with appropriate stakeholders about students' needs and interventions

• Determined intervention effectiveness and adjusted as needed

Step 7: Evaluate and Refine the EWIMS Process

Districts that are developing coordination and district team capacity for EWIMS will have a great deal of data and information and feedback from individual schools and district practices. Step 7 closes the circle on EWIMS as a continuous improvement process. Reflecting on current practices and progress about twice a year to develop a broad understanding of EWIMS implementation and fine-tune district capacity and support going forward is a necessary district support for schools. Reflection and refining practice can benefit a wide range of team activities and should include ways to consider the first 6 steps of the EWIMS process, as well as the student success system core components.

Doing the Work

During each step of the work, both the districts and schools carry out actions to engage in the EWIMS process. At the district level, those actions develop practices and capacities for the district and support practices and conditions for the schools.

What schools are doing	What districts are doing
Reflect on the EWIMS process during the school year. • Discuss what worked well, what needs to be modified, and what needs to be replaced or eliminated. • Support discussions and decisions with data, evidence, and documents of meeting lessons learned.	***Districts build their own capacity.***
	• Reflect to learn from implementation of districtwide capacities and school supports. • Assist school teams to make room for continuous improvement reflection in their own practices.
	Districts support school implementation.
	• Ensure learning across schools to accelerate learning. • Remove barriers identified through reflection. • Consider how EWIMS data align with school reporting requirements.

What Successful Implementation Looks Like

Schools are taking time to reflect on their implementation progress. Districts will be able to observe schools achieving results related to knowing whether students are reaching their desired goals and interventions are meeting student needs—schools achieving results will have completed the following tasks:

- Reviewed the implementation of the EWIMS process and team practices

- Made recommendations for improving the process

- Planned for what the EWIMS team will do in the next year to improve current practices, including strengthening staff capacity and knowledge of ways to promote student autonomy, sense of belonging, and connectedness

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Appendix: Early Warning Indicator Research

As a continuous improvement process based on research to address barriers to graduation, an early warning intervention and monitoring system (EWIMS) provides a way for educators to organize and readily use available early warning systems data to systematically identify students who are in danger of not meeting key academic milestones. Through the EWIMS process, students who meet or exceed attendance, behavior, or course performance indicator thresholds can then be matched with appropriate interventions to help them get back on track for graduation (Heppen & Therriault, 2008; Jerald, 2006; Kennelly & Monrad, 2007; Mac Iver et al., 2019; Neild et al., 2007; Pinkus, 2008; Rumberger et al., 2017).

Data-based decision making itself is not a new concept in education, so what sets EWIMS apart from other processes? As a systemic and systematic approach, EWIMS allows educators to organize schoolwide efforts by identifying students who are showing signs of disengagement, supporting these students by assigning appropriate interventions, and monitoring their progress within the intervention. EWIMS improves educators' opportunities to optimize the use of an early warning system (Allensworth & Easton, 2005, 2007; Dynarski et al., 2008) because EWIMS requires educator collaboration to turn data into actionable information.

Key educational milestones are transitions or benchmarks that research has shown are important to students' progress throughout their educational journeys. Such milestones may include, for example, school transitions, ninth-grade readiness, on-time graduation, and college and career readiness. Emerging research points to the importance of key educational milestones in the middle and elementary grades as well (Balfanz & Byrnes, 2019). For example, chronic absenteeism leads to lower academic performance in elementary school and a greater likelihood of continued attendance issues in the middle grades. Research has also established benchmarks of when those behaviors show an elevated sign of risk, or thresholds. Identified early warning indicators, based on readily available data, can reliably and accurately identify youth who are most prone to academic failure in high school and the middle grades (Allensworth & Easton, 2007). Commonly used early warning indicators for middle and high school are presented in Exhibit A1.

Early Warning Indicator Thresholds

Researchers have identified key early warning indicators, based on readily available data, in high school and the middle grades that can reliably and accurately identify youth who are most prone to academic failure (Allensworth & Easton, 2007). For example, Balfanz (2009) found that sixth graders in Philadelphia who had failing grades in mathematics or English language arts, attended school less than 80% of the time, or received unsatisfactory behavior grades in a core

course had only a 10%–20% chance of on-time graduation. Furthermore, fewer than one in four students with at least one of these early warning indicators graduated from high school within 5 years. Based on this finding and similar research findings, a set of attendance and academic indicators and **thresholds** have become generally accepted—at least as a good starting point— to establish a basic early warning system. Exhibit provides an overview of these early warning indicators supported by research for middle and high school grades.

Exhibit A1. Early Warning Indicators

Early warning indicator	Grade range	Threshold
Attendance		
Days absent	6–9	More than nine per quarter; more than 36 per year[a]
Instructional time lost	9–12	10% or more[b]
Behavior		
Behavior (e.g., referrals, suspensions, behavior grades)	9–12	Locally determined[b]
Office referrals	6–9	More than two per quarter; more than six per year[a]
Suspensions	6–9	More than one per quarter; more than two per year[a]
Course performance		
Grade point average	9–12	2.0 or lower on a 4.0 scale[b]
Course failures (any course)	9–12	One or more[b]
Course failures (English language arts and mathematics)	6–8	One or more[b]
Course failure in any core course (English, mathematics, science, and social studies)	9–12	One or more[b]
On-track indicator	9	Credit deficient for promotion to 10th grade and one or more failures in core courses[c]

[a]Information obtained from Johns Hopkins University (2012). Although John Hopkins University identified these thresholds for office referrals and suspensions, in our experience, these indicators are the most difficult-to-identify thresholds because student discipline policies vary widely by district and by school. For this reason, the American Institutes for Research® recommends that these indicators be locally validated. [b]Information obtained from Therriault et al. (2013). [c]Information obtained from Allensworth and Easton (2007).

Locally Validated Thresholds

Districts may find value in determining **locally validated indicators** to ensure that their local data (and therefore context) are reflected in the data that are used to identify students showing signs of elevated risk for not meeting key educational milestones. Local validation is the process of analyzing local historical data for patterns in early warning indicator data to

understand the thresholds for elevated signs of student risk. For example, although the nationally normed threshold for attendance in high school is 10% of missed instructional time, an analysis of historical data may reveal the threshold for elevated risk locally is 11.5%. Local validation is particularly important for behavioral data, including office referrals, detentions, and suspensions. Because student discipline policies, definitions, and data collection vary widely by district, these indicators are the most challenging to accurately identify thresholds for. Districts interested in conducting a local validation should consult the Regional Educational Laboratory West guide, *District Guide for Creating Indicators for Early Warning Systems* https://www.wested.org/resources/creating-indicators-for-early-warning-systems/#.

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