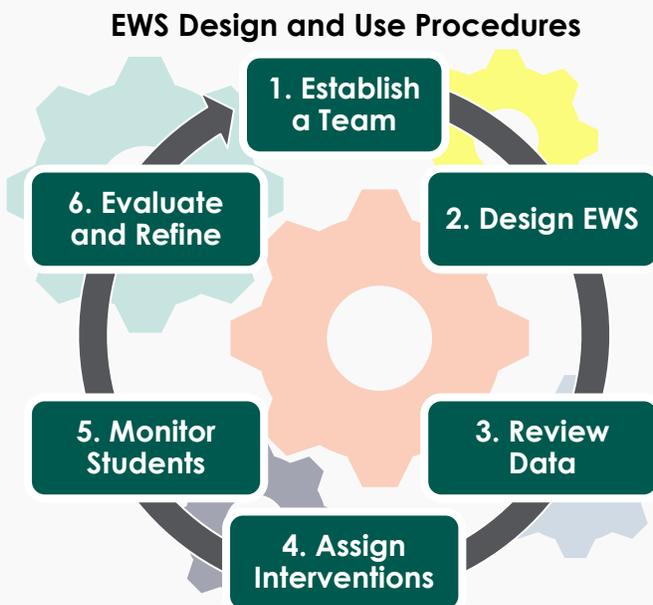


EARLY WARNING SYSTEMS AND MULTI-TIERED SYSTEMS OF SUPPORT TO PROMOTE COLLEGE- AND CAREER-READINESS

Designing and Using Early Warning Systems

The cyclical process displayed below—adapted from a seven-step process authored by the American Institutes for Research—outlines six steps Utah districts can use to adopt and leverage an early warning system (EWS) with relevant early warning indicators (EWIs) of students' risk level for dropout or failure to obtain college- and career-readiness.¹



Source: American Institutes for Research²



As a recommended first step, **districts can create a team composed of representatives from key stakeholder groups** (e.g., administrators, teachers, parents) to draft goals related to the EWS and determine what indicators to include as EWIs. In addition, individual schools in a district may construct internal teams—composed of teachers, guidance counselors, administrators, and other personnel—who will monitor their school's iteration of the EWS in parallel to the broader district vision. This school-level team will meet regularly to examine collected data, determine which students are at-risk or on-track, and design interventions accordingly.³

Next, **these teams can examine their district's unique context and incorporate relevant data from earlier cohorts of dropouts to select appropriate EWIs to serve as the foundation for the EWS.** Research indicates that dropping out and academic failure are not standard dynamics with causal factors that predict whether a student will persist through to graduation, requiring districts to examine many factors to determine whether a student is at-risk.⁴ EWIs typically encompass data in three areas—attendance, behavior, and course, or academic, performance (i.e., the ABC indicators)—with students being flagged for tiered interventions after reaching certain thresholds or cutoff points.⁵



THE CHALLENGE

According to the U.S. Department of Education, **the primary purpose of K-12 education is that "[e]very student should graduate from high school ready for college or a career,"** meaning they should possess the requisite knowledge and skills to be successful in postsecondary coursework (without remediation), employment, and their personal lives.⁷ However, many students fail to complete high school—with the latest data for Utah showing a statewide graduation rate of 87% for the 2018 cohort and a statewide dropout rate of 11%—and many of those who do graduate with a high school diploma exit high school ill-prepared for the labor force and unable to meet the demands of postsecondary education, restricting the opportunities available to them.⁸

However, **research shows that students may exhibit signs of potential dropout as early as Grade 1, and additional research finds that students may exhibit at-risk behaviors related to academic failure upon Kindergarten entry.**⁹ Consequently, experts recommend that early interventions be implemented at the elementary and middle school levels to support students' immediate academic, behavioral, and attendance outcomes, empower their families, and promote college- and career-readiness.¹⁰

Other Risk Factors



- Lack of support services
- High crime rates
- High unemployment
- Lack of affordable housing
- Controlled substance abuse



- Lack of relevant curricula
- Large class sizes
- Low staff expectations
- Segregation by ability
- Unsafe environment



- Low socioeconomic status
- Low parent involvement
- Non-English-speaking
- Sibling who dropped out
- High mobility



- Low school achievement
- Poor attendance
- Misbehavior
- Early aggression
- Emotional disturbance

Source: Multiple¹⁹

However, risk factors can also emerge from the larger community's characteristics, the school itself, and a student's family and domestic situation.⁶

Widely accepted cutoff points for the ABC indicators that can be used at all levels of schooling—elementary, middle, and high school—include:

A ttendance	Being absent 10% of school days
B ehavior	Two or more mild or serious behavioral infractions
C ourse Performance	Not reading on level by the end of Grade 3 Failure in English or math in Grades 6-9 A grade-point average less than 2.0 Two or more failures in Grade 9 Failure to earn on-time promotion to Grade 10

Source: Civic Enterprises and The Everyone Graduates Center, Johns Hopkins University¹¹

Ultimately, **individual districts and schools can determine the cutoff points for identifying at-risk students based on local contexts and available data.**¹²

Those teams and personnel in charge of designing and monitoring the EWS will maximize the impact of their work within local contexts by investigating trends and consistencies from their recent historical data (i.e., the previous five years), as well as research-based guidance, to create thresholds that will help determine individual students' level of risk for dropping out or academic failure.¹³

The selected cutoff points will guide school-level teams and those personnel directly responsible for data monitoring as they review students' data. They can use these thresholds on an established cycle or standardized timeline to determine whether a student is at-risk and to identify those particular risk factors that schools must address to better support that student.¹⁴ With such knowledge,



school-level teams are able to direct students to the most appropriate supports, resources, interventions, and specialized personnel to help them surmount those risk factors that are disrupting their education and to promote success in all facets of schooling.¹⁵



Once students are engaged in a specific intervention, the assigning school personnel (e.g., data teams, guidance counselors) should track their progress to determine if gains are being made in the target area (e.g., attendance, course performance). Specifically, data can be collected regarding the frequency of the given interventions and any changes to students' performance, in order to identify if the student is progressing, maintaining, or regressing relative to the specific indicators that originally flagged them as at-risk.¹⁶ Careful and consistent monitoring of students and the impacts of interventions will help school personnel determine if students continue to have unmet needs that require additional or alternative interventions or if current supports are generating the expected degree of improvement.¹⁷

Throughout the implementation of an EWS and its associated interventions framework, districts and schools are more likely to see consistent progress if they periodically assess the effectiveness and efficiency of their own practices and policies, the features of the EWS, the thresholds for identifying at-risk students, and the impacts of interventions to address students' areas of risk. Such evaluations will drive continuous improvements to better support students.¹⁸

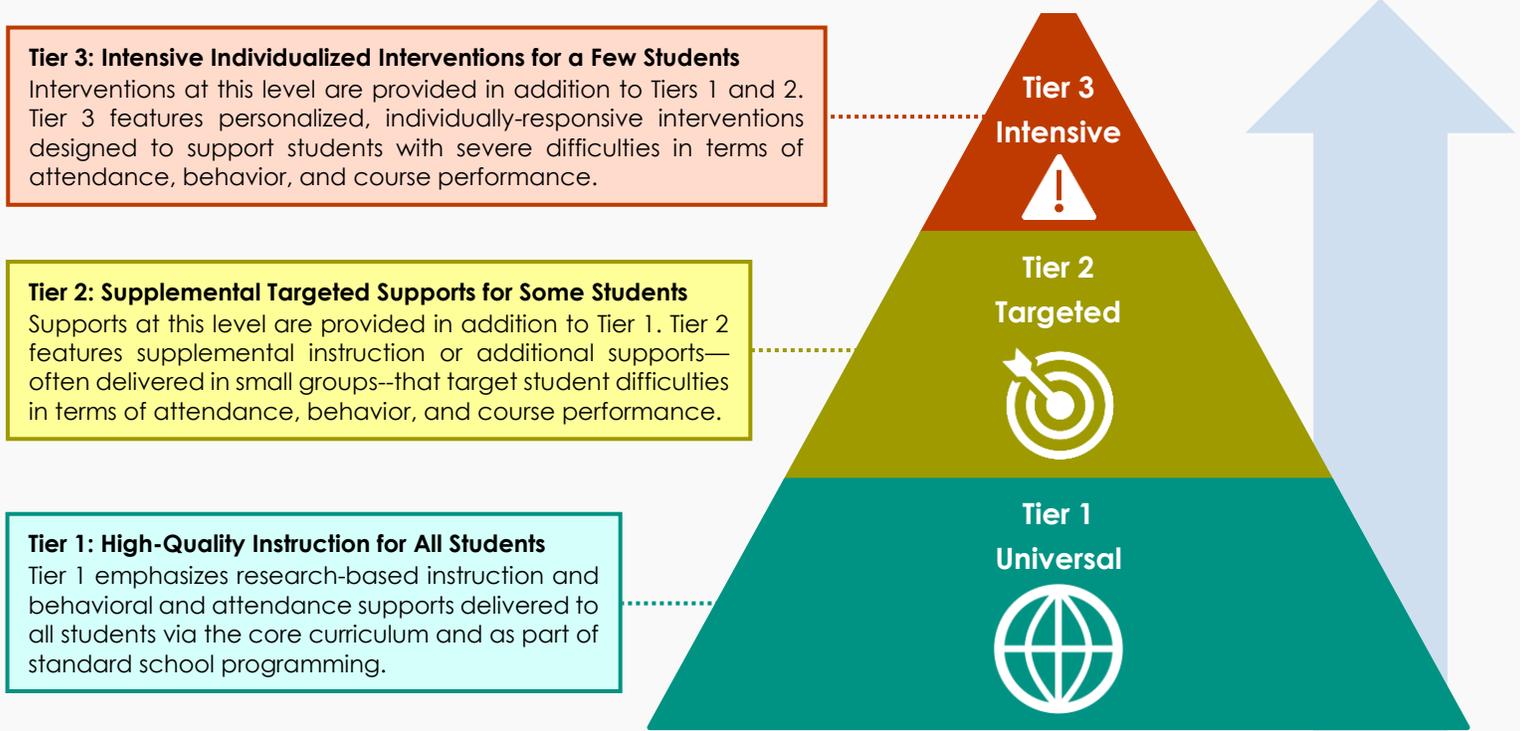


Delivering Interventions Via Utah's Multi-Tiered System of Supports

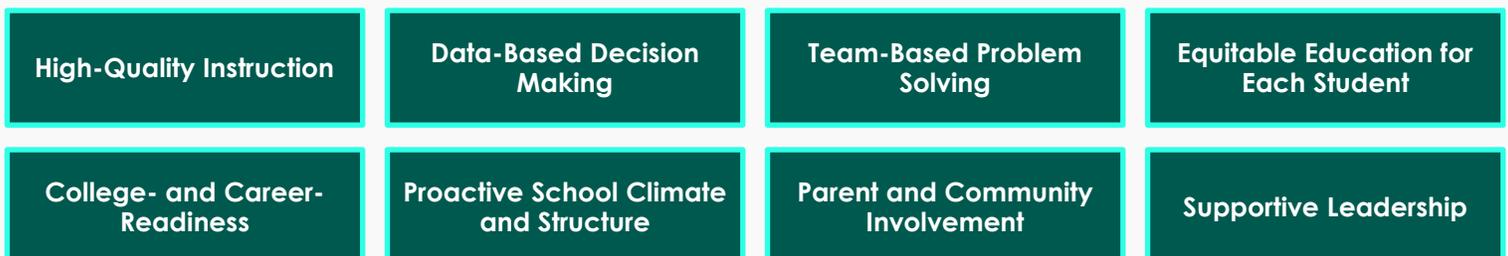
Interventions designed to address risk factors identified by EWSs and build preventative protective factors are typically organized into and delivered via a tiered model of increasingly intense interventions.²⁰ A tiered intervention framework is conducive to joint use with an EWS as both measures support student screening and data-based referrals to interventions of escalating intensity based on student needs and identified risk factors.²¹ Informed by such knowledge, Utah has adopted the Utah Multi-Tiered System of Supports (UMTSS) to direct the state's districts and schools "in evaluating and analyzing current practices, establishing supportive infrastructure, and utilizing data to improve student outcomes."²²

The Utah Multi-Tiered System of Supports

The Intervention Framework



The Eight Critical Components



Source: Utah State Board of Education and Utah Parent Center²³

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