Innovating for Student Success:

District-Led Innovation Showcase

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Introduction

The Student Success Data Challenge

Student success systems are an evidence-based approach for schools and districts to leverage data, relationships, and student-centered mindsets to systematically address achievement patterns and meet individual student needs. Effective data systems are the backbone of thriving student success initiatives. They enable practitioners to identify pressing student needs, implement targeted interventions for individuals and groups of students, and track key outcomes over time.

Yet many school districts find themselves struggling to implement data systems that truly enhance their student success work; they are looking for user-friendly technology that simplifies data entry and reporting so educators can focus on the human-centered aspects that matter most. While the edtech market offers a range of tools—from student information systems to analytics platforms and intervention trackers—practitioners often find these tools don't align with their specific needs, daily workflows, and the nuanced processes that define their school communities.

The Innovation Landscape

Among the many available edtech tools designed to help educators identify, monitor, and support students to stay on track, users of these products frequently encounter functionality gaps that don't meet their practical needs. Many also worry about the long-term viability of vendor products as ownership changes and funding landscapes shift unpredictably. Student Success teams need solutions that integrate seamlessly into their daily workflows, authentically reflect their unique school communities, and provide stability even as market conditions evolve. Above all, they seek the confidence that their data systems will help them consistently connect their students with the right support at the right time—regardless of vendor priorities or budget fluctuations.

In response to these challenges, many innovative school districts have developed what we call **District-Led Innovations** (DLIs)—custom data solutions designed to address specific gaps or better align data systems with local student success priorities. These DLIs range from simple spreadsheet-based trackers used at individual schools to sophisticated district-wide platforms integrating multiple data sources.

About this Resource

This resource showcases innovative work from schools and districts that have developed custom data solutions to strengthen their student success systems. It's not a how-to guide for building DLIs—rather, it's a learning tool that honors the resourcefulness of educators

who have crafted solutions to meet their unique needs, sometimes in collaboration with nonprofit organizations and other partners.

By highlighting these innovations, we aim to achieve the following:

- Elevate practitioner-driven solutions that are addressing student success challenges
- Prevent districts from "reinventing the wheel" by sharing successful approaches
- Identify patterns and insights that can inform both practice and solution development
- Advocate for commercial solutions that better address the needs revealed by these innovations

Throughout this resource, we analyze what makes each solution effective within its specific district context, considering local assets and challenges. While we focus primarily on technology platforms, we recognize that student success depends on the intersection of people, platforms, process, and policy. Technology solutions must be complemented by skilled educators, effective training, and supportive organizational structures. And as we celebrate these custom innovations, we recognize they aren't always the right approach for every district, particularly given concerns about long-term sustainability and scalability. We recommend engaging directly with vendors to advocate for, or co-design, product improvements designed to support local needs.

Our ultimate goal is to bridge the gap between school and district needs and vendor offerings—inspiring a new generation of student success data systems that truly support all students in reaching their potential.

Understanding Student Success Systems

Core Components

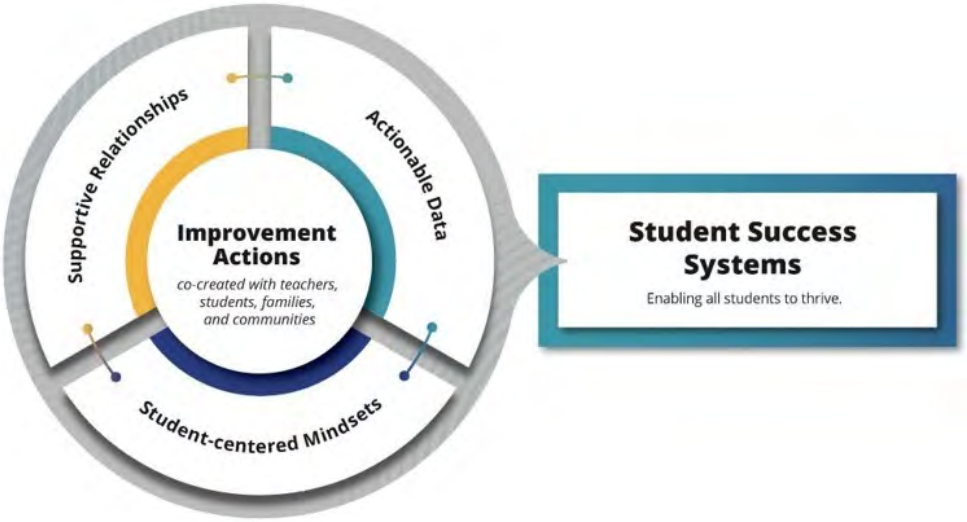
Student success systems are an evidence-based approach to organizing school communities to better support the academic progress, career and college transitions, and well-being of all students. Student success systems provide schools with a unified system that integrates, extends, and increases the capacity of existing student support efforts, including early warning, on-track, and multi-tiered support systems. High-quality, student success systems combine four essential elements so that secondary schools are empowered, in an inclusive way, to graduate all students on a pathway to adult success through higher education and job training.

These are the four key elements:

Strong, Supportive Relationships	Real-Time, Actionable Holistic Data	Strategic Improvement Actions	Student-Centered Mindsets

The urgency of this work is underscored by sobering graduation data. Students who are off track for graduation after ninth grade are less than half as likely to graduate than their on-track peers, with this issue having a disproportionate impact on Black and Latino students who were 46% and 31% more likely than the national average to be off track to graduate on time in 2022. Fortunately, research demonstrates that student success systems can drive meaningful improvement in leading indicators of high school graduation and college readiness, including attendance, GPA, and credit attainment.

The DLIs featured in this resource demonstrate how many schools and districts have been working to strengthen these core components, particularly real-time, actionable holistic data.



This evidence-based framework was developed by The GRAD Partnership, a collaborative initiative that brings together practitioners, researchers, and community organizations to identify and scale effective strategies that support student success. Their resources and tools provide a foundation for schools and districts seeking to implement and strengthen student success systems. Below we summarize the four components of student success systems. More information is linked in each section.

Strong, Supportive Relationships

At the heart of every effective student success system are the students themselves, surrounded by a network of meaningful human connections. These relationships—built on trust, respect, and shared commitment to student success—create the foundation for data-informed support and powerful technical solutions.

Here are the outcomes when relationships flourish between these groups:

- School staff and students: Students feel seen, known, and supported enough to take academic risks and accept mentorship and guidance.
- Students and peers: Positive peer culture reinforces belonging and motivates deep engagement.
- Staff members: Collaborative problem-solving replaces misunderstanding and blame.
- Schools and families: Authentic partnerships create consistent support across settings.

Strong, supportive relationships are critical for the sensitive data-informed discussions that make up this work. For example, when a counselor needs to connect with a family

about their student's attendance issues, when teachers need to collaborate on intervention strategies, or when administrators need to have difficult conversations about inequitable outcomes, the quality of existing relationships determines whether these interactions lead to meaningful change.

Technology and data systems must strengthen, not replace, these trust-based human connections.

Real-Time, Actionable Holistic Data

To make informed decisions that holistically support students, school teams need timely access to an integrated set of usable data. Effective student success systems bring together three crucial types of data:

- **Research-based predictive indicators**: Predictive indicators including the "ABCs" (attendance, behavior, and course grades) have been reliably shown to forecast critical outcomes such as grade promotion, graduation, and postsecondary readiness.
- **Measures of well-being**: Metrics of student agency, belonging, and connectedness are also important for understanding how students are doing with a focus on the conditions shaping engagement and achievement. These are sometimes called "the little abc's"— not because they are less important, but because their relevance has been acknowledged and elevated more recently.
- **First-hand Insights**: Finally, insights gathered systematically from school staff, students, and families, who are the primary experts about their experience and what they need, help ensure data interpretation is authentic and relevant.

When reviewed regularly and collectively, these indicators can reveal both immediate student needs and a school's capacity to provide relevant, meaningful learning experiences that interest, satisfy, and challenge all learners. Schools need access to integrated, user-friendly dashboards that bring these indicators together for real-time monitoring.

Strategic Improvement Actions

Building on strong relationships and holistic data, schools can take strategic action to support students. Effective student success systems require a school-based approach, supported by professional learning, frameworks, and protocols that enable teams to achieve the following:

- **Progress monitor** all students using predictive indicators of well-being (agency, belonging, and school connectedness) and academic success to identify patterns and trends that can inform action.

- **Use additional real-time data** including social-emotional and classroom experience data, and insights from teachers, students, and families to identify underlying causes that school actions can address.
- **Identify, develop, and implement** strategic and effective actions and supports to address those causes.
- **Evaluate** the use and impact of the actions and supports and continuous improvement approaches to modify or change them as needed.

Actions and supports can be at the district, school, grade, classroom, student sub-group, or individual level. Essential components of effective response systems include these:

- **Clear processes** to record, follow up on, and review the impact of actions with modifications as needed
- **Regular communication** with and gathering feedback from schools and the larger community
- **Team reflection** on effectiveness by examining both the actions taken and the ratio of students positively impacted versus those who could benefit to continuously improve the student success system

Student-centered Mindsets

Student-centered mindsets are the driving force behind effective student success systems and are critical for taking strategic actions. Unlike policies or procedures that can be mandated from above, authentic mindsets emerge organically through meaningful dialogue, honest reflection, and shared experiences among all adults in the school community.

To best support students, all adults in the building need to share a common set of attitudes and beliefs that respect the whole child. This involves four key areas:

Ensure that all students are represented:

- Actively address unfairness by ensuring all students have access to opportunities.
- Use data practices that disaggregate information to identify inequitably served groups.
- Maintain high expectations that every student can achieve good outcomes.

Focus on empathetic and welcoming practices:

- Create belonging rather than stigmatizing or isolating students and staff.
- Approach challenges with understanding rather than blame.

- Recognize and build upon what students and families bring rather than focusing on what they lack.
- Use language that reflects strength and asset-based perspectives when discussing students and families.
- Create safe environments for sharing ideas and information openly.

Promote collaboration and teamwork:

- Work together to improve rather than struggling alone.
- Include educator and student input in decision-making.

Be proactive over reactive:

- Take preventative action rather than waiting to respond to crises.
- Design supports to enable growth and development.

All students deserve to be set up for success. While developing individual plans for each student may be logistically impossible, collaborating to adopt whole child mindsets can lead to more preventative and proactive solutions that honor the inherent potential in every learner.

Infrastructure

Based on learnings from the GRAD Partnership, successful student success teams engage in the following practices:

- **Convene student success teams with clear roles and responsibilities:** At the school level, diverse teams of teachers, counselors, administrators, and support staff are established with defined functions and regular meeting time during the school day.
- **Define processes for collaborative improvement planning:** Committed teams implement structured approaches for reviewing data patterns, identifying root causes, developing targeted solutions, and tracking implementation and impact.
- **Embed structures for including student, family, and community voice:** To center lived experience of students, schools can create multiple pathways such as advisory councils, interviews, and feedback mechanisms to ensure diverse perspectives inform understanding and solutions.
- **Set up regular meeting cadences and protocols for reviewing data:** Student success teams schedule and adhere to consistent, protected meeting times with clear protocols for analyzing holistic student data, planning interventions, assigning responsibilities, and evaluating effectiveness.

Effectively implementing student success systems requires robust technology infrastructure that supports daily operations. Teams need tools that streamline their work—ensuring the right people have timely access to relevant data that is both clear and actionable. Beyond simply viewing data, teams require integrated action planning that tracks who receives which interventions, monitors effectiveness, and identifies additional support needs at both individual and group levels. Unfortunately, teams are often challenged to bridge the gap between their systems' capabilities and their actual needs.

Technology Solutions

The landscape of available technology platforms to support student success systems reflects a complex ecosystem of solutions that districts need to sift through to meet their diverse needs:

Student Information Systems (SIS) are the foundational data repositories for most districts, housing student demographic, enrollment, and academic records. While comprehensive in scope, traditional SIS platforms often lack the real-time analytics and user-friendly interfaces needed for proactive student success interventions.

On-Track Solutions (OTS) are more targeted platforms that use local, historical student data, research-based early warning indicators, and predictive analytics to identify students who are in danger of not achieving key educational milestones, such as on-time graduation. OTS often fall into three categories:

- **Business Intelligence Software**: These general-purpose tools facilitate custom development of reports and dashboards outside of the SIS and other district systems, but they are not specialized for education data, roles, or workflows. Examples include PowerBI, Tableau, and Google Sheets. These solutions offer lower-cost options with familiar interfaces but require significant technical capacity for design, implementation, maintenance, and updates.
- **EdTech Analytics Platforms**: These platforms integrate data from connected district systems into dashboards and data visualizations. They offer automated data integrations but typically come with ongoing additional costs and require vendor training and support. On-track is often only a partial focus of these platforms, and they do not always include functionality to manage interventions.
- **End-to-End Solutions**: These solutions connect student data from district systems with intervention management aligned to prioritized action. They provide data and related actions in one system using existing data agreements and align with on-track approaches, but they can have overwhelming user experiences and require significant vendor collaboration for high-quality setup and effective ongoing usage.

Intervention-Specific Tools are standalone tools that support school-based work associated with one or more early warning indicators. They may or may not integrate with SISs and OTs and use current data to implement and monitor interventions related to the following areas:

- Attendance/chronic absence
- Formative assessment
- Learning Management Systems
- College and career readiness
- SEL/school environment

Common Pain Points

Despite the variety of available solutions, districts consistently encounter significant challenges when implementing these technology platforms. To learn more about the current landscape of student success systems, with a focus on system capabilities, Digital Promise conducted a comprehensive field scan including conversations with 50 individuals from 30 organizations including schools and districts, technology vendors, intermediaries, researchers, and strategic partners. We explored their visions for student success systems, promising practices, and ongoing challenges, with particular attention to the technology and data infrastructure supporting this work.

Nine common pain points emerged that districts consistently encounter when implementing technology platforms and systems to drive student success work. While we present these pain points separately in the following matrix to illustrate their individual nuances and complexities, conversations with districts reveal they are deeply interconnected. These challenges span the entire ecosystem of student success work—from the integration of data sources to generate insights, to how those insights translate into action, to the market dynamics and district politics that ultimately shape what happens in schools. Each pain point is described below with specific examples of how these challenges manifest across different districts and platforms.

Student Success Systems - Technology Platform Pain Points

Data Quality
Inconsistent, incomplete, or unreliable data undermines identification of student needs.

Fragmented Data Systems
Siloed platforms require manual integration and prevent holistic view of student success.

Data Access
Limited real-time data access across roles prevents timely intervention.

Actionable Data Visualizations
Complex and technical reporting makes it difficult to identify patterns and trends.

Intervention Tracking
There is a lack of integrated systems to monitor assignment, progress, and effectiveness of interventions.

System Customization
Rigid structures prevent meaningful adaptation to district context.

System Usability
Complicated interfaces create barriers to adoption and consistent use.

Cost Barriers
Essential features and product support come at additional costs, straining district budgets.

Edtech Marketplace Volatility
Acquisitions and product shifts create uncertainty in long-term planning.

Data Quality

If holistic, actionable data is the foundation of student success systems, inconsistent, incomplete, or unreliable data undermines the utility of these systems, making it impossible to accurately identify students who need support. When data is missing, entered incorrectly, or labeled differently across schools, districts risk focusing in the wrong area or missing critical student needs. Practitioners report challenges including delayed data entry by clerical staff and lack of validation rules that would catch and flag nonsensical entries (e.g., a negative attendance rate), incompatible data formats (e.g., text in numeric fields), or unaligned codes that create cascading problems throughout the system. As a result, districts sometimes end up with unreliable data, misinterpreted data, or data that requires manual cleaning before it can be used for student success work, defeating the purpose of leveraging technology to support these efforts.

> *"Data hygiene in schools, and being able to interpret codes in a standard way, is critical. For example, in a SIS the code "NM" [No Mark] conveys that a student hasn't received a traditional letter grade for a course. It might mean a student passed the class, or it might mean incomplete or is a placeholder for more information needed. Without alignment, these can be interpreted differently or turned into Fs, creating problems for kids when it comes to their transcripts and paths to graduation."*
> *—Dr. Juli Coleman, Chief of Improvement; School Networks, The CORE Districts*

Fragmented Data Systems

High-performing student success teams need real-time access to unified ABC data and measures of student well-being to identify progress and gap areas and intervene proactively. However, education technology systems operate in isolation—student information systems, attendance software, behavior management platforms, and learning management systems each maintaining separate databases that require manual extraction, cleaning, and consolidation. Often, these systems are not interoperable, so data cannot flow between them. This fragmentation and lack of data interoperability prevents schools from seeing the complete picture of student needs and forces teams to spend valuable time managing data infrastructure rather than supporting students.

> *"We're hearing from principals and school administrators that they are experiencing "platform overload" when they want a one-stop-shop for simple referencing of actionable data."*
> *—Dr. Adam Kurth, Chief Financial Officer (Former Director of Technology and Innovation), Iowa City Community School District*

Data Access

If a student has missed several days of school, is receiving failing grades, or is displaying well-being concerns, critical student success interventions require timely action. Educators, counselors, and administrators all need access to current data to identify students in need and to coordinate appropriate support. When data systems only update on batch schedules— quarterly or at semester's end— they become historical records rather than proactive support tools. This delay transforms what should be preventative measures into reactive responses. By the time multiple users can access and act on the data, students may already be significantly in need, requiring more intensive interventions to support their path to success.

> *"Schools need to see those ABCs in one view. This helps end siloes so they are not going back and forth between dashboards to figure out what's going on at a group level"*
> *—Tara Madden, Executive Director at Talent Development Secondary*

> *"Teachers don't have time to run reports. They need notifications. Like: 'Sam has been absent this many days, and here is his test data.' Then make it easy to take action. If you wait until mid-year to figure out what's going on, it's already too late. Educators need real-time data to make decisions and use data to support their students."*
> *—Dr. Samuel Mormando, Director of Technology, Innovation, and Online Learning, Garnet Valley School District*

> *"Data needs to be as accessible as possible to people who need it the most without jumping through hoops, including teachers, parents, and the district central office. And we want to understand which students are slipping through that current systems aren't catching; we don't know what we don't know."*
> *—Dr. George Philhower, Superintendent, Eastern Hancock Schools*

Actionable Data Visualizations

Effective data visualizations can reveal individuals or groups of students who need support and can be used to track progress toward student success goals at classroom, school, and district levels. Visual representations—like unified dashboards showing how attendance, behavior, and course performance interact, trend lines tracking student progress over time,

or group-level views that highlight patterns across demographics—transform raw numbers into actionable insights. Yet many platforms overwhelm users with text-heavy reports, complex queries, and technical language that require interpretation from data experts before they can guide action. Even when platforms provide visualizations, they often present data in isolation rather than showing the relationships between different indicators, making it difficult to understand root causes or see the complete picture of student needs. Student success teams need intuitive visualizations that allow them to quickly identify patterns, spot concerning trends, and make informed decisions so they can focus on taking data-informed action.

"There's a huge gap between the data educators input into our systems and the available visualizations. We need intuitive dashboards that differentiate between formative and summative assessments at a glance. Teachers should be able to input grades for individual assignments and generate graphs to compare class performance across assignments. The data system needs to be an efficient tool instead of a barrier or extra step for educators to understand student needs."
—Asha Nidumolu, Teacher on Special Assignment - Equitable Grading Practices, Oakland Unified School District

Intervention Tracking

Student success depends not just on identifying students in need of support but on systematically monitoring interventions. Many of the systems that districts rely on lack the infrastructure to document and monitor the full lifecycle of interventions from initial assignment through ongoing progress monitoring. Intervention assignment and tracking happens at the school level, with teachers, counselors and support staff facilitating mentoring sessions, tutoring progress, family outreach, and other supports. Often, critical intervention data remains siloed in spreadsheets, paper logs, or school-level tools that don't integrate with the district systems used for higher-level decision making. This gap can create communication breakdowns and can prevent teams from building institutional knowledge about which interventions work, making it difficult to demonstrate the impact of student success efforts.

"We're seeing more districts recognize that a comprehensive data platform is a necessity, not a luxury. They desperately want to understand which interventions are actually working. Take attendance interventions—a district might have students in four different support programs but have no systematic way to track impact or know which ones they should scale up or phase out. Even districts with well-organized MTSS frameworks often can't tell you if their interventions are actually making a difference."
—Sarah Singer, Executive Director, Education Strategy, PowerSchool

System Customization

Student success systems reflect each district's unique context, priorities, and approaches, but many commercial platforms offer rigid structures that prevent meaningful customization of elements like data field names, cut score values, and intervention dropdown menus. These limitations force schools to either adapt their processes to match product constraints or create complex workarounds that undermine data integrity. Without the ability to tailor queries, reports, and key metrics to their specific community context, districts struggle to implement cohesive student success strategies that align with their educational philosophy and student population characteristics.

> *"The SIS won't even allow us to add our own interventions if they don't have them included in the state list....So right now it's, quite frankly, a bust. We have our own interventions that we are doing. But we can't track them in the system because they aren't on that dropdown menu."*
> *—Kelly Gandy, Business Information Technology Program, Demopolis* High School

System Usability

The most powerful data system is worthless if the people who need it most can't navigate its complexity. Student success depends on school and district leaders, teachers, and counselors having easy access to relevant data when making critical decisions. Yet too often, edtech platforms are designed primarily for district-level workflows, neglecting the daily realities of school-based staff. This misalignment creates unnecessary barriers: extensive training requirements, multiple clicks to access basic information, and technical expertise needed for simple reports. When a counselor needs to quickly identify students with attendance concerns during a student success team meeting, she can't afford to struggle with complex filters or navigate confusing interfaces. These barriers prevent widespread adoption and consistent use across schools, creating implementation gaps where some staff embrace a tool while others abandon it. When educators must constantly contact IT support or vendors just to complete routine tasks, frustration builds. This often drives staff back to unsustainable workarounds like paper tracking, ultimately undermining the data-informed decisions that directly impact student outcomes.

> *"Even when data systems can talk to each other, there's a bigger issue about helping people digest information in a way that is interpreted for key audiences. We need the right interpretations that can be understood, used, and acted on. And behavioral change is crucial—getting users to actually interact with the implemented solution requires useful and sticky enough systems from a user experience perspective so educators will keep coming back."*
> *—Dr. Alex Casillas, Principal Research Psychologist, ACT's Skills Research and Development team*

Cost Barriers

The financial reality of education budgets often conflicts with the need for comprehensive data systems. Some vendors tier their pricing models, placing critical student success features—such as advanced analytics, comprehensive dashboards, or intervention tracking—in premium packages beyond the financial reach of many districts. Districts frequently find themselves having to decide between paying multiple vendors for partial solutions that don't integrate well, settling for basic functionality, or building in-house solutions that may lack sophistication and sustainability. The resulting financial burden can lead to inequitable access to quality data systems, with resource-rich districts implementing comprehensive solutions while others struggle with fragmented or incomplete tools.

> *"If our district doesn't pay for different types of reporting, then we don't have that functionality. I just realized a couple of weeks ago that the district had decided we no longer need these particular reports, so they let a part of our package lapse."*
> *—Terina Gantt, Principal, Demopolis* High School

Edtech Marketplace Volatility

The education technology landscape can shift rapidly through acquisitions, mergers, and product discontinuations, creating significant uncertainty for districts investing in student success infrastructure. When vendors pivot their strategic focus or sunset critical products, districts must scramble to adapt both their technical systems and the educational workflows built around them. Without guarantee that vendors will continue to support the features that make a platform valuable for a district's specific needs, districts can be hesitant to fully adopt and integrate commercially available systems.

> *"Deep, collaborative, context-informed work is hard to make financially viable. And if we can't walk the tightrope between financial sustainability and deep domain expertise, then even the most mission-aligned efforts won't last. That fragility then shows up on the user end as inconsistency, implementation fatigue … and the cycle repeats"*
> *—Lilian Wu, Data Visualization Analyst, Open Architects K-12*

District-Led Innovation Showcase

In response to these widespread challenges, many districts have begun to develop customized solutions to bridge the gaps between their needs and available commercial offerings. We have identified several District-Led Innovations (DLIs) that demonstrate different approaches to operationalizing student success systems.

These DLIs exist along a spectrum of complexity and scale—from simple, spreadsheet-based tools used at individual schools to sophisticated district-wide platforms that integrate multiple data sources. Some districts have developed these solutions entirely in-house with existing staff, while others have partnered with non-profit organizations, specialized networks, or technical consultants to co-design and implement custom solutions.

To help understand the range of approaches represented, we've organized these examples across three key dimensions that emerged from our analysis:

Technical Infrastructure Requirements

- **Foundational**: Leverages existing basic tools and standard technical capacity
- **Enhanced**: Requires customized configurations and dedicated technical coordination
- **Advanced**: Needs integrated platforms with specialized technical architecture

Implementation Approach

- **In-House**: Built internally, limited external support
- **Partnership**: Developed alongside external partners
- **Externally Developed**: Primarily designed and maintained by an external partner

Scalability

- **School-level**: Single-school or small-scale solution
- **District-level**: Scalable across multiple schools within a district
- **Broadly Replicable**: Adaptable for multiple districts or nationwide usage

School or District	Technical Infrastructure Requirements	Implementation Approach	Scalability
Demopolis High School	Foundational	In-House	School-Level
Lynwood Unified School District	Enhanced	In-House	District-Level
Colorado Springs School District 11	Advanced	Partnership	District-Level
Lowell Public Schools	Advanced	Partnership	Broadly Replicable
New York City Public Schools	Advanced	Externally Developed	Broadly Replicable

The following showcases highlight what districts have built, how they've navigated the development process, and how the resulting solutions reflect their unique contexts and communities. By showcasing these diverse approaches, we aim to provide insights that can inform schools and districts in the process of codifying or refining their own home-grown approaches to student success data and vendors seeking to better understand practitioner needs.

Two of our featured examples, Lynwood Unified School District and Colorado Springs School District 11, were initially identified and developed in partnership with Preva Group as part of their work evaluating on-track solutions in districts with widely-used student information systems and demonstrated investment in student success work. Preva's comprehensive interviews with district staff across multiple roles provided foundational insights into student success approaches, structures, and data systems. We have expanded on Preva's foundation by following up with these districts after another school year of implementation to understand the evolution and impact of their systems.

Our additional showcase districts were identified through our partnership with GRAD Partnership and its extensive networks. Demopolis High School was chosen as a GRAD Partnership Spotlight School for its success in fostering student-centered mindsets in a small, rural setting. Lowell Public Schools/Open Architects and New York City Public Schools/New Visions for Public Schools presented their impressive solutions at the 2025 GRAD Partnership convening.

Demopolis High School

Demopolis High School (DHS) is the sole high school in the Demopolis City Schools district in Alabama. DHS created a tracker using Google Sheets to monitor student progress and facilitate targeted interventions, demonstrating how a small, rural school can build student success systems with foundational tools and internal capacity.

Location	Alabama
Setting	Rural
Students Served	~1,800, including about 575 at DHS
Schools	4 schools, including 1 high school
Key Demographics	50% Black, 42% White, 6% Hispanic/Latinx 50% qualify for free or reduced price lunch
Tech Infrastructure	Foundational: Leverages existing basic tools and standard technical capacity
Implementation	In-House: Built internally, limited external support
Scalability	School-level: Single-school or small-scale solution

Student Success Vision

The DHS vision is anchored in the belief that all students deserve consistent and personalized support to ensure they remain on track for graduation and post-secondary success. They emphasize an inclusive approach to student success, involving all faculty and staff in grade-level teams that include teachers, counselors, administrators, career coaches, and support staff.

DHS systematically identifies students in need of support based on the ABC indicators (Attendance, Behavior, and Course performance), and prioritizes meaningful connections between students and caring adults through long-term mentoring for identified students. Mentors support students beyond academics, noticing what is going on with individual students to deeply understand what they need and connect them to key resources and services.

Watch a video to learn more about DHS' Student Success Teams.

Pain Points

Before implementing their DLI, DHS experienced challenges with **Data Access** and **Cost Barriers.**

Data Access: There was no centralized location for staff from a range of roles to view relevant student data in a timely manner to take action.

- Mentors faced significant challenges accessing real-time data for students who weren't enrolled in their courses. Staff had to contact administrators or other teachers to gather information about students' academic performance, attendance, and behavior issues. This created delays in intervention and made it difficult for mentors to have informed conversations with their mentees.

Cost Barriers: DHS did not have sustainable access to premium features of PowerSchool that would have supported more comprehensive student tracking.

- As in many districts, procurement decisions at DHS occur at the district level, leaving school-level staff with minimal insight or influence regarding platform investments. Additionally, since PowerSchool SIS is provided by the state to all Alabama districts, neither the district nor individual schools have control over the core functionality or available features. This disconnect can create situations where those closest to student needs have insufficient input into technology purchasing decisions.
- As a smaller district, Demopolis must make difficult financial choices, especially in the current economic climate. The district must balance competing priorities across multiple schools with limited resources. As DHS is the only high school in the district, some of their specific needs are not relevant to the district's other schools.

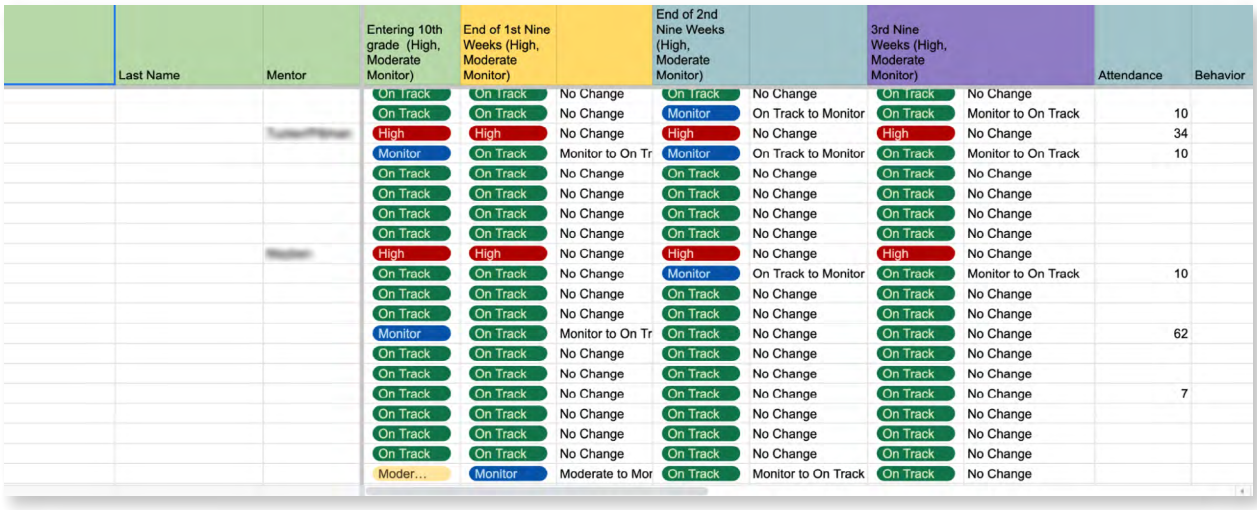
District-Led Innovation

To address these challenges, Demopolis High School developed a custom Google Sheets-based student tracking system that monitors student success indicators over the four-year high school journey. Administrators regularly pull data manually from PowerSchool SIS into the tracker. Key features and functionality of the system include:

- **Comprehensive Student Tracking**: Each grade-level team maintains a spreadsheet that monitors every student's attendance, behavior, and course performance every nine weeks.
- **Risk Classification System**: Students are categorized as "On Track," "Monitor," "Moderate Risk," or "High Risk" based on their ABCs.
- **Progress Monitoring**: DHS staff are able to track changes in student status between reporting periods (e.g., "Monitor to On Track" or "Moderate to High").

- **Historical Data Retention**: Information rolls over from year to year, giving each new grade-level team insight into students' historical patterns.
- **Connectedness Tracking**: Annual observations of student involvement in extracurricular activities to identify students who may need additional connection points.

Tracker in use



	Last Name	Mentor	Entering 10th grade (High, Moderate Monitor)	End of 1st Nine Weeks (High, Moderate Monitor)		End of 2nd Nine Weeks (High, Moderate Monitor)		3rd Nine Weeks (High, Moderate Monitor)		Attendance	Behavior
			On Track	On Track	No Change	On Track	No Change	On Track	No Change		
			On Track	On Track	No Change	Monitor	On Track to Monitor	On Track	Monitor to On Track	10	
		[redacted]	High	High	No Change	High	No Change	High	No Change	34	
			Monitor	On Track	Monitor to On Tr	Monitor	On Track to Monitor	On Track	Monitor to On Track	10	
			On Track	On Track	No Change	On Track	No Change	On Track	No Change		
			On Track	On Track	No Change	On Track	No Change	On Track	No Change		
			On Track	On Track	No Change	On Track	No Change	On Track	No Change		
			On Track	On Track	No Change	On Track	No Change	On Track	No Change		
		[redacted]	High	High	No Change	High	No Change	High	No Change		
			On Track	On Track	No Change	Monitor	On Track to Monitor	On Track	Monitor to On Track	10	
			On Track	On Track	No Change	On Track	No Change	On Track	No Change		
			On Track	On Track	No Change	On Track	No Change	On Track	No Change		
			Monitor	On Track	Monitor to On Tr	On Track	No Change	On Track	No Change	62	
			On Track	On Track	No Change	On Track	No Change	On Track	No Change		
			On Track	On Track	No Change	On Track	No Change	On Track	No Change		
			On Track	On Track	No Change	On Track	No Change	On Track	No Change	7	
			On Track	On Track	No Change	On Track	No Change	On Track	No Change		
			On Track	On Track	No Change	On Track	No Change	On Track	No Change		
			On Track	On Track	No Change	On Track	No Change	On Track	No Change		
			Moder...	Monitor	Moderate to Mor	On Track	Monitor to On Track	On Track	No Change		

Indicator Guidelines

Indicator	Moderate Need		High Need
Attendance	8-10 % absences=3 or more absences		10 % or more absences= 4 or more
Behavior	Step 4 Tiger Tiers or 1 office referral		Step 5 or more than 1 office referral
Grades	1 F		2 or more F's
Connectedness	Student is not involved in any determined extra curricular		Student is not involved in any determined extra curricular

Zoomed in on ABCs and Connectedness

	Mentor	End of 2nd Nine Weeks (High, Moderate Monitor)		Attendance	Behavior	Course Work	Connectednes
	[redacted]	On Track	Monitor to On Track				Band
		On Track	No Change				Band
		On Track	No Change				Band
		On Track	No Change				Band
		On Track	No Change				Band
		On Track	No Change				Band
		Monitor	No Change	28			baseball
	[redacted]	Moder…	Monitor to Moderate	12	2	2-F's	Basketball
	[redacted]	On Track	Monitor to On Track				Cheerleader
		On Track	No Change				Cheerleader
		On Track	Monitor to On Track				Football
		On Track	No Change				Football
		On Track	No Change				Football/Baseb
		On Track	No Change				Softball
		On Track	No Change				Tennis
		On Track	No Change				Volleyball
		On Track	No Change				Volleyball
		On Track	No Change				Volleyball, Soft
		On Track	No Change				Water girl
		On Track	No Change		1		

Intervention Menu

The Intervention Menu is a living document that complements the tracker and is accessible to all staff. When the team identifies and successfully implements a new intervention, it can be added to the document for future reference.

Intervention Strategy	How It Works	Best for Improving…
2x10 Relationship Building	Spend two minutes for 10 consecutive school days developing a positive relationship with a student.	Behavior, SEL
Attendance Incentive Plan	Create an individualized attendance plan with the student and provide positive reinforcement when the student makes progress towards the goal(s).	Attendance
Behavior Improvement Plan	Develop an individualized success plan to address a specific behavioral issue.	Behavior
Check In Check Out (CICO)	At the beginning of each day, meet with the student to review the goals you've set together. Observe the student throughout the day, and talk about whether they were able to meet the goal at the end of the day.	Behavior
Counseling	Refer the student to one-on-one counseling services.	Behavior, SEL
Guardian Meeting	Call a meeting with the student's parents or guardians to discuss a specific concern about the student and generate potential solutions.	Attendance
Graphic Organizer	Use a diagram, chart, or outline to help students arrange information, see the relationships between ideas, and apply the information in assignments.	ELA

Impact on Practice

Structured collaboration process

- Grade-level teams meet every nine weeks for 1–1.5 hours to review the spreadsheet and discuss students' needs one by one using a structured protocol.
- Mentors and advisors use the reports to identify students needing support. Faculty and staff attending grade-level meetings are able to add their own insights into what is happening with these students based on their caring relationships.
- The Student Success Team tracks progress of identified students weekly.

Increased data literacy

- Conversations about student support are anchored in comprehensive data rather than anecdotal observations.
- Staff now have access to students' patterns over time, giving a fuller picture than viewing each semester in isolation allows.

"Having access to a student's historical data allows support teams to track progress and evaluate which interventions have worked—or haven't. This broader perspective gives new team members valuable insight into how to best assist the student's continued growth. Even though a student may be assigned a new mentor each year, effective support must be consistent and ongoing."
—Terina Gantt, Principal, Demopolis High School

Timely intervention cycle

- DHS staff are able to identify struggling students, including those with multiple risk factors, earlier in each grading period rather than waiting for semester failures.
- Students with persistent or severe issues are referred to the Problem-Solving Team for more intensive intervention. The indicator data systematically guides assignments to appropriate support tiers, with mentoring provided to students identified through the data and Tier II and Tier III supports assigned based on level of need.
- Staff are aligned on assigning evidence-based intervention strategies.
- Since implementing this system, student check-ins and proactive supports have increased, DHS has seen a **7% drop in chronic absenteeism** in students, **over 3% change in graduation rate**, and teachers have reported increased job satisfaction and renewed sense of purpose.

Key Insights

Critical Success Factors

- DHS partnered with the Rural Schools Collaborative for training and change management. Targeted support from experts helped generate staff buy-in for the new approach.
- Involving all staff members in grade-level teams created shared ownership of student success.
- Leaders adopted what they called a "Just Start" mentality. This willingness to begin with a manual solution, rather than waiting for the ideal system, showed the rest of the team how important it was to be data-driven.

Recommendations for Other Districts

- Focus on relationships first. Building authentic connections between students and mentors is a critical foundation for intervention.
- Design systems that allow staff to see student history across grade levels and years. This context is critical for understanding students' backgrounds and needs.
- Effective student success systems don't require sophisticated technology, particularly in a tight-knit community where people know and have access to each other. Simpler solutions may be better and more cost effective where the feedback loops are reasonably small and local and the team shares a commitment to keep every student on track.

Lynwood Unified School District

Lynwood Unified School District (LUSD) is an innovative district in Southern California that built a robust early warning system using customized configurations to identify and support at-risk students across school sites, showcasing how to leverage enhanced technical coordination to scale student success practices district-wide.

Location	California
Setting	Urban/suburban
Students Served	~12,000
Schools	19 schools, including 3 high schools
Key Demographics	89% Hispanic/Latinx, 28% English Learners
Tech Infrastructure	Enhanced: Requires customized configurations and dedicated technical coordination
Implementation	In-House: Built internally, limited external support
Scalability	Externally Developed: Primarily designed and maintained by an external partner

Student Success Vision

Lynwood's district-wide emphasis on college- and career-readiness drives the focus for timely, actionable student success reporting. The district has established a comprehensive vision for student success centered on the following:

- Fostering a culture where data empowers rather than evaluates staff and students
- Ensuring equity of access to opportunities and interventions across all student populations
- Monitoring ABC indicators (Attendance, Behavior, Course performance) to identify students in need of support
- Maintaining alignment and open and frequent dialogue between district leadership and school sites
- Building capacity among leaders, teachers, and counselors to use data effectively
- Aligning academic and behavioral supports through systematic tracking

Pain Points

Before implementing their DLI, LUSD experienced challenges with **Data Access** and **Intervention Tracking.**

Data Access: Staff across different roles struggled to access the student data they needed in a timely and usable format

- The Aeries SIS platform could produce reports based on custom queries but was not user-friendly enough for all staff, creating barriers for teachers, counselors, and administrators who needed data to make informed decisions.
- Staff often didn't know where to look to find information about student progress and needs or lacked the technical skills to generate the reports they required.
- Manual processes for accessing and formatting Early Warning Indicator reports consumed valuable time that could have been spent supporting students.
- Different roles needed different data presentations, but the existing system didn't provide role-specific views that matched staff workflows.

Intervention Tracking: The SIS wasn't configured to effectively track student interventions.

- There was no central location for assigning interventions related to attendance, behavior, and academics.
- A lot of intervention data that was being collected in schools was not integrated back into the SIS, creating information silos and lack of cohesion about intervention status, progress, and effectiveness.

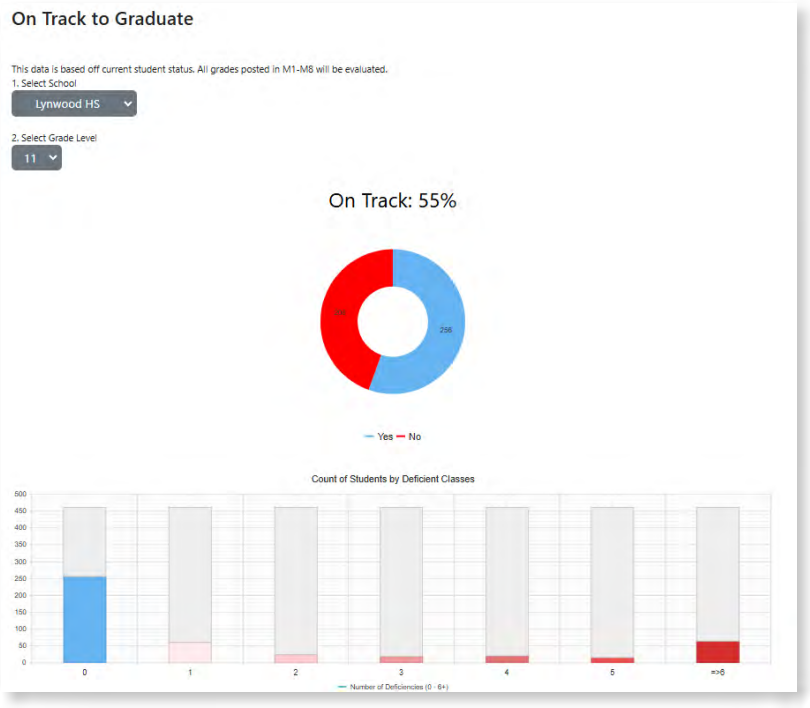
District-Led Innovation

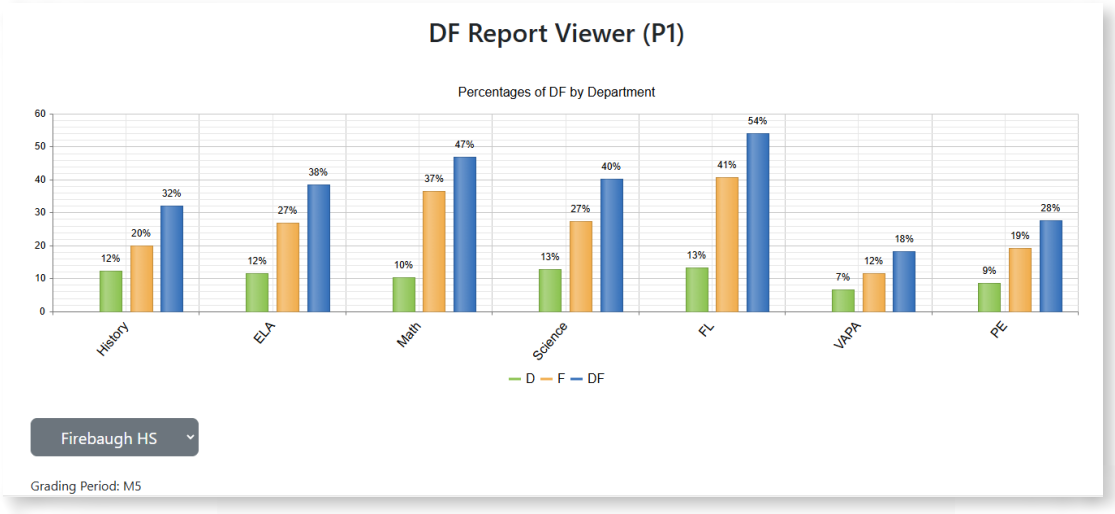
To address these pain points, LUSD leveraged an in-house Secondary Data Lead with software development skills to develop and maintain a suite of custom dashboards and tools. These solutions were developed gradually, based on developing understanding of staff data needs.

While the tools described below are not fully integrated into one single platform, they are strategically designed to work together to support the district's student success work. Each provides role-specific functionality that ensures the appropriate staff have access to the most relevant, real-time, and actionable data for their responsibilities—from teachers tracking academic interventions to counselors managing behavioral supports to administrators monitoring classroom observations.

LUSD Secondary Data Dashboard

- The custom dashboards integrate with Aeries SIS and are managed through local forms and databases, simplifying the front-end user experience and reducing the need for complex back-end data management.
- Dashboards provide accessible role-specific views for district administrators, school administrators, and counselors.
- Pre-built queries are focused on the most relevant data for monitoring and intervention; for example mid-semester D/F alerts at the class period, teacher, and student levels, attendance reporting, and on track to graduate by course completion.





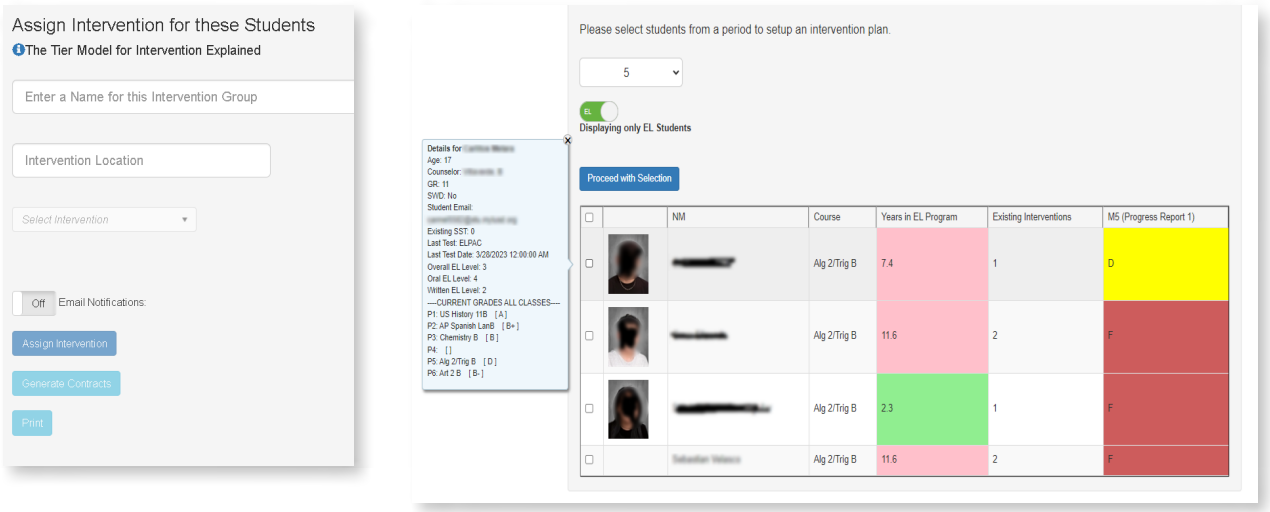
As part of this development, LUSD also created comprehensive intervention systems to systematically track interventions from assignment through monitoring, generating documentation, and syncing data back to the SIS.

Intervention Systems

Academic Intervention and Monitoring for Students (AIMS) Tool

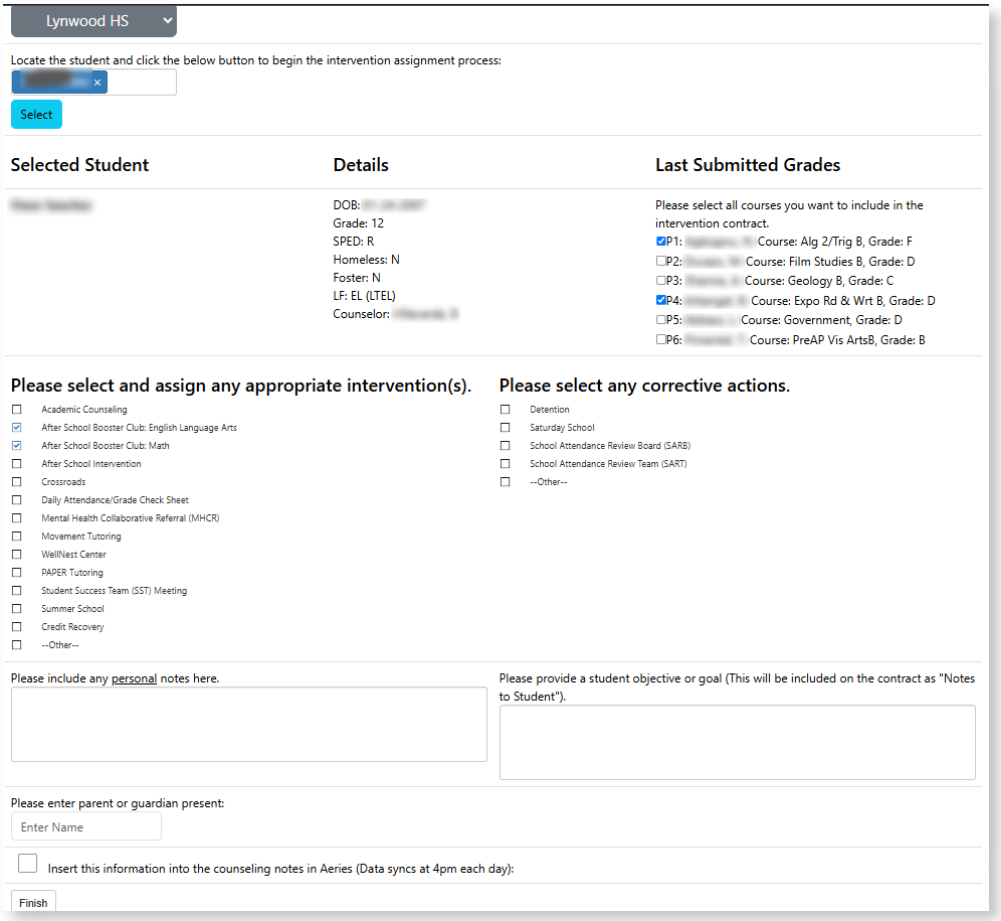
- AIMS is a system for tracking academic interventions assigned by teachers
- The tool identifies EL typology and other notable demographic information for each student, generates PDF contracts for accountability, and sends automated email alerts to intervention coordinators
- It includes an admin-accessible dashboard to keep leaders in the loop about intervention assignment and effectiveness.

Setup student intervention



Counseling Intervention Management module

- Part of the LUSD Secondary Data Dashboard, this module manages both academic and behavioral interventions assigned by counselors.
- This intervention data is automatically synced back into the SIS.
- The module generates PDF contracts for consistent documentation.

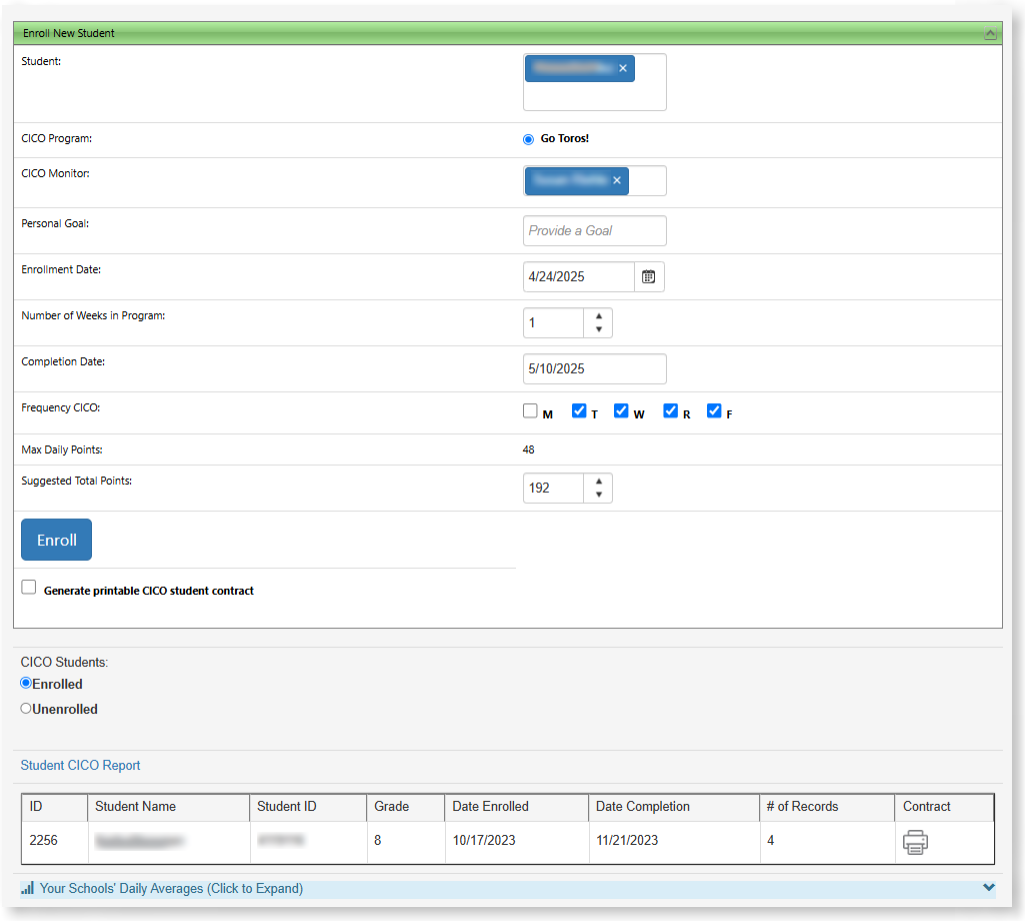


LynPBIS+

- Custom check-in/check-out logging for Positive Behavioral Interventions and Supports (PBIS) students
- Enables counselors, teachers, and support staff to track tiered interventions across classroom, small group, and individual levels

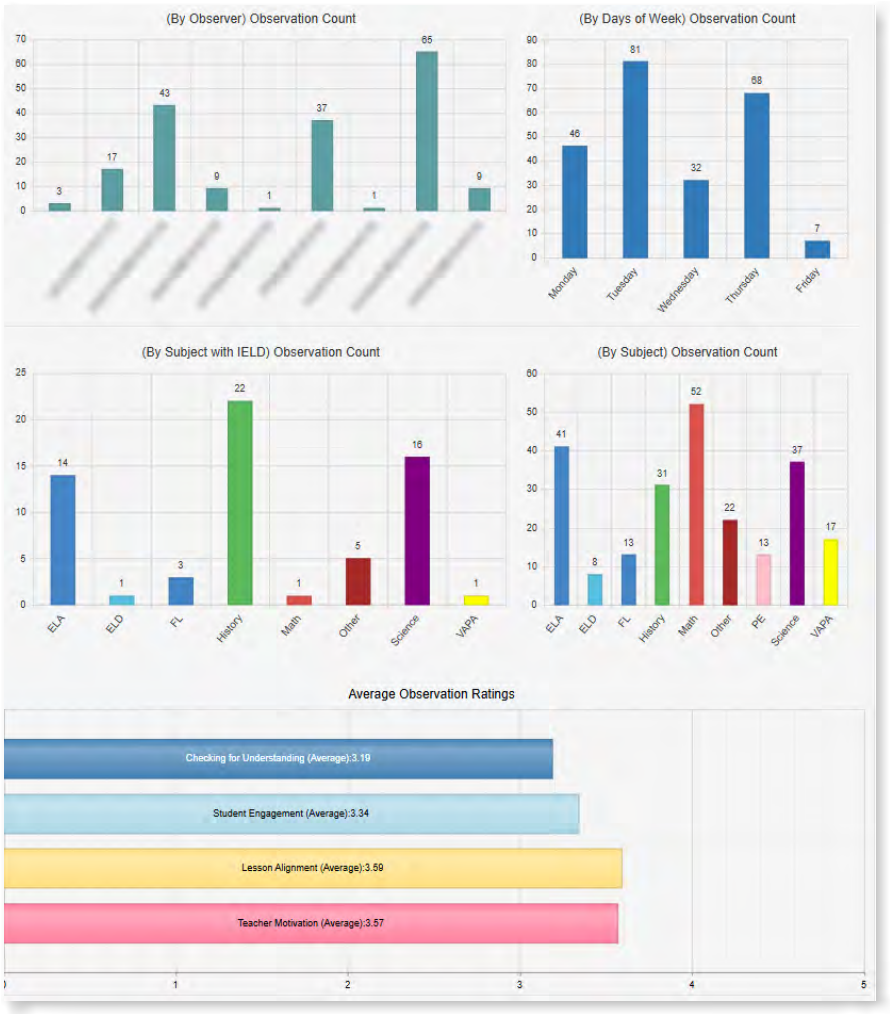
School Dashboard

Tier 3 PBIS Plan (Individual)



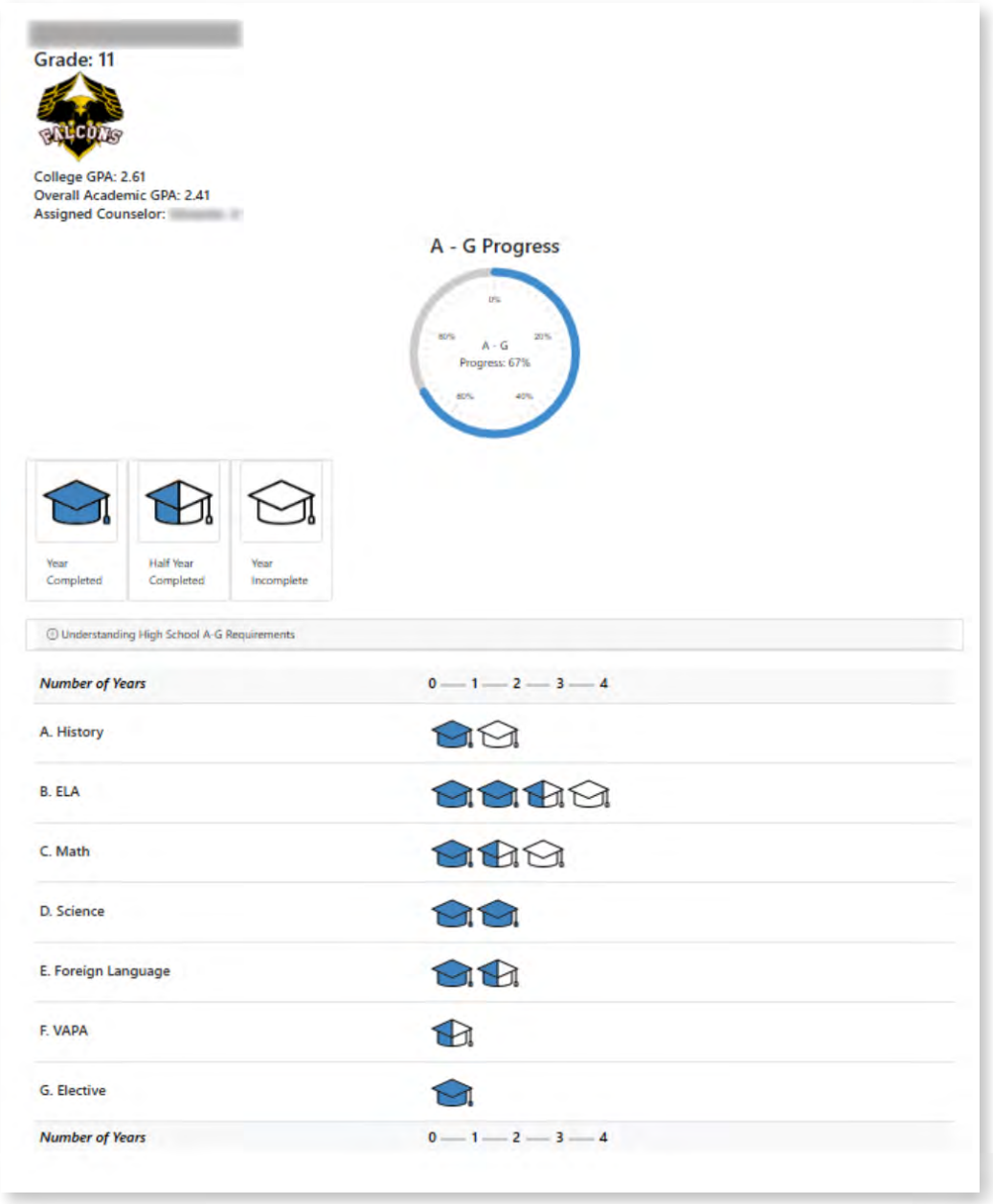
LIVE (Lynwood Instructional Verification and E-tool)

- This tool within the secondary data dashboard allows school leaders to plan and track classroom observations to deliver consistent feedback to teachers.
- Based on D/F reports as indicators of course performance, for example, leaders can identify priority teachers and class periods to observe and support.
- As a Tier 1 intervention, LIVE creates a direct link between teacher observation and student success data, supporting teachers to significantly reduce their D and F assignments.
- This reduction can have broad, positive effects on students and school culture, while also allowing interventions for individual students who have received Ds and Fs to be much more targeted and meaningful.
- Analytics also include observation frequency including by school, observer, time period, and class period. These views, also visible to district-level staff, help leaders identify observation gaps across subjects, grade levels, and school buildings.



CAPS (College/Career Academic Progress for Students)

- This tool provides clear, visual tracking of student progress toward A-G requirements needed for California public university admission.
- It features easy-to-understand graphics that help families interpret sometimes complex college eligibility criteria and increases transparency so families can actively participate in their students' educational planning and college preparation.



Impact on Practice

Lynwood district staff have noticed several positive changes in practice following implementation of the DLIs.

Since implementing their comprehensive data tracking system three years ago, the district has seen a significant **decrease in D/F rates of over 8%** at the high school level.

The system has also facilitated robust intervention tracking, with **593 high school interventions entered** in the AIMS tool during the 2024-2025 school year alone.

Evidence-Based Conversations

- Easy access to clear and aligned data has encouraged more evidence-based conversations among district leaders, counselors, and teachers.

> *"The dashboards have eliminated excuses. When students are struggling, we can't claim to not know."*
> *—Christine Arostigue-Manson, Director, Secondary Education*

Structured Data Review Processes

- Schools use data in structured processes including data reflection, guidance alignment, and student success teams.
- Administrators and counselors have what they need for quarterly data review meetings where they review ABC data, including implications for key subgroups, and plan interventions.
- Teams are able to use meeting time more efficiently through organized data presentation.

Targeted Intervention Management

- Processes for identifying students in need of support are now streamlined.
- Interventions are better aligned with district priorities around college and career readiness.
- School and district level staff feel positive about improved tracking of intervention effectiveness and increased access to intervention details.

Improved Visibility and Accountability

- Aggregated D-F reports by teacher and period increase visibility of classroom performance patterns, enabling efficient group-level interventions rather than scattered individual student approaches.
- District administrators can effectively monitor site administrator observations, creating a clear accountability chain and ensuring visibility across leadership.

- Enhanced monitoring of chronic absenteeism and academic performance issues provides greater visibility into attendance patterns and achievement gaps.

Key Insights

Critical Success Factors

- Pre-building common queries significantly improved user experience and data accessibility for district and school staff in a variety of roles.
- District staff with robust school-based experience were able to thoughtfully frame student success work to the entire team. Data systems do not take the place of this ongoing communication; they support what has been directly communicated.
- Clear guidance on school-based student success structures and staffing made explicit expectations about team members' roles, structure for meetings, escalation paths, and approach to intervention.

Recommendations for Other Districts

- Develop staff capacity by combining pedagogical knowledge with technical skills. While not every district needs an in-house developer, building a team that understands both educational systems and technical troubleshooting is essential for successful implementation.
- Implement tools like CAPS early to keep families informed about student progress. Clear tracking systems particularly benefit families of historically excluded learners by clarifying educational requirements and pathways to success.
- Actively promote new systems to staff through training and demonstration of benefits. Staff who understand and value these tools become natural advocates, increasing district-wide usage and impact.

Colorado Springs School District 11

Colorado Springs School District 11 (D11) is an urban school district in Colorado that worked with PowerSchool to build custom configurations and integrated dashboards demonstrating that a strong partnership and clear vision can lead to a flexible solution that fits a district's unique requirements.

Location	Colorado
Setting	Urban
Students Served	~22,000
Schools	57 schools, including 8 high schools
Key Demographics	44% White, 36% Hispanic/Latinx
Tech Infrastructure	Advanced: Needs integrated platforms with specialized technical architecture
Implementation	Partnership: Developed alongside external partners
Scalability	District-level: Scalable across multiple schools within a district

Student Success Vision

D11's approach to data collection and analysis is rooted in an intentional and strategic approach which gives significant autonomy to schools while maintaining district goals for student success. The district's Future Ready division works closely with other district teams, like the On-Track to Graduate and Education Insights teams, to maintain an early warning system and identify students in need of interventions. Those district teams provide high-quality data to their school counterparts to support student success work, which is driven by school-designed solutions.

Pain Points

Before implementing their DLI, D11 experienced challenges with **Fragmented Data Systems** and **System Customization**.

Fragmented Data Systems: Despite procuring most data tracking tools from a single vendor, Powerschool SIS, there was limited data interoperability.

- PowerSchool did not provide a one-stop shop where they could access all the data required for informed decision making, particularly the ability to pull together a comprehensive story for any individual student.
- The need to pull data from multiple sources proved to be time-consuming and pulled too much on educator capacity.

System Customization: Limitations in the SIS meant that data could not be organized in ways that fit into district processes.

- The SIS had strict rules for labeling and thresholds that could not accommodate district criteria for students in need of support.
- Without the flexibility to set its own standards, D11 could not send the most actionable data to the schools.

District-Led Innovation

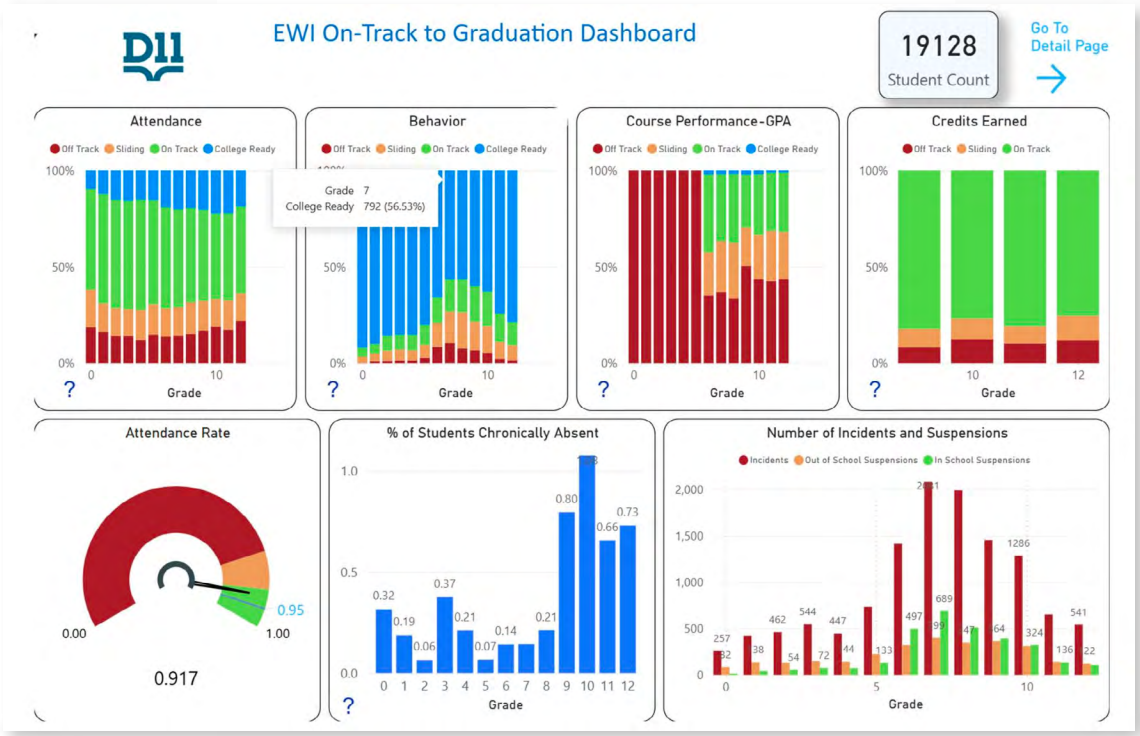
D11 developed custom EWIS (Early Warning Indicator System) dashboards by working with their internal IT capacity in collaboration with PowerSchool. Now, their On-Track to Graduate (OTG) dashboard uses PowerBI to more easily visualize on-track measures based on their preferred criteria.

These tailored dashboards pull together all the data needed to understand a student's experience in the district, including these factors:

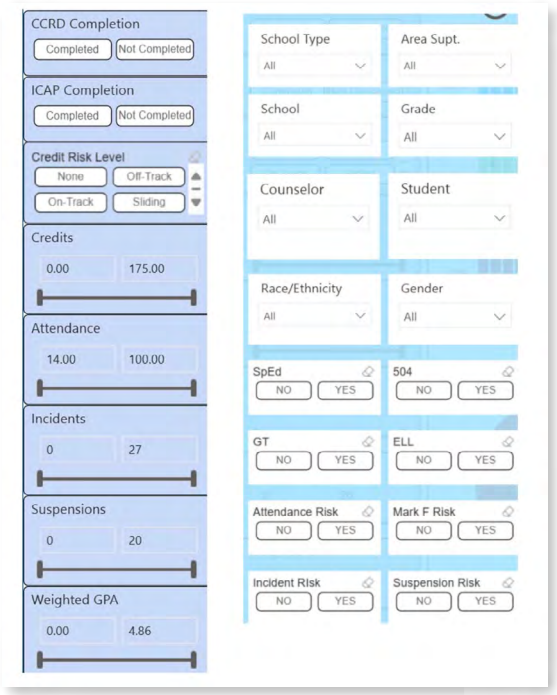
- Attendance—focusing on chronic absenteeism and daily attendance
- Behavior—referrals, incidents, and removal from classroom or school
- Course performance—measured by GPA and credit progress
- Additional data is used to determine other interventions (e.g., MTSS, 504, IEP)

EWIS/Graduation On-Track Summary Page

This main page provides EWI and risk-level summary data for the district, school, or a selected group. The dashboard and reports are interactive with cross-filtering and drill-through capabilities. Filtering persists when moving to the EWIS/Graduation On-Track Detail Page.



Available Filters

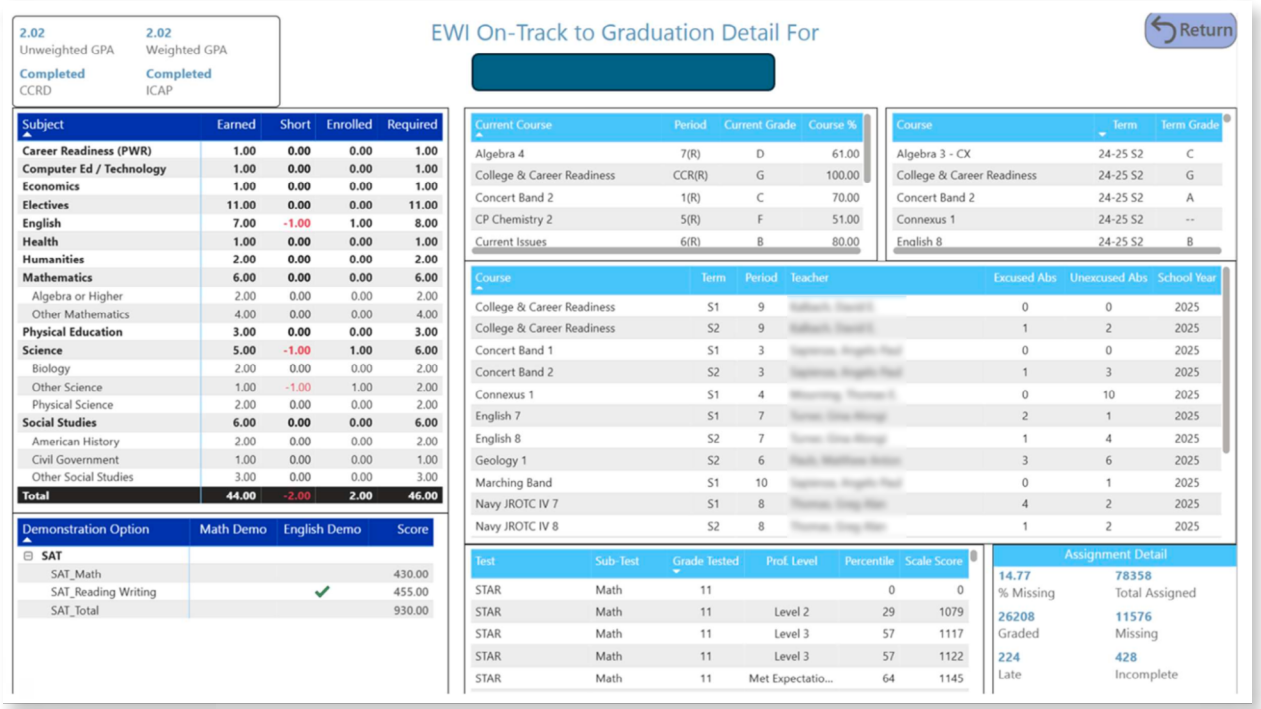


EWIS/Graduation On-Track Detail Page

This view provides detail on the student group selected on the main page. Users can filter, sort, and export tabular information. Users can select a student to access additional detail by clicking "Drill Through to ABC and Grad Detail."

ABC and Grad Detail Page

This view provides additional detail for a selected student including detailed attendance, behavior (incidents), grade (including history), and graduation progress.



Risk Levels/Rubrics

Attendance Risk Levels

Based on Average Daily Attendance for Current Year

College Ready	Greater than 97% attendance rate
On Track	Greater than 90% attendance rate
Sliding (Opportunity)	Missing more than 17 days of school or Less than 90% attendance rate
Off Track	Less than 80% attendance rate or more than 2 absences/month

Behavior Risk Levels

Based on Number of Incidents and Suspensions for Current Year

College Ready	0 incidents / 0 suspensions
On Track	1 Incident
Sliding (Opportunity)	2 or more incidents
Off Track	1 or more suspensions

Course Performance GPA Risk Levels

Based on GPA and Core Course (Math/ELA) Course Performance

College Ready	GPA 3.0 or above and B Average on core courses
On Track	GPA of 3.0 or above
Sliding (Opportunity)	GPA 2.0 - 3.0
Off Track	GPA < 2.0 or 2 or more F's in core courses

Graduation Credit Status Based Upon Credits Completed at the End of Each Term at Each Grade Level

Grade, Semester (End)	Off Track	Sliding	On Track
Grade 9, Semester 1	0-1.999	2-5.999	6 or higher
Grade 9, Semester 2	0-7.999	8-11.999	12 or higher
Grade 10, Semester 1	0-13.999	14-17.999	18 or higher
Grade 10, Semester 2	0-19.999	20-23.999	24 or higher
Grade 11, Semester 1	0-25.999	26-29.999	30 or higher
Grade 11, Semester 2	0-31.999	32-35.999	36 or higher
Grade 12, Semester 1	0-37.999	38-41.999	42 or higher
Grade 12, Semester 2	0-41.999	42-45.999	46 or higher

Attendance Code	Description	Counts As Chronic	Attendance Code	Description	Counts As Chronic
•	Present	No	O	Office	No
A	Absent (Unexcused)	Yes	P	Prearranged	Yes
B	Work Study	No	Q	Went Home III	Yes
C	Counselor/Social Worker	No	R	Runaway	Yes
D	Enrolled in Special Program	No	S	Suspension	Yes
E	Excused Absence	Yes	T	Tardy (Unexcused)	No
F	Field Trip	No	V	Early Completion	No
G	Early Release/Parent	Yes	W	Weather	Yes
H	Timeout to Home	Yes	X	Excused Tardy	No
I	In School Suspension	No	Y	In a Facility	No
J	Truancy Court	Yes	Z	Detention Center	No
K	Classroom Suspension	No	1	Work Release Permit	No
L	Tutored District	No	4	Infectious Disease	Yes
M	SPED ONLY in school no IEP Svcs	No	6	State or District Testing	No
N	Nurse	No	9	Temporary Remote	No

Students are counted as chronically absent if (*Days Absent*)/(*Days Scheduled*) × 100% ≥ 10%

EWI Detail Key

✕ Missing/Not Met/ Unsatisfactory

! Alert/Partially Met/ Approaching

✓ Sufficient/Met/ Satisfactory

Absence Alert	More that 2 absences/month Missing more than 17 days of school for the full year
Suspension Alert	1 or more suspensions and/or mild sustained behavior infractions
Incident Alert	2 or more incidents in the year
Mark F Alert	2 or more Fs in a Math or English course

The D11 team determined criteria for identifying students who would benefit from additional supports, and their custom dashboard allows them to see students fitting that criteria at a glance.

They took a research-informed approach to establishing intervention thresholds, aligning risk levels with research from student success experts at Johns Hopkins University, the Carnegie Foundation for the Advancement of Teaching, and others. This evidence-based foundation led to the development of specific cutoff triggers for risk levels including "Off Track," "Sliding," "On Track," and "College Ready" for certain measures. This approach ensures that interventions are triggered at points validated by educational research, increasing the likelihood of meaningful support for students.

Impact on Practice

Consolidation of Data

- Staff can now develop a holistic picture of any student with a few clicks rather than spending time compiling data from multiple systems, enabling faster and more comprehensive support decisions.
- The ability to drill down to the student level without running multiple reports allows the team to more easily operationalize the conceptual ideas in the MTSS framework.

> *"The connection between what is happening in the big picture to what I need to do in my classroom tomorrow, that through line is there. And that's really the whole goal of MTSS: how do you very quickly zoom out what's happening school-wide, even district-wide, to zoom in, who needs my help tomorrow, and what does that help look like?"*
> *—Sarah Wilson, On Track to Graduate Facilitator, Colorado D11*

School-Based Solutions, Powered by District Data Systems

- Because they prioritized EWI dashboards that provide data to schools, who own intervention decision-making authority, D11 was able to contribute to student success while keeping school-level autonomy.
- Student data across D11 is housed in the same system, but school leaders are restricted to viewing only the data that pertains to their building.

Context-Driven Decision Making

- By creating a system that can respond to district-set criteria, rather than relying on generic vendor-provided cutoffs and thresholds, D11 can more effectively target students in need of support.
- A unified data system allows for apples-to-apples comparisons for student data, which the team has found particularly powerful for middle to high school transition. Being

able to compare eighth grade to ninth grade data in the same system allows for more targeted interventions right when students need the support.

Building Data Literacy through Collaborative Learning

- D11 held site-based training sessions on OTG dashboard where school staff could access their student success PowerBI supports, ask follow-up questions, and provide immediate feedback.
- They also hosted cross-school "data dig" sessions where staff from multiple sites were tasked with using the dashboards to answer specific questions about student performance.
- Monthly Community of Practice meetings, led by student success leads and MTSS team, leverage structured data analysis protocols to bypass assumptions to get to true insights and actionable decision making.

Key Insights

Critical Success Factors

- Strong IT capacity, along with deep partnerships with vendors, enabled development of bespoke systems that target the specific needs of the district.
- School-district feedback loops allowed the district to identify issues with data fragmentation and develop a solution that provided the greatest impact for decision-makers in schools.
- D11 maintains ongoing evaluation of their dashboard effectiveness through regular Community of Practice discussions, focusing on how schools are using PowerBI and other data systems like Panorama to drive student success. D11 also hopes to develop more granular metrics to better understand how staff engage with data tools and the resulting impact on student outcomes. This commitment to measuring and improving the system ensures that the district's data infrastructure will continue to evolve to meet educator and student needs.

Recommendations for Other Districts

- Procuring tools from a single vendor does not necessarily mean those tools will be well integrated. Ask questions about how interoperable tools are as part of the procurement process.

> *"The data itself is fairly easy to get at. What is more important is getting the data in front of the right people and getting it so they can look at it on a consistent basis"*
> *—Kirk Fuss, Programmer II*

- SISs come with preset parameters; if your district requires flexibility in determining its own parameters, it may require a custom solution.
- A strong centralized IT in a district can benefit autonomous schools if effective collaboration structures are in place.
- Hosting cross-functional team meetings and PD sessions empowers decision-making from all perspectives.

Lowell Public Schools / Open Architects

Lowell Public Schools (LPS) is a diverse urban school district in northeastern Massachusetts that has partnered with Open Architects (OA), a data analytics platform that specializes in building practice-informed tools that translate complex education data into actionable insights. Together, LPS and OA developed a data ecosystem that empowers staff across roles to engage in timely, student-centered intervention.

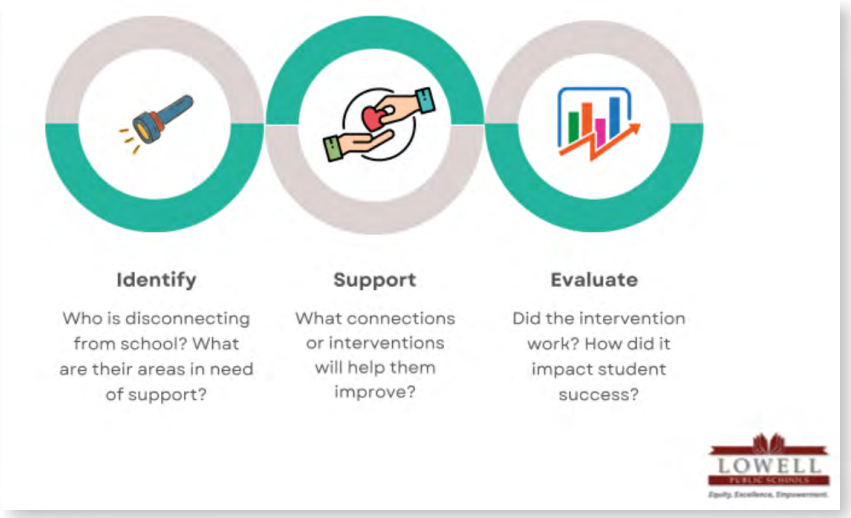
Location	Massachusetts
Setting	Urban
Students Served	~15,000
Schools	28 schools, including 3 high schools
Key Demographics	42% Hispanic/Latinx, Asian 26%, White 20%, Black 8%, over 70 languages spoken, 83% designated high needs
Tech Infrastructure	Advanced: Needs integrated platforms with specialized technical architecture
Implementation	Partnership: Developed alongside external partners
Scalability	Broadly Replicable: Adaptable for multiple districts or nationwide usage

Student Success Vision

Nearly 83% of LPS students are designated high needs, meaning they qualify for additional educational resources including free/reduced price lunch, special education services, and services for multilingual learners. In this context, LPS emphasizes a people-first approach to student success, with a strategic focus on using data trends to identify students needing support and implement meaningful interventions. Their vision prioritizes on-the-ground strategies tailored to specific student populations, ensuring technology supports, rather than drives, timely decision-making by educators.

The Student Success Team meets at least quarterly to identify students in need of support based on data which Indicator Teams meet more regularly on content-area intervention. Ultimately, the goal is connecting students to effective interventions that address their individual needs and keep them on track for academic success and graduation.

This vision aligned naturally with Open Architects' practitioner-centered approach. Founded by former district and public-sector leaders, OA brings a deep understanding of the daily challenges educators face. This shared commitment to putting on-the-ground needs first made OA an ideal partner for LPS.



Pain Points

Before implementing their work with OA, LPS experienced challenges with **Data Access** and **Actionable Data Visualizations**.

Data Access: Critical student data and school-level trends were restricted to a small number of staff members.

- Limited access prevented some educators and support staff from gaining insights that could inform their work with students.
- Staff were also concerned that they could not access necessary data in a timely manner.

Actionable Data Visualizations: LPS wanted a way to transform raw student data into clear and consistent visual representations that staff could easily understand and act upon.

- Schools and interventionists were creating their own ad-hoc tiers to identify students at risk (e.g., on attendance or behavior), but this system was subjective and siloed and lacked views of overall risk, meaning students, often those with emerging or moderate needs, were being missed.
- Without visual cues to highlight patterns and trends, it was difficult for teachers and support staff to quickly identify which students needed support and what specific interventions would be most effective.

District-Led Innovation

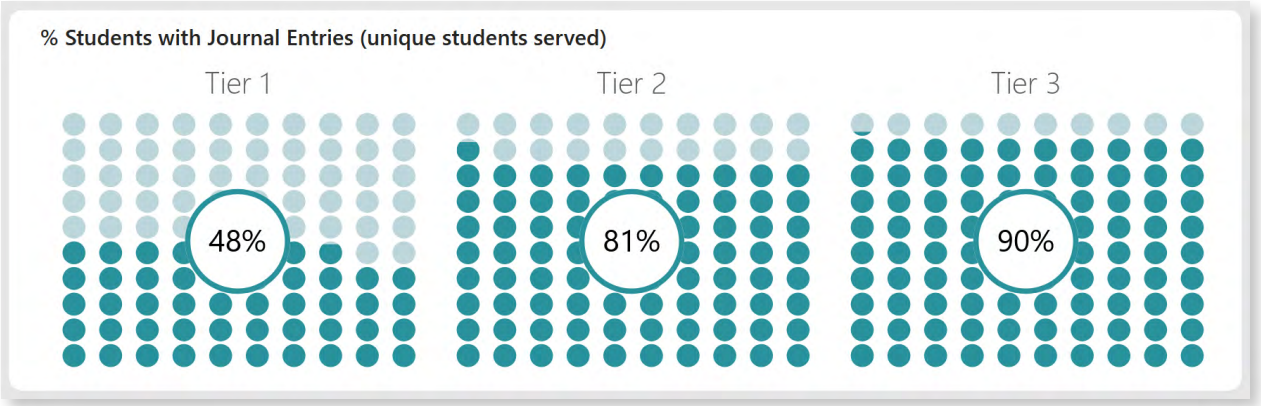
LPS partnered with OA to address these challenges, designing solutions that prioritize school staff needs and capabilities. Key features and functionality of the tools include:

- **Simplified but Robust Data Dashboard:**
  - The solution consolidates data in one accessible location while maintaining a clean, uncluttered interface.
  - The intuitive design presents essential information at a glance while allowing users to explore details as needed.
  - Risk levels are recalculated nightly with thresholds tailored by grade level for developmental relevance.
  - Color-coded risk tiers (Tiers 1–3; low, medium, or high risk) incorporate both traditional ABCs (attendance, behavior, and course grades) and measures of wellbeing (agency, belonging, connectedness).

- **Visual Risk Identification System:**
  - Based on logic developed through conversations with school staff about high-risk factors they observe in students, the system uses color-coded flags as clear visual indicators that immediately draw attention to students requiring support.
  - The system highlights intervention needs without requiring extensive technical knowledge on the part of school staff.
  - Extensive filters allow educators to slice the data by grade, demographic, support touchpoints, and more, informing outreach and resource alignment.

Current Period Risk Tier	Chronic Abs Risk Pts	Incident Risk Pts	Failed Eng. Risk Pts	Failed Math Risk Pts	CY # Absences	CY # Behavior Inc.	Most Recent iReady ELA	Most Recent iReady Math	MCAS ELA	SGP	Scaled Score	MCAS Math
Tier 1		1			9.00	6.00	Mid or Above Grade ...	1 Grade Level Below	PM	63	479	PM
Tier 1					2.00	1.00	1 Grade Level Below	3 or More Grade Lev...	NM	78	461	PM
Tier 3	2	1			34.00	5.00	1 Grade Level Below	3 or More Grade Lev...	PM	90	479	NM
Tier 1					11.00	0.00	1 Grade Level Below	1 Grade Level Below	PM	90	498	PM
Tier 1					10.00	0.00	1 Grade Level Below	1 Grade Level Below	PM	73	477	PM
Tier 2		1		1	12.00	5.00	3 or More Grade Leve...	3 or More Grade Lev...	NM	5	441	NM
Tier 1					3.00	0.00	Mid or Above Grade ...	Mid or Above Grade ...	M	18	508	E
Tier 1				1	1.00	3.00	Mid or Above Grade ...	3 or More Grade Lev...	PM	5	486	PM
Tier 1					5.00	0.00	Mid or Above Grade ...	1 Grade Level Below	PM	19	494	PM
Tier 1					8.00	0.00	1 Grade Level Below	1 Grade Level Below	PM	95	486	PM
Tier 1			1		14.00	0.00	3 or More Grade Leve...	1 Grade Level Below	NM	46	464	PM
Tier 1					0.00	0.00	Early On Grade Level	Mid or Above Grade ...	M	88	506	M
Tier 1					14.00	0.00	1 Grade Level Below	1 Grade Level Below	PM	56	481	PM
Tier 2			1	1	8.00	2.00	3 or More Grade Leve...	3 or More Grade Lev...	NM	29	464	NM
Tier 1					0.00	0.00	2 Grade Levels Below	Early On Grade Level	PM	72	482	PM
Tier 1		1			2.00	13.00	3 or More Grade Leve...	3 or More Grade Lev...	NM	24	443	NM
Tier 1					7.00	0.00	3 or More Grade Leve...	3 or More Grade Lev...	NM	18	448	NM
Tier 1					6.00	0.00	Mid or Above Grade ...	Mid or Above Grade ...	M	70	518	M

- **Student Connectedness Visualization:**
  - This waffle chart visualization displays each student as a tile, clearly distinguishing between students who have a known point of connection (darker dots) and those without (lighter dots).
  - Connected students show both natural connections (through sports or extracurriculars) and those with existing journal entries or who have already been assigned interventions.
  - Unconnected students are deliberately highlighted to draw attention to students who have not yet received specific support.
  - Visual segmentation by risk level allows intuitive tracking toward connection goals (e.g., reaching 90% connectedness for Tier 3) and focused engagement efforts.
  - The interactive display allows filtering by intervention type, grade level, or teacher, generating contact info and actionable checklists for follow-up.



Impact on Practice

"The platform has completely elevated our ability to see students' level of risk as it changes real time—across schools, districts, and, most powerfully, at the individual student level. We can now identify who's disconnecting and respond with targeted, organized, and efficient support. Prior to this, school teams needed to manually run cumbersome reports that required additional sorting and calculation to determine risk tiers, an impracticality which limited the use of multi-tiered-support systems. Often, students in Tier III risk would get lots of support while students in Tier II risk would fly under the radar because their lower-grade disconnection wasn't as easily apparent. Thanks to the ABC risk tiers, schools are now able to organize their support in real time with just a few simple clicks."
—Dr. Lauren Campion, Director of Student Resources, Lowell Public Schools

Since beginning their partnership with OA, LPS has observed decreases in chronic absenteeism and dropout rates and an improvement in graduation rates. They have also identified the following positive changes in practice:

- Staff now have access to clear, intuitive visualizations that highlight students needing support without requiring extensive data analysis skills.
- The color-coded system enables quick identification of students at various risk levels, allowing for more timely interventions.

Key Insights

Critical Success Factors

- LPS understands the ABCs as symptoms of disengagement rather than causal factors. Their approach prioritizes these research-backed indicators over demographic classifications or state-mandated categories that can complicate analysis.
- By focusing on clear engagement patterns, staff can more efficiently identify students who need targeted intervention and direct resources where they'll have the greatest impact. Progress can then be monitored over time to assess whether those interventions are having the intended effect.

> *"A lot of times when people think about data visualization, they think that they have to do something fancy. However, we really need to think about how someone is using that data … You want something that is clear, that's easy to read, that's well-defined so that it's showing you what needs to immediately draw your attention. Once you have that, the rest of the visuals and tools should help you dig deeper and figure out your next steps."*
> *—Lilian Wu, Open Architects*

- Prioritizing user needs over technical complexity and engaging end users throughout the design process resulted in a usable system that addressed real-world challenges faced by staff.
- Combining strategic direction from district leadership with technical expertise from Open Architects created a solution tailored to LPS's specific context. A strong partnership and ongoing feedback loops means the platform can continuously evolve as more needs are surfaced.

Recommendations for Other Districts

- Focus on creating visualizations that clearly communicate essential information without overwhelming users. School staff are the ones implementing interventions and making decisions based on the data; if they can't easily interpret it, even the most sophisticated system will fail to improve student outcomes.
- Customization is essential. Include the staff who will be using the system in the design process to ensure relevance and usability of dashboards and tools.

New York City Public Schools / New Visions for Public Schools

New York City Public Schools (NYCPS) is the largest public school system in the United States, serving approximately 850,000 students across more than 1,600 schools. New Visions for Public Schools is a nonprofit organization that has dramatically scaled its technical capacity, evolving from a small team of developers supporting a handful of schools to providing the Portal platform, which is available to all NYCPS schools. This transformation reflects both the growing demand for their solutions and the organization's commitment to addressing systemic data infrastructure challenges across the entire district.

Location	New York
Setting	Urban
Students Served	~850,000
Schools	1,600 schools, including over 400 high schools
Key Demographics	42% Hispanic/Latinx, 20% Black, 19% Asian, 16% White 14% English Learners, 21% receive special education services, 73% qualify for free or reduced price lunch
Tech Infrastructure	Advanced: Needs integrated platforms with specialized technical architecture
Implementation	Externally Developed: Primarily designed and maintained by an external partner
Scalability	Broadly Replicable: Adaptable for multiple districts or nationwide usage

Student Success Vision

After nearly two decades of steady graduation rate increases, New York City's school system now faces urgent challenges that threaten this positive trajectory. The combination of historically high chronic absenteeism following the pandemic and the end of COVID-era Regents Examination waivers creates a need for more coordinated, data-informed interventions across NYCPS.

New Visions addresses this challenge by grounding its student success work in structured routines that occur at critical decision points throughout the year—graduation planning, course scheduling reviews, and marking period check-ins. By supporting ~80 schools to engage in these routines simultaneously, New Visions amplifies consistent practices across

all participating schools. This coordinated approach is particularly powerful in a system as large and diverse as NYCPS.

Pain Points

Before working with New Visions to implement the Portal—the New Visions custom-built student success platform—many high schools in New York City experienced challenges with **System Customization**, **System Usability**, and **Intervention Tracking**.

System Customization: Previous systems were not tailored to reflect the state- and school-specific expectations and requirements for student progress.

- Schools were not able with previous tools to indicate when they offered specific courses or expected students to pass certain exams, making it difficult to accurately track and flag if students were genuinely off-track for graduation.
- They also lacked the ability to incorporate New York state-mandated Regents Examination requirements, which differ by diploma type and are critical for graduation but offered only at specific times during the year.

System Usability: The complexity of previous data systems prevented staff from accessing key information when making time-sensitive decisions about student support.

- Existing platforms disrupted natural workflows, requiring staff to click through multiple screens and run complex reports to piece together a complete picture of student needs.
- The cumbersome nature of these systems meant critical decisions were often delayed or made without complete information, leading to missed opportunities for intervention.

> *"Critical student data alerts often get lost in our district's information systems. By the time I could review it, it was often too late to address issues like failing grades that then became permanent transcript failures, or attendance drops that led to chronic absenteeism."*
> *— Devon E, Principal*

Intervention tracking: There was no systematic way to track the full intervention lifecycle and evaluate effectiveness of interventions.

- Schools struggled to connect specific interventions (like tutoring or mentoring) with measurable student outcomes (like improved grades or attendance).
- Staff had limited visibility into whether students assigned to interventions were actually participating in them.
- Without clear connections between interventions and outcomes, schools couldn't effectively determine which support strategies were working and which weren't.

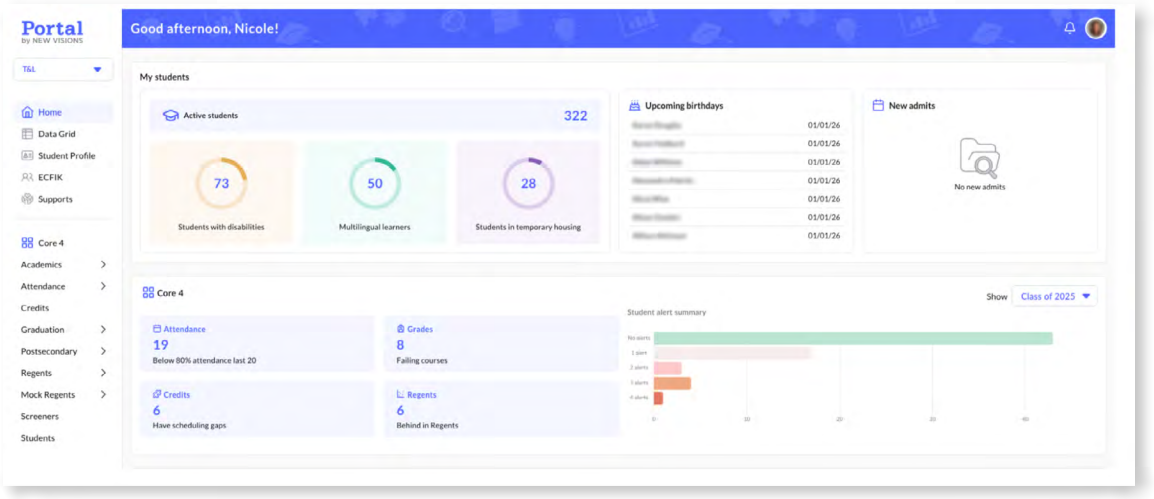
District-Led Innovation

The Portal

Based on the unique challenges, needs, and lived experience of practitioners in New York City, New Visions developed the Portal, a student planning and school management tool that uses data to highlight groups of students needing attention, monitors whether or not an action has been taken to support those students, and helps schools understand whether or not those actions improved the outcome they were designed to improve.

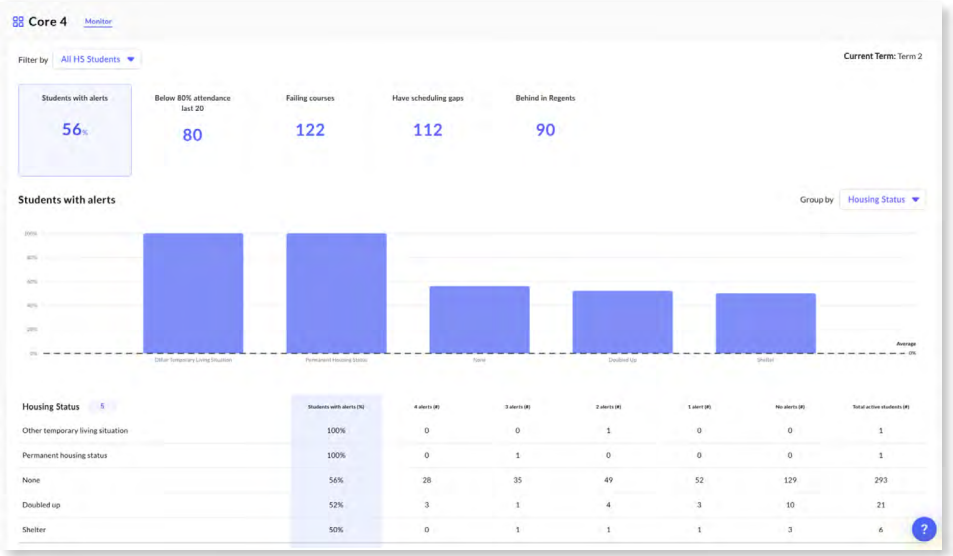
School Homepage

The Portal's homepage provides a simple "at-a-glance" dashboard.



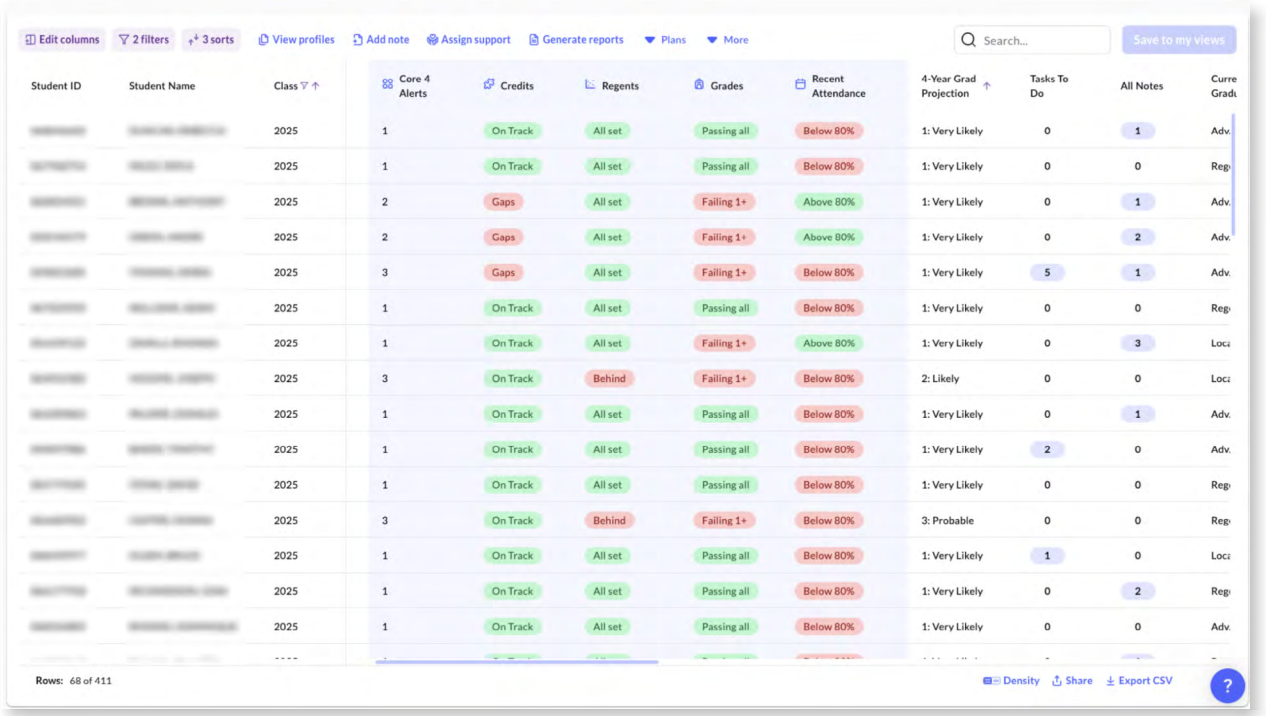
School Dashboard

This view allows schools to hone on in specific subgroups of students (for example, grouped by housing status).

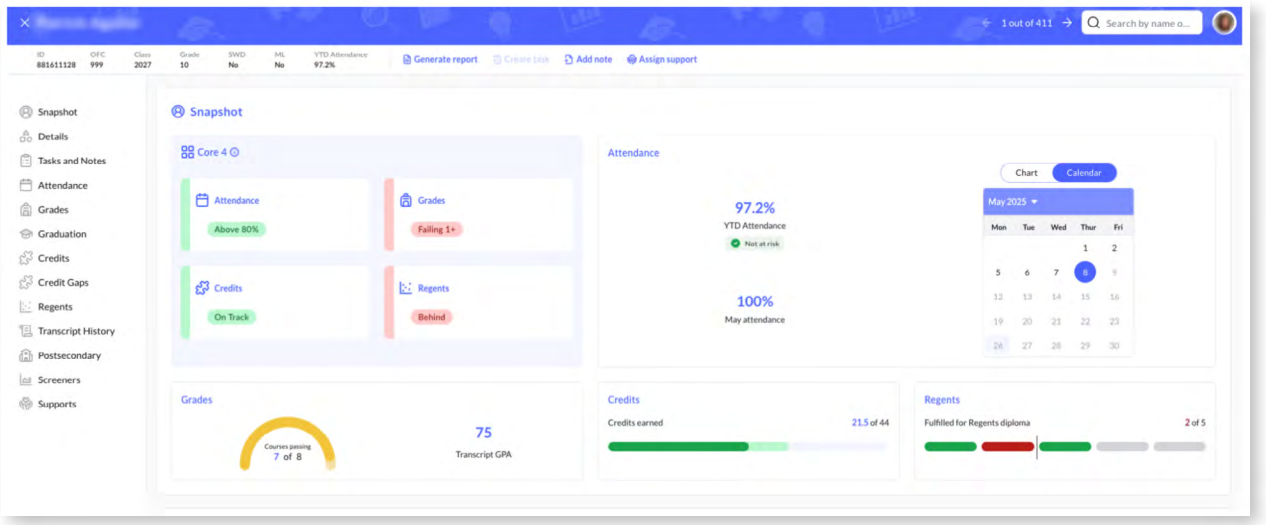


The Data Grid

This spreadsheet-like view allows schools to sort and filter the data, take bulk planning actions, and create custom data views.



Student Profile

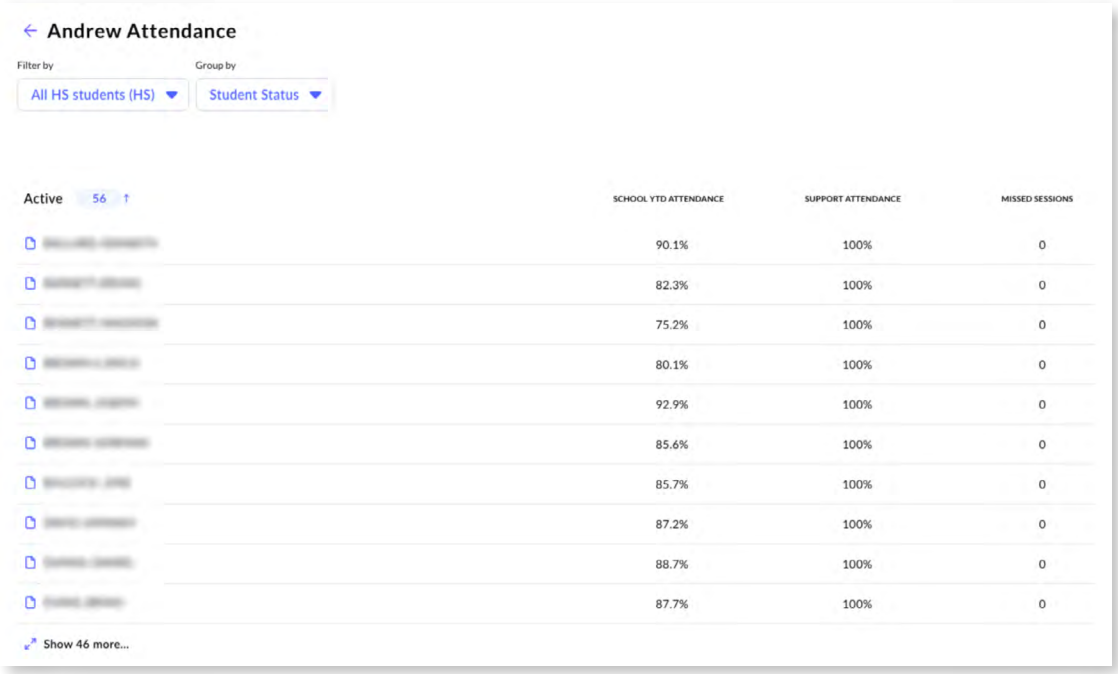


Core 4

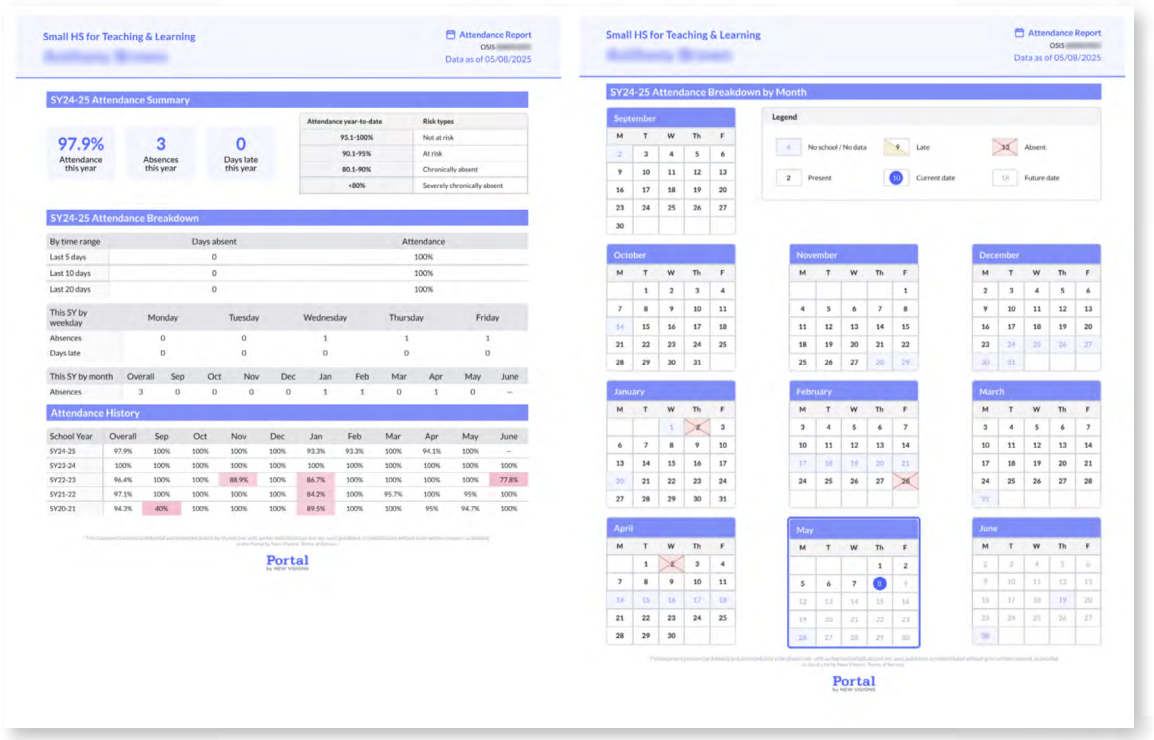
Core 4 is functionality in the Portal to help schools monitor graduation progress. If a student has one or more alerts, the Portal will help educators take action to support the student. Core 4 alerts include:

- **Attendance:** students with less than 80% attendance in the last 20 days (missing 4+ of the last 20 days)
- **Credits:** students behind in credits needed for graduation
- **Grades:** students failing one or more courses
- **Regents:** students behind in Regents needed for graduation

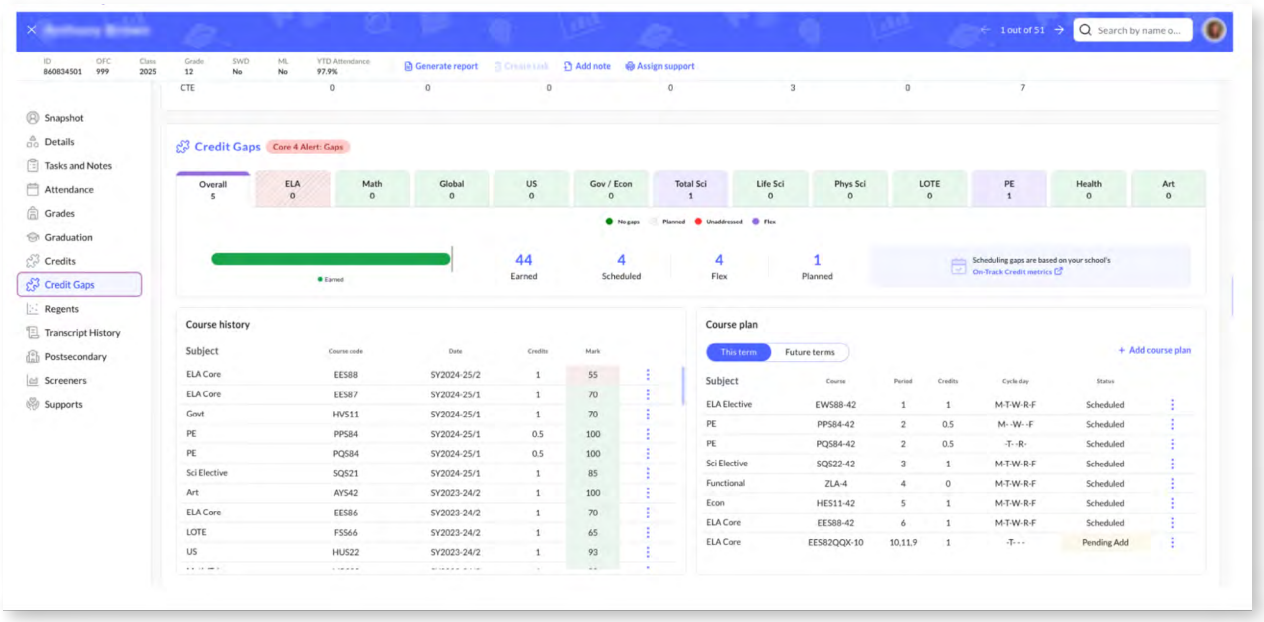
Attendance: For students flagged for attendance concerns, schools can add a note to capture qualitative information, generate a PDF with a summary of the student's attendance to help inform a conference with the student and family, and assign the student to a structured intervention (e.g., mentoring).



Attendance PDF Report

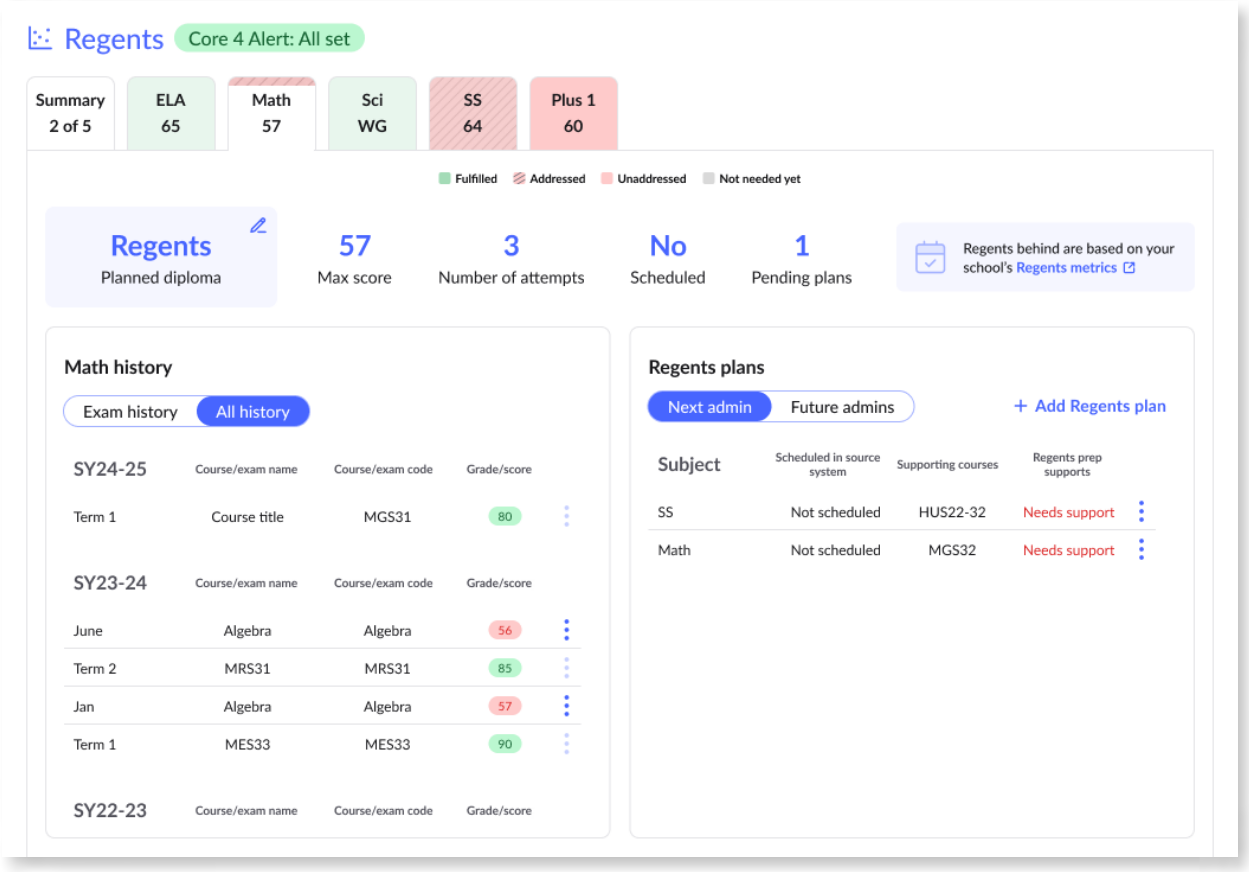


Credits: If a student shows a credit alert, the Portal includes the option to add a scheduling plan to either resolve the gap in the current term or in a future term. Future term plans are typically made when the course is either not offered during the current term or the student doesn't have room in their program for additional courses or swaps.



Grades: When a student has a grades alert, the school can use the Portal to assign that student to some type of academic support (e.g., tutoring) and can take attendance for the assigned intervention. This functionality helps schools easily see if the student is currently participating and evaluate if, after receiving intervention, their grades have improved from one marking period to the next.

Regents: A Regents flag means that a student has not yet passed an exam needed to be on track for graduation. To address these alerts, schools use the Portal to schedule the student for an upcoming or administration of the exam. In addition, if a student is scheduled for an exam but not yet enrolled in an aligned course, the system will flag this inconsistency, enabling schools to strategically assign the student to appropriate support for exam preparation. Below is an example of how that looks in the student profile.



Impact on Practice

Users have shared that the tools save time and help them focus on the relationships and intervention actions that matter for students. NYCPS schools with higher usage of the Portal have outpaced schools who do not use it in attendance, Regents, and graduation metrics.

> *"The Portal and Core 4 have been a game-changer in how I support my students. Having immediate access to a holistic view of each student—their academic performance, attendance records, and even assessment data—allows me to identify potential challenges and intervene proactively. Instead of relying on various systems and time-consuming data collection, I can now quickly pinpoint students who might need additional support, whether it's academic counseling, social-emotional resources, or college and career guidance. This efficiency allows me to spend more quality time directly engaging with students, developing personalized plans and connecting them with the right resources at the right time. The Core 4 features have truly empowered me to be a more effective advocate for my students' overall well-being and success."*
> *—Stephen B., High School Guidance Counselor*

Prevention-Focused Mindset

- Counselors and support staff can now visualize each student's multi-year graduation pathway before finalizing course schedules, identifying potential credit shortfalls before they occur. This forward-looking capability ensures students are enrolled in required courses at optimal times.
- The Portal's attendance tracking has transformed chronic absenteeism response by automating early identification of concerning patterns. This systematic approach helps schools address attendance issues before they significantly impact academic performance.

Data-Informed Intervention Planning

- The Portal has transformed how educators respond to student needs by providing actionable alerts and structured intervention pathways. School staff now have a systematic process for addressing key graduation risk factors, moving from reactive to proactive support.
- The ability to both assign specific academic interventions and track student participation and attendance in these support sessions within the Portal creates a closed-loop intervention system. Now staff can assess if intervention participation leads to improvement, allowing for targeted adjustment of support strategies based on effectiveness data.

- By centralizing intervention documentation, the Portal supports improved coordination among different staff members working with the same students. Counselors, teachers, and administrators have visibility into all interventions a student is receiving, creating a more coherent support experience and ideally preventing duplication of efforts or gaps in service.
- NYCPS schools with higher usage of the Portal have outpaced schools who do not use it in attendance, Regents, and graduation metrics.

Key Insights

Critical Success Factors

- User-Centered Design: Involving NYCPS educators and support staff throughout the design process ensured the Portal addressed real workflow needs rather than just administrative priorities.
- School Customization: By allowing schools to configure when specific courses are offered and when students are expected to pass certain Regents exams, the system generates alerts based on each school's unique academic sequence.
- End-to-End Intervention Tracking: Building comprehensive workflows that connect identification, assignment, documentation, and outcome measurement enables evidence-based decision making.
- Task-based Training: Rather than overwhelming staff with all features at once, training was integrated with relevant seasonal tasks, making it more approachable and immediately actionable.
- Ongoing Support Infrastructure: A dedicated Portal Support Team and in-app chat feature ensure users receive timely assistance.

Recommendations for Other Districts

- Focus on Prevention First: Implement systems that flag potential graduation obstacles before they occur, as preventive action requires fewer resources than remediation.
- Build Closed-Loop Workflows: Track the full cycle from alert to intervention to outcome measurement to avoid accountability gaps.
- Prioritize Usable Systems: Design around actual staff workflows rather than accountability metrics; simpler systems that address core functionality get used consistently.

Cross-Cutting Insights: Lessons from District-Led Innovations

Across the diverse DLIs highlighted in the showcases, several patterns emerge that can inform other districts' approaches to student success data and technology.

What Works Well

Integrating Research-Based Frameworks

Districts that ground their DLIs in research-based frameworks can achieve meaningful outcomes. For example, D11 established intervention thresholds based on foundational student success research, and LPS aligned its tools with evidence-based, on-track indicators. These tools go beyond theory to apply the research within tools to ensure that data triggers appropriate interventions.

Building Cross-Functional Teams

Successful implementation requires collaboration across technical and instructional domains. For example, LUSD leveraged a Secondary Data Lead with both software development skills and educational expertise, while LPS engaged external data visualization partner Open Architects, which is grounded in a practitioner perspective. These collaborations bridge technical possibilities with educational realities.

Prioritizing Educator Workflow Integration

Successful DLIs seamlessly integrate into educators' existing workflows rather than disrupting them. For example, New Visions' Portal provides NYCPS with task-based tools aligned with educators' yearly responsibilities while LUSD's Secondary Data Dashboard pre-builds common queries to eliminate technical barriers for its users. When data systems complement rather than complicate daily work, they are more likely to be adopted by staff at all levels.

Visualizing Data for Immediate Action

Effective visualizations can transform complex data into actionable insights. For example, LPS's color-coded risk tiers immediately draw attention to students requiring support, while DHS's spreadsheet-based tracking system displays student status changes over time. These visual cues enable educators to identify patterns and opportunities for action without extensive data analysis skills.

Leveraging Pattern Recognition for Group-Level Interventions

For sustainability, student success teams need to look beyond individual case management to identify meaningful student groupings for strategic interventions. For example, LUSD's aggregated D-F reports by teacher and class period enable administrators to shift from scattered individual supports to targeted classroom-level intervention and LPS's color-coded risk tiers help staff quickly identify not just individual students needing support, but patterns across classrooms and grade levels. This approach enables schools to ask strategic questions like "Which interventions work best for students with similar risk profiles?" rather than treating each struggling student as an isolated case.

Supporting the Full Intervention Lifecycle

The most impactful systems track not just student status but all phases related to intervention management. For example, New Visions' Portal connects identification to action by tracking whether assigned supports actually improve targeted outcomes, and LUSD's AIMS tool and Counseling Intervention Management module document intervention assignments and monitor participation and outcomes. These solutions enable evidence-based decisions about intervention effectiveness.

Pitfalls to Avoid

Assuming One-Size-Fits-All Criteria

Districts like NYCPS and D11 agreed that vendor-provided default cutoff points didn't align with their local requirements and student populations. DLIs allow customization of risk indicators and intervention triggers based on local factors, course offerings, and graduation requirements.

Overcomplicating User Interfaces

Districts consistently mentioned that complex interfaces discourage use. Simple solutions, like DHS's spreadsheet-based tracking system, that prioritize ease of use may be easier to stand up and widely implement than more sophisticated systems. However, DHS manually pulls data from their SIS and transposes it into spreadsheets, a process that takes several hours per grade level every nine weeks. For districts already stretched thin, this time investment may be unsustainable, especially when staff could be directly supporting students instead.

Underestimating Manual Process Burden

While simple tools can drive adoption, districts must carefully consider ongoing maintenance requirements. For example, DHS manually pulls data from their SIS and transposes it into spreadsheets, a process that takes several hours per grade level every nine weeks. For

districts already stretched thin, this time investment may be unsustainable, especially when staff could be directly supporting students instead.

Neglecting School-Level Autonomy

Schools need to feel included in decision-making processes and have ownership over their student success initiatives, rather than having solutions imposed from the top down. Districts like D11 found success by balancing centralized data infrastructure with school-level decision-making authority. Their approach provides high-quality, consistent data while preserving schools' autonomy to design and manage interventions that fit their specific context and student needs.

Sustainability Considerations

Data Quality and Security

Long-term sustainability of any student success data solution depends on continually improving data quality since problems arise when data is not entered or entered incorrectly. Several DLI examples demonstrate promising approaches: LUSD built validation protocols into their custom dashboards to catch data entry errors, while D11's partnership with PowerSchool enabled them to establish data governance protocols that ensure consistent coding across their system. Districts should consider processes for regular data audits, clerical staff training, and validation protocols that maintain data integrity over time. Critically, districts developing their own solutions may also lack the infrastructure for robust data security, backup systems, and disaster recovery that commercial vendors provide as standard features.

Technical Capacity and Knowledge Management

Since staff turnover is inevitable in education, districts must develop comprehensive strategies to maintain system functionality and expertise over time. A district might build technical capacity in house, as LUSD did with its dedicated Secondary Data Lead, or might partner with an external organization for this capacity, as DHS did with the Rural Schools Collaborative. If a district lacks both the budget to hire specialized staff and the relationships to secure meaningful technical partnerships, technical capacity could be a major challenge. Many DLIs depend heavily on one or two key individuals. If these experts leave, the district faces significant risk of system breakdown. Vendor solutions typically provide institutional continuity that individual district expertise cannot match.

Training and Documentation Protocols

Sustainable systems require ongoing, just-in-time training rather than one-time introduction sessions. New Visions found success with seasonal training aligned to relevant tasks,

supported by an in-app chat feature for real-time assistance. Districts should also prioritize documentation and knowledge transfer protocols—such as DHS's built-in guides and definitions or New Visions' comprehensive training materials—to ensure that critical system knowledge isn't dependent on any single individual and can support consistent implementation as new staff join the team.

Ongoing Evaluation and Refinement

Like any program or tool being implemented, districts must continuously evaluate whether their DLI is achieving desired outcomes. For example, D11 maintains regular Community of Practice meetings to assess dashboard effectiveness, while LUSD consistently reviews intervention tracking to determine which supports improve student outcomes. This commitment to measurement helps systems evolve to meet users' changing needs.

Cost-Effectiveness and Resource Allocation

Districts must carefully evaluate costs when considering DLIs and vendor products, as initial development costs represent only a fraction of long-term expenses. While custom solutions may appear cost-effective initially, hidden opportunity costs—including staff time—can accumulate quickly. And solutions that work for pilot implementations may rapidly become more expensive as they expand district-wide. Commercial vendor solutions, which often require higher upfront fees, can be worthwhile at scale. However, vendor solutions carry their own risks: districts may become locked into proprietary systems where switching costs become prohibitive, limiting future flexibility and bargaining power. The most sustainable approach may involve hybrid strategies that balance cost with functionality. Districts should conduct honest assessments of their technical capacity, available funding, and long-term strategic priorities when making these decisions.

AI is Coming to Student Success Systems

The lessons from DLIs are even more critical as artificial intelligence begins to transform educational technology. None of the DLIs showcased is leveraging AI yet—though LUSD has plans to integrate OpenAI to help analyze and summarize large data tables—but soon the technology will be ubiquitous. The foundational elements that make current student success systems effective will determine whether districts can successfully leverage AI to enhance rather than complicate their student success work. Relevant functionality on the horizon includes AI-driven chatbots that provide guidance on data querying or recommendations for research-based interventions aligned to data, advanced analytics and data visualization for risk analysis and student groupings, automated data quality monitoring that flags inconsistencies or anomalies for review, and natural language querying capabilities that can make complex data more accessible to educators.

Quality Data and Local Context

AI has the potential to amplify both strengths and weaknesses in existing systems. AI tools require clean, well-structured data to function effectively. This means without a foundation in data governance and validation, AI implementations risk perpetuating or magnifying existing data quality problems. Additionally, AI trained on large, generalized datasets can inadvertently perpetuate existing inequities in our society, potentially harming the specific student populations that student success systems are designed to support. The nuanced understanding of local context that effective student success work requires becomes even more critical in an AI-enhanced environment. The showcased DLIs demonstrate how districts can build systems that reflect their specific community needs, graduation requirements, and intervention approaches. This is the kind of local specificity that AI needs to complement rather than replace.

Data Literacy and AI Literacy

As AI makes data queries easier to generate, educators need even stronger data literacy skills to critically evaluate AI-generated outputs. School staff must be prepared to interrogate AI recommendations to ensure that they align with educators' deep knowledge of their students and communities. This new reality reinforces the importance of practitioner involvement in shaping AI-enhanced tools rather than simply receiving them as end users.

Preparing for AI

Districts that have invested in strong data practices, local context integration, and meaningful practitioner engagement will be better positioned to leverage AI effectively. Meanwhile, districts without these foundational elements may find that AI amplifies existing challenges around data fragmentation, quality, and usability. The absence of K-12-specific AI guidelines makes the practitioner voice in development more critical than ever.

Conclusion: Bridging Innovation and Market Solutions

The District-Led Innovations showcased in this resource demonstrate that when districts ground their innovations in research and school-level needs, they can make a difference for students.

As we celebrate these innovations, we must also recognize their limitations. While DLIs address authentic needs, they can also carry significant opportunity costs. By building outside of existing systems rather than working with vendors to improve them, districts may miss opportunities to influence product development that could benefit the broader educational community. And it is important to note that for districts with stable funding and needs that align with existing products, commercial solutions may provide better long-term value and support than custom alternatives.

The Promise of Co-Design

A powerful insight from these showcases is not that districts should abandon commercial solutions in favor of custom development, but that the education technology market desperately needs authentic partnership between practitioners and vendors. The DLIs reveal specific pain points that vendors can address through collaborative development rather than forcing districts to solve challenges independently.

As AI makes more sophisticated data analysis possible, the need for thoughtful configuration and interpretation is more urgent than ever. The local context expertise—about students' strengths and challenges, community resources, graduation requirements—that makes these DLIs successful is even more critical in an AI-enhanced environment. This moment is an opportunity for districts and vendors to work together to develop solutions that leverage both technological capabilities and educational best practices.

District and school staff are natural leaders in shaping the future of educational technology. Rather than working in isolation, districts can embrace their role as active partners in solution development. On the vendor side, products can evolve beyond soliciting customer feedback to establishing true co-creation partnerships where districts contribute expertise and context while vendors provide technical infrastructure and scalability.

Co-design partnerships offer compelling advantages for all parties. For vendors, they can reduce product development risk, accelerate market validation, and create solutions that districts actually want to purchase and implement at scale. For districts, they can provide access to the latest technical infrastructure without the burden of long-term maintenance, while ensuring their unique needs shape product development.

The districts featured in this showcase have proven that effective student success systems are possible when technology truly serves educators and students. Now we have the opportunity to scale these insights through systematic collaboration between the education community and the technology industry. Digital Promise is facilitating this collaboration by bringing together edtech vendors with experienced district partners to co-design improved student success solutions, leveraging the local context expertise and user-centered design principles that made these DLIs successful to create more sustainable, scalable solutions that can benefit districts nationwide.

Key Terminology

General

Student Success System: A comprehensive, evidence-based approach that combines strong relationships, real-time actionable data, strategic improvement actions, and student-centered mindsets to ensure all students stay on track for graduation and post-secondary success.

Student Success Team: a group of trusted adults who work together regularly to implement and improve the student success system. This typically includes teachers, counselors, school administrators, and may also include parents/guardians, support staff, and community partners.

Early Warning System: A comprehensive data system that uses predictive indicators to identify students at academic risk across multiple grade levels and timeframes (e.g., risk of grade retention, course failure, or not graduating high school).

9th Grade on Track: A specific measurement within early warning systems that focuses on whether freshman students are meeting key benchmarks (typically credits earned, course grades, and attendance) that predict on-time graduation. This assessment is critical because freshman year performance is highly predictive of graduation outcomes.

Multi-Tiered Systems of Support (MTSS): A framework used by schools to provide supports and early interventions to struggling students. This framework organizes the kinds of supports needed into tiers, broken down by the type and intensity of support.

- **Tier 1:** provides **universal supports** that can be implemented for all students.
- **Tier 2:** provides **targeted supports** for some students who may require additional support and attention.
- **Tier 3:** provides **intensive individual supports** that are specifically designed and implemented for high-risk students.

Intervention: Evidence-based strategies, programs, and supports designed to address specific student needs related to academics, behavior, attendance, or overall well-being.

Student Information System (SIS): A software system used by schools and districts to collect and manage student data and administrative processes.

District-Led Innovation: A custom data solution, developed by a school or district, designed to address specific gaps in commercially available products and/or better align data systems with local student success priorities.

Data Management and Analysis

ABCs

- ABCs: These three research-based indicators are often used to determine whether students are on track to graduate. Thresholds for these indicators may differ depending on the school or district context.
  - **A**ttendance
  - **B**ehavior
  - **C**ourse performance
- Measures of Well-Being: These indicators focus on social-emotional factors that influence engagement and achievement. They help identify root causes behind student struggles and incorporate valuable insights from students, teachers, and other school staff who understand the whole child.
  - **a**gency
  - **b**elonging
  - **c**onnectedness

Aggregate Data: Raw data that has been collected and then summarized using statistical measures (e.g., totals, averages, percentages) to show patterns across groups rather than individual records.

Cohort Analysis: A method that tracks data patterns from the same group of students (a cohort) over time to analyze patterns in their academic progress, attendance, or other outcomes.

Configuration: A customized arrangement of a technological system.

Data Collection Methods: Activities for gathering data. Data collecting methods related to student success can include (but are not limited to) these:

- Classroom observations
- Surveys conducted with teachers, students, and counselors
- Interviews with teachers and students
- Teachers journaling their interactions with students

Data Dashboard: A "homepage" that displays high-level data and key metrics.

Data Governance: The practice of making data usable, safe, accessible, and accurate.

Data Interoperability: The degree to which data is effectively exchanged across applications.

Data Lake: A storage system that holds large amounts of **raw data** in its original format until it's needed for analysis.

Data Query: A request made to a database to perform an action (such as retrieving or modifying) on a piece of data.

Data Visualization: A way to display data in charts, graphs, or other visual formats that make patterns and trends easy to understand at a glance. Examples include bar charts showing attendance rates by grade level or pie charts displaying intervention types.

Data Warehouse: A structured database that stores **processed and organized data** to be used for reporting and analysis.

Disaggregated Data: Data that has been broken down by specific student characteristics (such as race/ethnicity, English learner status, or special education services) to identify patterns and equity gaps.

Raw Data: Data that has only been entered into a system and has not been manipulated

Schema: Describes how data is arranged and organized.

Software and Technology

Application Programming Interface (API): A connection that helps share data between computers or computer programs. In education, APIs enable student information systems, learning platforms, and other tools to exchange information automatically.

Learning Management System (LMS): A software application that allows educators to create, deliver, and manage educational content and track student progress.

Middleware: Software that acts as a bridge between applications and systems enabling them to communicate and share data even when they weren't originally designed to work together.

Additional Resources

Organization	Resource	Description
CORE Districts	Supportive 8th to 9th Grade Transition Change Package	Comprehensive online change package with resources for essential transition steps including pre-transition communication, summer bridge programs, advising and mentoring systems, 8th grade data review, and 9th grade welcome activities. Includes access to Breakthrough Success Community focused on 9th grade on-track metrics.
CT RISE	On-Track Data Teams RISE Strategy Guide	Strategic guide providing structure and implementation guidance for establishing and operating on-track data teams within school systems.
Everyone Graduates Center	Resources by Audience - Pathways to Adult Success	Curated collection of how-to guides for school systems and partner organizations focused on student transitions and early warning systems. Resources cover starting viable programs, building stakeholder buy-in, applying equity frameworks, developing postsecondary pathways, creating partnerships, managing data systems, and implementing EWS systems.
Everyone Graduates Center	Early Warning Systems Video Training Series	Eight-part video training series covering EWS planning, design, implementation, and problem-solving. Modules include system overview, data culture development, tiered intervention linking, planning processes, startup guidance, lessons learned, intervention analysis, and faculty introduction strategies.
GRAD Partnership	Student Success Team Reflection Tools	Team reflection and action planning tools featuring inquiry-based questions, data sources, and indicators focused on key attributes of effective student success systems. Includes tools for both student success teams and district leadership to facilitate continuous improvement through structured reflection, analysis, and strategic planning sessions.

Organization	Resource	Description
Institute for Education Sciences	The Early Warning Systems Learning Series	Comprehensive repository of learning materials from REL Northwest's EWS Learning Series including webinars, implementation tools, and research publications covering specialized topics such as English language learners, social-emotional learning indicators, data visualization, and parent communication strategies.
Massachusetts Department of Elementary and Secondary Education	EWIS - Early Warning Indicator System	State-specific clearinghouse providing resources for Massachusetts' Early Warning Indicator System including report guides, implementation training videos, early grades guidance, and integration strategies with other state resources like FAFSA completion and workforce employment reports.
Michigan Department of Education	Early Warning Intervention and Monitoring System (EWIMS)	Evidence-based, data-driven decision-making framework designed for integration with district secondary Multi-Tiered System of Supports (MTSS). Includes comprehensive implementation guide and training video series.
Network for College Success	Understanding Research & Applying Data	Toolkit series focused on research interpretation and data application including freshmen on-track calculations, relationship-building for high school transitions, intervention development and tracking, and communication strategies for sharing on-track research with staff, students, and families.
UChicago Consortium on School Research/ Annenberg Institute/ Gardner Center	College Readiness Indicator Systems Resource Series	Six-part research-based resource series providing frameworks, indicator catalogs, data reporting guides, validation tools, organizational capacity assessments, and implementation strategies for developing effective college readiness indicator and support systems based on a three-year initiative across five urban sites.

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