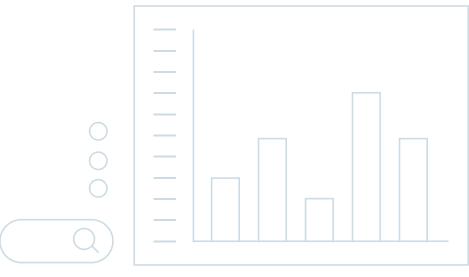


# Turn Data into Insights

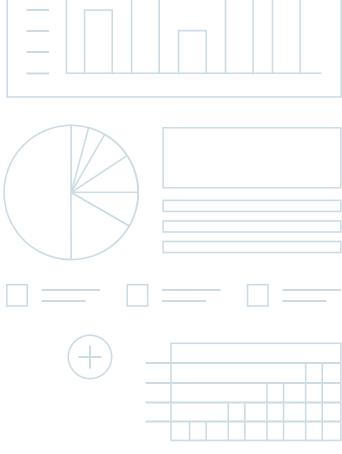
How Integrated Data can
Uncover Student Needs







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### Your Data Tells a Story

Schools and districts are collecting more data than ever before, and that data can be an educator's most valuable resource. From grades and assessment scores to demographics, from behavior, attendance, and engagement metrics to social and emotional learning (SEL) information, there is data from every aspect of a student's educational experience. Each data point is a part of a student's story, a piece of the larger puzzle.

Stakeholders across an organization—including leaders, program directors, and teachers—use data from multiple systems daily to make decisions that affect student, class, school, and district-level outcomes. But understanding the whole story requires bringing it all together—connecting those puzzle pieces.

To address the needs of each student, we need to understand the whole student. They are much more than their grades and behavior; we need to look at a range of factors to understand their educational journey, what supports they need, and what will accelerate their learning. So, how can we ensure that decisions are informed not just by instinct, experience, and good intention but by trusted, connected data?



66

Data is one of the most powerful tools to inform good decisions and create opportunities for students along their education journey—and it's much more than test scores. Data helps us make connections that lead to insights and improvements.<sup>1</sup>

<sup>1</sup> "<u>Data Can Help Every Student Excel</u>," Data Quality Campaign







## The Juggling Act

The truth is that the first step in becoming data-driven is less about the data itself and more about understanding its power to transform educational processes. But once that is understood, managing the complex and unique data needs that support various data-driven initiatives is a significant juggling act for most school districts.

When it comes to district plans, there are long-range, strategic goals for continuous improvement, as well as tactical objectives for increasing student engagement, getting early warnings to at-risk students, closing learning gaps, and creating targeted programs to address the needs of all students equitably. And data is the foundation of all of these initiatives. But, the key to success is not only starting data-driven improvement initiatives, but first identifying the data points you want and need to measure. Then, the difference between success and failure often depends on having the tools to capture the right data points, connect those data points, easily draw correlations, and measure progress effectively. In an environment that can be data-rich but knowledge-poor, these can be significant challenges to overcome.





### Barriers to Using Data to Identify Student Needs: The Challenge of Disjointed Data

To effectively execute goals and focus on the most impactful areas for students, educators need visibility to timely and relevant data. Herein lies the challenge for many school districts.

Often, critical district data is collected and stored in separate systems that don't connect or share information easily. This problem is compounded by the ever-growing number of applications used by districts. According to the <u>Digital Promise League of Innovative Schools</u>, 74% of school districts use more than 26 software systems, with 17% using more than 100 different software systems.

What's left is a ton of siloed data and no simple method to bring it all together in an easy-to-use format. As a result, district staff invests time and resources into accessing and compiling the information in a meaningful way. Despite their best efforts, any reports they are able to provide to educators become instantly stale when new data is entered into the disparate source systems.



Meanwhile, educators often are left to make sense of disconnected information, attempting to piece together data from multiple sources to identify students' needs and challenges. Understandably, this results in frustration and educators making decisions equipped only with old, incomplete, or inaccurate data.

Shuffling through documents, file folders, or disconnected applications for a specific piece of data is an unacceptable time drain for an already tapped-out staff. Not only is this impractical, it's ineffective.

Today, school districts need to look for a modern, integrated analytics solution that provides access to the data that matters, empowering users to see and understand data in context, and derive actionable, impactful insights.







### Surface Insights to Drive Impactful Change

Uncovering student needs and effecting positive change in student outcomes requires identifying and addressing key contributing factors. Understanding the root cause(s) better enables educators to identify the appropriate actions for each student, class, and school.

Only by exploring and correlating data can teachers and leaders really distinguish the causes, understand the best way to improve student achievement, and develop a plan for meeting individual needs. By viewing data from multiple sources in one location, educators ask and answer important questions like:

- How do attendance and engagement affect student achievement?
- Is academic growth proportionate across subgroups?
- How does program enrollment correlate with improved assessment scores?
- Where do we have equity or disproportionality concerns to address?
- How can we identify best practices from highperforming classrooms to help others improve?
- Which intervention programs work best, and which ones are not working?

Connecting data sources across a district can yield a number of actionable results. Let's focus on some of the biggest issues that are top of mind for all educators—student engagement, connecting multiple measures of assessment, and equity—and how insights from integrated data can help tackle these significant challenges.





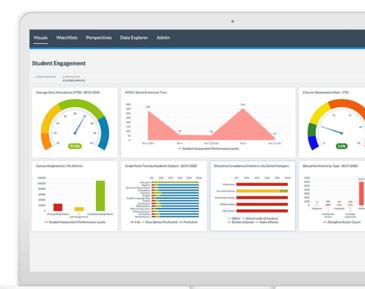
#### Measuring Engagement

Prior to the pandemic, educators were focused on the impact of attendance on student success. Were students in the building, in their seats, when they were supposed to be? In a post-Covid world, attendance is still paramount, but student engagement is another critical factor that is top of mind. Are students participating, motivated, happy, curious, and actively engaged in their learning?

Because disturbances to instruction inevitably affect a teacher's ability to engage all students and meet their learning needs, measuring student engagement is more important than ever. A Gallup study<sup>2</sup> of 128 schools and more than 110,000 students found that student engagement was significantly related to student academic achievement progress (growth) in math, reading, and all subjects combined, as well as postsecondary readiness in math and writing.

Despite its necessity, it can be difficult to understand which students are actively engaged and which are only passively participating. For educators to make well-informed instructional decisions, engagement needs to be identified and quantified, not just determined by student behavior and educator perception.

With a modern, integrated analytics solution, educators have access to data on demand that highlights risk factors and indicates engagement concerns. By bringing together information like missing or past due assignments, behavior and social-emotional health, attendance, course grades, and assessment data, educators can see the whole picture of student engagement and outcomes from the classroom level to the district and state level. With the ability to quickly surface insights from this data typically found in disparate systems, educators can make informed decisions that affect measurable improvement.



#### **KEY QUESTIONS TO CONSIDER**

- How do you measure student engagement in distance and hybrid learning environments?
- Can you correlate late or missing assignments with attendance, behavior, or learning mastery?
- How do you monitor engagement to see early warning indicators to identify students at risk?

92%

Results from our 2021 State of Teaching and Learning in K-12 Report show that 92% of educators identify student engagement as the leading metric of student success.





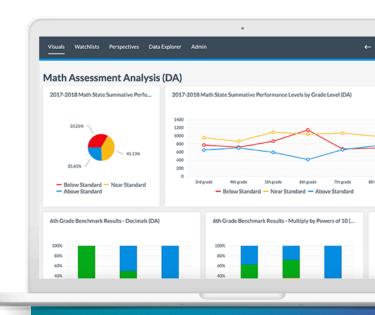
<sup>&</sup>lt;sup>2</sup> Reckmeyer. (2019, October 19) "<u>Focus on Student Engagement for Better Academic Outcomes</u>"

## **Monitoring Student Progress**

Student performance, progress, and mastery are measured in many ways—LMS assignments, classroom assessments, benchmarks, growth monitors, diagnostics, and summative assessments—to name a few. With so many instruments in use throughout the district, measuring student progress and understanding where the learning gaps are can be challenging. And while assessment data is valuable, educators know it does not necessarily tell the whole story. But in the proper context, assessment results can provide valuable insights to drive better and more equitable student outcomes.

When educators can see and understand student performance in context, they can more effectively identify and remediate learning gaps and self-evaluate their instructional strategies. Educators can collaborate around best practices and develop strategic intervention plans by exploring the factors that contributed to these assessment outcomes.

To truly understand where students are learning, school districts need to be able to easily bring together formative, benchmark, and summative assessment scores with a wide range of other critical data from across the district. When assessment data is combined and correlated with other key data points such as academic performance, attendance, discipline, and program enrollment, educators at all levels can derive strategic insights, track progress and growth from year-to-year, inform instructional decisions, monitor programs and quantify their impact on outcomes, and identify student subgroups for monitoring and intervention. With integrated analytics, academic leaders can visualize and understand assessment data with visibility into trends, comparisons, and contributing factors.



#### **KEY QUESTIONS TO CONSIDER**

- Can you correlate state test scores to district assessments?
- How can you identify performance of subgroups for monitoring and interventions?
- Can you track progress and growth from year-to-year?





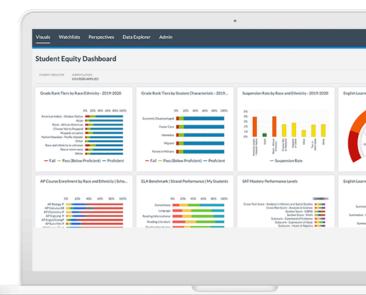
#### **Advancing Equity**

Access to equitable learning experiences is a cornerstone of education. At the same time, students come from diverse backgrounds with a wide range of academic and non-academic needs, so we know a one-size-fits-all approach to learning is ineffective. As such, data plays a pivotal role in providing equitable access for all. Faced with hundreds, if not thousands, of data points to consider, integrated and comprehensive analytics are essential-educators can't solve problems they don't fully understand.

School districts need relevant and timely data to uncover potential inequities, structure school and district supports, and identify students in need of intervention. Further, leaders need a line of sight into performance across the district to ensure students aren't getting left behind.

An integrated analytics solution brings together critical data, including student demographics, program and participation data, assessment outcomes, and more, and quickly surfaces insights that you may not otherwise see. Taking the time to analyze metrics in a way that highlights disproportionality across different subpopulations often highlights inequities that were previously unknown. For example, are students being disciplined in a disproportionate way? Are there disproportionate patterns in learning gaps, and is there a significant correlation between classrooms, schools, or certain populations of students?

District administrators, school leaders, counselors, teachers, or those serving a particular population of students can identify trends and patterns, analyze data, and make adjustments to provide every learner their best opportunity to succeed.



#### **KEY QUESTIONS TO CONSIDER**

- How do you identify and measure potential inequalities in learning opportunities?
- Can you easily identify and compare student groups across many different indicators?
- Can you measure progress to ensure positive changes in inequalities and learning outcomes?





### Bringing It All Together: The Power of Integrated Analytics

It's clear that data-driven insights can be the catalyst for meaningful changes that lead to improved outcomes. With access to deeper, actionable insights based on valuable, integrated data, educators can make more informed decisions that transform education for students, classrooms, schools, and the entire district.

Elevate K-12 Analytics, the comprehensive analytic application that is part of the Instructure Learning Platform, combines data from key district data sources so educators can measure, manage, and improve student outcomes. Elevate provides real-time access to integrated data so educators can ask and answer important questions to understand what is affecting student success. So, what makes Elevate K-12 Analytics stand out?

#### **Next Level Reporting**

Elevate K-12 Analytics contains hundreds of pre-built, research-based performance measures, metrics, and visuals, but still allows users to create, customize, personalize and share visualizations and reports.

### The Information You Really Need, When You Really Need It

Elevate K-12 Analytics is easy to learn and use, regardless of technical skill or data literacy. Data views at the district, school, classroom, and student level provide leaders a line of sight into key metrics that drive continuous improvement and ensure accountability, while giving teachers the data they need to support each of their students.



We are thrilled with the way data from our disparate data sources comes together in one place. The dashboards, scorecards and watchlists provide insights into student performance that otherwise would take much longer to realize or run the risk of going unnoticed. These visualizations accelerate our teachers' and leaders' ability to make data-driven decisions that help our students succeed.

#### **JONATHAN HULBURT**

Director of Accountability and School Transformation, East Central Independent School District



#### Comprehensive, Multi-Year Analytics

Longitudinal analysis requires integrated, historical data that can be explored by educators and data analysts, alike. Elevate supports multi-year analytics without the investment required to build and maintain a custom data warehouse.

#### **Built to Industry Standards**

Elevate K-12 Analytics is a fully hosted and vendor managed product built on and powered by Ed-Fi technologies to ensure true data interoperability between your district source systems.

#### **Role-based Security**

Access to all reporting and visuals is managed based on the user's role to ensure student data privacy. Roles can be automatically synchronized with district staff positions to ensure PII is always maintained as district staff changes.

#### **Seamless Integration**

As a part of the Instructure Learning Platform, Elevate K-12 Analytics is directly integrated with <u>Canvas LMS</u> and <u>Mastery Connect</u> for even more impactful teaching and learning. The ability to visualize Canvas assignment data alongside data from Mastery Connect and other assessment sources and the district's student information system truly empowers educators to monitor and improve student equity and outcomes.

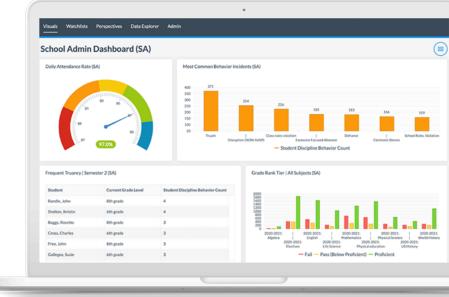






Elevate K-12 Analytics is designed to deliver real-time, actionable insights by bringing together data from key district data sources for a comprehensive picture of all students. With powerful, predefined dashboards, charts, and visuals, teachers and district leaders can make data-informed decisions and effectively measure, manage, and improve student outcomes.

Are You Ready to Become Data-Driven? Learn more about how Elevate K-12
Analytics can help turn data into insights to improve education outcomes or request a demo.









# Powering the World's Smartest Classrooms.

Instructure is an education technology company dedicated to helping everyone learn together. We amplify the power of teaching and elevate the learning process, leading to improved student outcomes. Today, Instructure supports more than 30 million educators and learners at more than 6,000 organizations around the world.

The Instructure Learning Platform makes learning more personal and student success more equitable by delivering the solutions you need to support, enrich, and connect every aspect of teaching and learning. The Instructure Learning Platform includes:



**Canvas by Instructure:** providing a robust foundation for teaching and learning—both in and out of the classroom—for all students, while seamlessly integrating with other learning tools.



**Mastery by Instructure:** bringing together the assessment tools and quality content educators need to implement a successful assessment program that drives learning forward.



**Elevate by Instructure:** improving the use of data and technology to help solve district challenges and give educators the information they need to make impactful decisions.



**Impact by Instructure:** helping teachers and students adopt educational technology to promote deeper engagement with learning.

Learn more at https://www.instructure.com/k-12.