

What is Learning Analytics?

Through the efficient use of Learning Analytics, educators can personalize and enhance learning for students at every stage of the student's career.

Big Data Meets Big Learning

Corporations and government agencies have been using data based analytics for years to help with operational efficiency and to better realize objectives. K-12 education—with its own complications surrounding the security of student data—is only now poised to fully make use of learning analytics tools to improve student outcomes.

"Schools and districts are challenged by limited resources and increased accountability, which are propelling creativity and discovery," says database administrator Melisa LaCroix. "The analytics programs that were once reserved for big businesses are now being widely used in higher education and K-12 institutions to measure student growth, inform curriculum decisions, and identify students at risk for failing a course or program."

Data-based learning analytics equip educators with the power of truly understanding whether their students are learning a specific subject, and help them to pivot or personalize instruction to help meet learning objectives.

Learning Analytics¹

The collection, analysis, and reporting of data about learners in order to understand and optimize learning. This collection of data captures a student's academic performance, analyzes it for patterns, and reveals areas which need improvement. The primary purpose of learning analytics is to empower educational institutions to identify potential challenge areas of each student and take swift action in addressing them.



1. https://www.solaresearch.org/about/what-is-learning-analytics/







Learning **Analytics** New evidence-based policies **ACTION** and programs introduced Personalised Learning Plans are created Analysed data drives INSIGHT decision making Data analysis reveals trends, patterns and insights **ANALYTICS** Data is analysed and correlated Teacher views aggregated student data Establish student baseline data **METRICS** in each learning domain Student assessments, bio data, performance tracking Raw data is generated **DATA** Non-evidence basd **OPINION** decision making

Making Smarter Decisions, Faster

A detailed learner analytics report can help educators to identify specific learning patterns and design more effective teaching plans.

Learning analytics can also:

- Highlight Students Requiring Added Support
 plus some text
 Data insights help teachers identify students who
 may be falling behind academic expectations,
 and indicate the need for extra attention.
- Register Student Engagement
 Analytics can register the time students spend
 on coursework and understand whether they
 are truly engaging with the content. This allows

- educators to customize learning plans tailored to student strengths and challenges, resulting in greater student immersion.
- Measure and Compare Student Performance Learning analytics provides a complete view of a student's performance throughout the year, allowing educator's to respond with an appropriate action plan.
- Redesign Courses If Required
 Student analytics reports can provide the insight necessary for educators to either modify teaching or rethink course modules to enhance the learning experience of the students.







What is the Difference Between Learning Analytics and Data Analytics?

Data Analytics is the science of examining raw data with the purpose of drawing conclusions about that information and involves applying an algorithmic or mechanical process to derive insights. Learning analytics, however, is the measurement, collection, analysis, and reporting of data about learners and their contexts, for purposes of understanding and optimizing learning and the environments in which it occurs.

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Data Mining for Academic Gold

Before edtech tools such as learning analytics, educators would need to rely on their own experiences and expertise to diagnose difficulties and potential academic pitfalls. And while student data and statistics have revealed basic academic proficiency in the past, they provided little actionable information for educators to offer academic support at critical times. Learning analytics have the potential to maximize student learning while enhancing teaching and delivery methods. Even today, schools and districts are beginning to better utilize this information to craft more meaningful curricula and help students to achieve greater degrees of academic success.

View Additional Resources

Check out the rest of the Learning Analytics tools and resources on the **K-12 Blueprint.**





