

Student behaviors span multiple tools. For our analytics to be effective, we need to aggregate data across the spectrum of student-facing tools. The UDP provides a single common source for data from multiple sources to fuel the learning analytics applications that support student success efforts at Penn State.

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### A Data Conundrum

Higher Ed institutions have developed a core competency, accelerated by the 2020 pandemic, to curate suites of best-in-class teaching and learning tools for their classrooms. These "front line" tools are often foundational to students' learning experiences, directing their interaction with course materials, instructors, and peers. The data that flows from these tools can provide valuable, real-time insight into student success - *if* - IT staff can access the data and deliver it to teaching and learning analysts.

Provisioning dozens of tools from dozens of vendors to create best-in-class learning experiences also poses a data challenge. With each tool using its own set of APIs and its own data schemas, finding alignment between two tools is rare. With dozens of tools, the challenge grows exponentially.

#### The UDP Makes it Possible

Unizin has solved this data conundrum by centering learning analytics on the learner, not the tool. This learner-centric approach, made possible by the Unizin Data Platform (UDP), enables Unizin members to better understand how learners learn, when and how they engage with course content and tools, and how all these factors relate to student performance, persistence, and success - individually and within cohorts.

The UDP is a cloud-native, standards-based set of data stores centered around three concepts:

- **Unification**: break down the tool-imposed barriers across the teaching and learning ecosystem to bring student learning data into a common place
- **Modeling:** transform data via standards to "speak a common and consistent language", regardless of which tool generates the data
- **Speed:** build robust, scalable, use-case driven data marts and data services to analyze this massive, standardized dataset and to speed time to insight.

#### The UDP in Action

The UDP unlocks countless opportunities for analytics, research, and applications and has allowed Unizin member institutions to connect with their learners in highly intentional and impactful ways. These include:



### Diversity Equity & Inclusion

Fusing learning data with student demographics in the UDP is accelerating DEI research and student success programs across Unizin campuses.

Indiana University's LARA Project, uses UDP data to examine gender differentials in STEM course grading.

Course Insights at the University of Nebraska uses UDP data to power instructor dashboards on diversity and performance equity, among other metrics.



## Student Activity & Time Spent Metrics

With unified, modeled data, we can assemble "tool agnostic" timelines of student activity that provide a complete picture of how students engage with course materials and learning tools.

Data marts, like the Unizin Interaction Session data mart help IT teams quickly access this information and provide it to research and analytics teams building predictive models of student success and persistence based on student activity and engagement metrics.



### Governance & Privacy in the Cloud

The UDP is built and presented in Google Cloud. Data doesn't leave the cloud, and all data is wrapped in cloud-native security.

This approach to data governance and privacy eliminates the need for expensive, less secure, on-prem resources that require continual upkeep and maintenance.

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