



Unizinsight

Member Case Study

PennState



Elevate & the UDP

“With Elevate, we can identify students at risk of failing a course within two weeks of the start and take corrective action.”

- *David Smith, Associate Dean of Advising, Penn State University*

The Pandemic-Sized Need for Information

Early in the pandemic - as higher ed went 100% digital - institutions of all sizes scrambled to meet a confounding challenge. Without the benefit of classroom attendance and engagement, instructors and advisers needed a new way to identify students who might be struggling to stay connected to their courses and coursework.

Students (and faculty) faced a myriad of challenges with the initial rapid expansion of digital pedagogy - from connectivity, to finding suitable workspaces, to tool adoption and seamlessly integrating digital tools into existing coursework. Yet digital learning took hold. Today, many courses are delivered in a hybrid format, which means students are being asked to show up both physically and digitally.

Despite this change in teaching methodology, a student's activity and engagement within a course remains a strong indicator of persistence and outcome. How to accurately assess activity when students operate in both physical and digital domains is the challenge.

Elevating Student Success with the UDP

With nearly 90,000 students enrolled across almost two dozen locations and with multiple digital learning tools deployed across the university, Penn State needed a new solution to help academic advisors understand student activity in a hybrid learning environment.

A team of Penn State application developers, including data scientists, UI, and user experience experts, worked with advising leadership to identify the most valuable digital learning data points that could reliably indicate student activity, as early in the semester as possible, to inform appropriate interventions.

The Penn State Data Empowered Learning team rapidly developed a prototype web-based application called Elevate to combine Student Information System data with learning event data, derived from various learning tools, and provide accurate and actionable measures of engagement levels for each student in a course.

Elevate utilizes the Unizin Data Platform (UDP) which gathers learning event data from disparate learning tools and systems across the campus and consolidates them using standards-based data modeling into a unified learning event repository.

This massive dataset helps generate daily student activity reports, provided as both individual student profiles (fig 1) and in roster format with multiple students (fig 2). These reports are connected to Penn State's advising platform, Starfish, making it easy for advisers to keep track of student activity without needing to learn a completely new application or workflow.

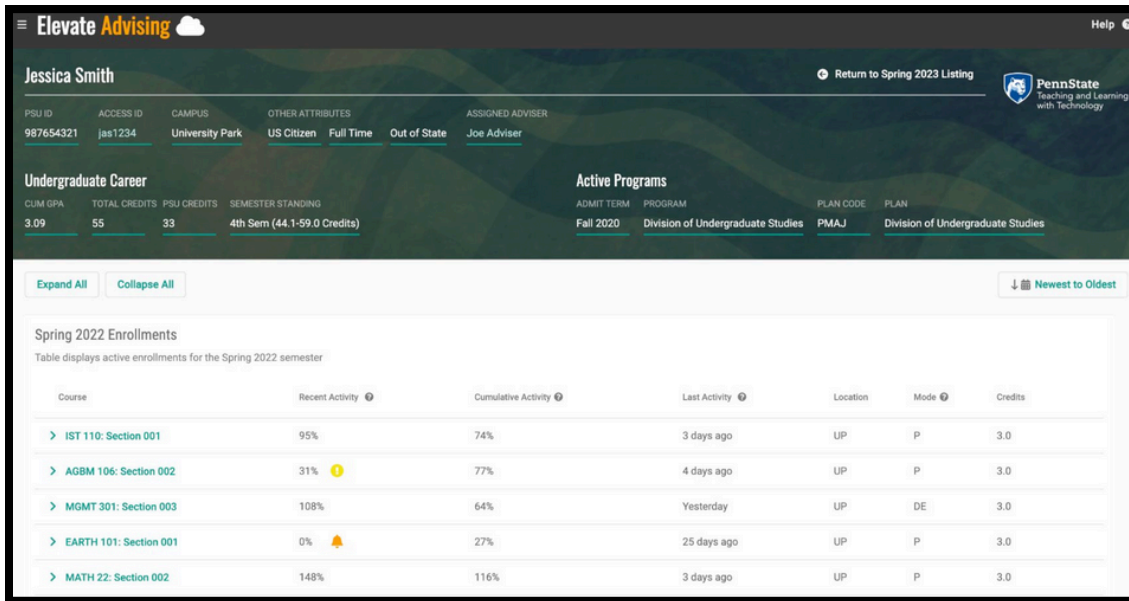


Fig. 1 - The Elevate student profile highlights enrolled courses for which a student has Low or Zero activity, enabling advisers to quickly intervene, understand, and provide guidance to help reengage students with course activities

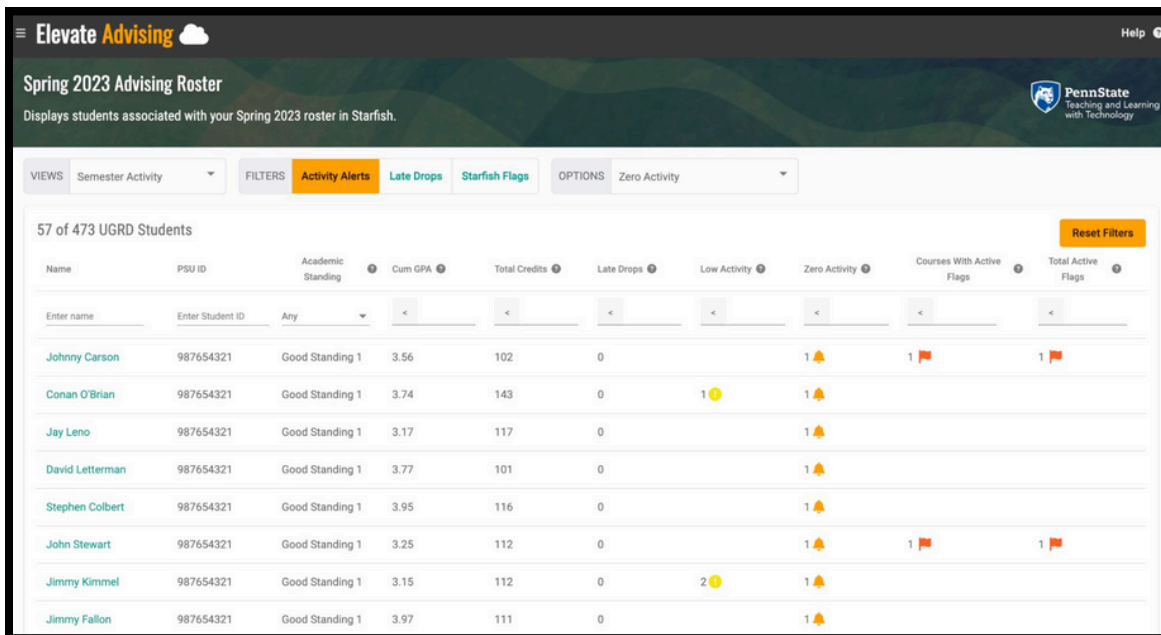


Fig. 2 - The Elevate Roster shows student alert and warnings for all students in a single course, a useful utility for large-format courses where student participation can otherwise go unchecked.

Making an Impact

As a tool, Elevate is directly impacting the way advisors engage with and support students. As a model, Elevate demonstrates the value of standards-based data to enable flexibility and growth.

Adoption

In less than three years, Elevate has become an important component of the Penn State advising system. With seamless integration into the Starfish advising platform, Elevate's adoption has rapidly grown. During the 22/23 academic year, nearly 450 Penn State advisers working across 12 campuses, used Elevate to advise more than 35,000 students, almost 45% of the entire student population.

Expansion

The initial Elevate prototype, deployed in 2020, only included Canvas data. As more instructors have integrated more digital tools into their classrooms, Elevate data capabilities have expanded as well. With the help of Unizin and the UDP, Elevate now incorporates Canvas, Top Hat, and Kaltura data, providing a much more nuanced digital representation of student activity across courses than the initial prototype.

Evolution

The success of Elevate has inspired Penn State IT staff to develop companion tools, using similar standards-based models and integrating learning data from the UDP. Course Insights is a Canvas LTI application that enables instructors to view aggregate descriptive and diagnostic data about the students in their courses to help make the connection between course material, delivery, engagement, and student outcomes.



For more about Unizin visit www.unizin.org or contact info@unizin.org