Unizinsight

Member Case Study

UCI Spark

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Jeremy Thacker, Assistant Director, Educational & Student Success Technologies

At UC Irvine, Data Sparks Student Success

The University of California at Irvine has a long and well-earned reputation for operating at the forefront of innovation and technology. From its campus-wide Comprehensive Analytics for Student Success program (COMPASS), to being one of the first U.S. universities to develop its own AI chatbot for students (ZotGPT), UCI is pursuing new ways to deploy data in service of its students.

One of the University's most recent innovations – UCI Spark – is a student-centered, mobile-first web application that brings together student data, Canvas data, and UCI student support resources, to provide students with personalized insights and timely information about available resources to support their success.

UCI Spark is just the latest in a growing array of data-driven student success tools and platforms being developed and deployed across Unizin member campuses. Like the Canvas Activity Score tool developed at Indiana University and the Student Activity Score at the University of Iowa, UCI Spark uses real time learning data to generate a dashboard view of their academic progress during a semester.

But that's not all.

UCI Spark also integrates data from other departments and resources across the UCI enterprise to generate informed, personalized suggestions for students - "sparks" – that serve as a gentle guide to relevant campus resources that can help them reach their academic goals. Each spark is drawn from evidence based best practices and the recommendations of campus experts. Sparks aren't directives. Each student decides whether to act on a spark.

"The UCI Spark concept has been on the drawing board for a long time," explains Jeremy Thacker, Assistant Director, Educational & Student Success Technologies at UCI. "But it wasn't until we joined Unizin and had access to the Unizin Data Platform that we were able to pursue this application in earnest. That capability, along with inspiration from other members who have developed advisor and student-facing applications, enabled us to quickly move UCI Spark from concept to deployment."

Overcoming Data Silos

While UCI Spark offers a streamlined and simple user interface, its underlying datasets and logic is anything but. Like many university developers, the UCI team faced the challenge of gathering and integrating data that was siloed and distributed across and between departments: pulling together student information from admissions and enrollment management, services and resource information from individual student success units, and student activity and performance metrics from Canvas.

The Unizin Data Platform and Unizin data marts were key to overcoming this development hurdle, providing UCI developers a faster, more intuitive way to identify and access LMS and learning tool data to power Spark analytics.

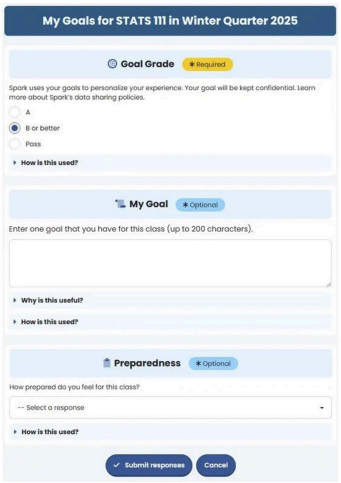
“You can’t get a sense of how a student is engaging with their course space with just raw underlying data. There are too many data points,” says Ray Vadnais, UX/UI Architect at UCI. “Having access to Unizin data marts helped us quickly gain an initial understanding of student engagement and the learning experience. From there we dove into the underlying data tables to refine our Spark analytics.”

Designed to Inspire

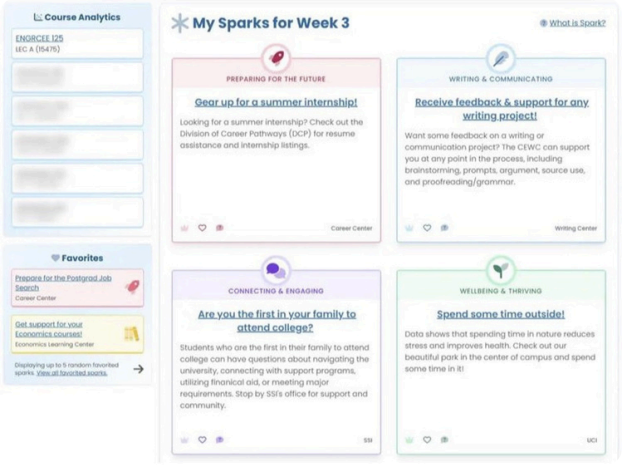
Throughout the development process the UCI team engaged in healthy conversation concerning the student-facing UI and the types of learning insights shared with students. As an application designed for self-selection and self-direction, the development team worked to provide a balanced perspective to students, offering some specific insights about their learning activity without being too prescriptive or encouraging students to overfocus on a certain aspect of learning.

“The goal isn’t to say that every student should be spending two hours in each class, or that once you’ve hit that green light you’re going to get an A,” explains Vadnais. “Rather, we leaned into the general activity metrics to give students a fair representation of how they’re engaging in a course as a bridge to the resources and tools that can support their academic journey and their experience as a member of the UCI community.”

The first time a student visits UCI Spark to access their analytics for a particular course, they are prompted to select a goal grade and have the option to enter a personal goal for the class and indicate their sense of preparedness. This student input serves two purposes, to help students thoughtfully prepare for the course, and (in the future) to inform Spark analytics and align them with student-defined measures of success.



The UCI Spark dashboard is an easy to navigate and understandable interface for a student to quickly see how they are distributing time across courses and how their activity is varying from week to week, linked to a top-four list of sparks to consider for that week.



The number of sparks presented was a major consideration during the application design. Four was chosen as a reasonable number of actions from which to choose, with most students likely being able to do at least one or two of them during a week. The designers were careful not to overwhelm students with a laundry list of sparks, while also being cognizant of the risk of underwhelming students with too few sparks that they might not find inspiring or helpful. The novelty of four new sparks each week strikes a good balance between being informative, achievable, and engaging.

"The idea is, when a student logs in here, what they see is for them. They're seeing this spark because they are most likely to get value out of it based on what we know about their circumstances," explains Thacker. "If we've done our job right, when a student opens UCI Spark they know to pay attention. Because not only is the list short, but it's also directly relevant to who they are and how they're performing. When they expect to get value out of the experience, they will come back for more."

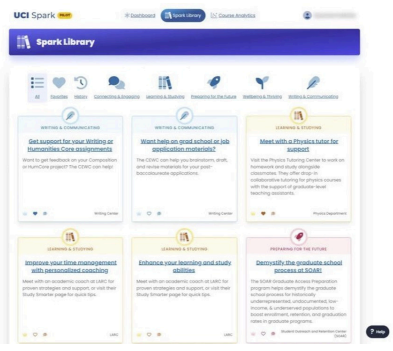
Three Key Takeaways

Inspired by Others

While the UCI team had harbored the concept of Spark for a long time, the final development and design pulled from other Unizin member projects. Indiana University and the University of Iowa both used UDP data to inform student activity metrics with predictive attributes, while the University of Michigan's My Learning Analytics (MyLA) application provided insight into the nuances of presenting students with personal performance data in ways that are inspiring and uplifting.

Design Minded

The UCI Spark interface is decidedly approachable. From the soft color palette to the iconography, to incorporating the UCI Anteater into the promotional and educational materials – the entire user experience is designed to be welcoming, inviting and familiar to students.



Sparks are Suggestions

As a high-achieving campus, UCI students are typically motivated, focused and resilient. In this context, Spark serves as an adjunct to help guide students to helpful resources to further their academic pursuits and support their campus experience. As students utilize sparks, the system becomes more intuitive and intelligent to serve-up new ideas that align with a student's interests or goals.