



Unizinsight

Member Case Study



“When an instructor can clearly see the representation in their classroom across various dimensions that are difficult to discern from mere observation, and then map how various groups engage with and respond to the coursework itself - in real time - they can make better informed instructional decisions to meet the learning needs of every student.”

Chad Brassil, Associate Professor, Biological Sciences & Faculty Director of Undergraduate Analytics

The University of Nebraska, Lincoln: Higher-ed Equity in 3-Dimensions

Creating inclusive learning environments that accurately reflect increasingly diverse student populations is a priority across higher education. Administrators invest time and resources to promote equitable learning that is reflective of and tuned to the needs of all students on campus. This includes encouraging instructors to evaluate their teaching environments, course materials, and instructional strategies to make learning more inclusive, relatable, and resonant with the students in their classrooms.

Data can help this endeavor. Yet bridging the divergent perspectives of administrators and faculty poses a challenge. At the University of Nebraska-Lincoln, members of the Executive Vice Chancellor's Office and Information Technology Services' Learning Analytics Team have joined forces to address this dynamic - using UDP-data to provide both broad and deep understanding of classroom equity, inclusive instruction, and student performance.

Chad Brassil, Associate Professor, Biological Sciences and Faculty Director of Undergraduate Analytics, led the initiative to develop the Course Demographics Suite. The Suite includes a series of Demographic by Performance dashboards providing instructors and administrators with better understanding of faculty and student needs to inform investment and drive institutional change.

At a classroom level, the Suite includes [Course Insights](#), a dynamic platform that helps instructors better understand the demographics within their classrooms, identify performance gaps between demographic categories at the assignment level, apply interventions, and measure results during the course of instruction.

With data from the UDP, the University of Nebraska is expanding its understanding of its large and complex learning dynamic, to deliver learning analytics and student insights where they are needed most - at the point of decision.

Course Insights: One Tool - Seven Dashboards

Every faculty member within the University of Nebraska system has access to Course Insights directly within their course page in Canvas. The tool utilizes the data from the Unizin Data Platform and applies an

LTI wrapper for visualizations developed in Tableau to generate a series of interactive dashboards presenting key student performance, engagement, and demographic metrics to instructors.

These easy-to-comprehend, highly flexible dashboards enable faculty to visualize the students within their classrooms from multiple perspectives. They can assess the overall composition of their classrooms – not just the proportion of one group versus another – and performance gaps across groups of students. Granular insights on student performance and learning dynamics help teachers identify opportunities to provide extra support to an individual student or apply global interventions to address performance or engagement gaps affecting entire student groups.

Dimension 1



Demographic Info & Performance Demographics

Demographic Info allows instructors to visualize the demographics within a course in multiple dimensions. Instead of assuming students align with a single or idealized background, the dashboard provides a categorical - not just a proportional - view of class demographics. This perspective helps foster the mindset of teaching equally to all categories of students represented in a course.

Performance Demographics disaggregates assignment grades by demographic metrics to help identify gaps within a course. Assignments can be clustered individually or by groups or modules aligned with Canvas. Links within the dashboard provide access to pedagogical resources for closing demographic gaps, as well as to a companion dashboard to visualize letter grade demographics for a course across semesters.

Dimension 2



Student Activity

Activity Turn-in Times helps instructors better understand when students are submitting assignments by indicating the total number of assignments submitted each hour for every day of the week. Filters provide different perspectives, including activity types, specific activities of interest, and date ranges.

Activity Results in Course tracks a student's performance over time based on historical activity scores grouped by activity type, such as homework, quiz, or exam scores. This perspective can help identify differences in student performance between activity types or determine when to reach out to a struggling student.

Dimension 3



Learner Performance

Overview of Learner's Performance in Classroom Activities summarizes and presents average student performance for each course activity to help instructors quickly understand how many students are making submissions and meeting due dates, as well as what they are scoring on course activities. The dashboard helps track how students' learning is trending with course progression.

Learner's Workload in Current Term presents the number of activities due for each student in a class, across all their courses on any given day (up to 5). Instructors can select date ranges, grading status or narrow in on specific students to help adjust assignment due dates or to plan future course sections.

Learner's Activity Profile on Canvas merges assessment of Canvas engagement and course performance to quickly identify students who may not be regularly interacting with online course materials then review how those students are meeting deadlines and scoring on activities.

Enabling a Larger Conversation

Beyond helping instructors become more effective teachers, Course Insights is one element in a suite of tools developed by the University of Nebraska designed to enable coherent conversations concerning equity and inclusive learning across the entire University. Faculty, administrators, deans and department chairs, curriculum committees and course designers all have access to data-informed perspectives to make better decisions, based on tangible metrics, to serve every student. For more on these tools, visit: <https://executivevc.unl.edu/academic-excellence/undergraduate-analytics>



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