Empowering instructors to teach the way they want to teach

The University of Arizona is leading the way in delivering online courses that are ranked amongst the top online programs in the US.

One of their main drivers is to provide freedom and autonomy to their students seeking an online education. They provide the technology tools to enable students to access course material, classroom discussions, and homework while doing so at their own pace. They were looking for an education technology solution to help them optimize the building and maintenance of their 10,000 course sites a year.

School

The University of Arizona is dedicated to providing its students with an education that encourages exploration and innovation. Built around a culture of student engagement and success, students can take advantage of the many activities, opportunities, and services to help them develop their careers and personal lives.
Overview

With affordability and accessibility continuing to be top of mind concerns for most institutions of higher learning, online learning remains a disruptive force within the educational world. More than one in four post-secondary learners in the US today now take at least one distance learning course with nearly 3 million doing their degree entirely online.

Nationally ranked as one of the best in the nation, the University of Arizona has been steadily expanding its online presence from a robust catalogue of graduate programs (the school’s doctorate of nursing degree has been available fully online for the last 15 years) into the world of undergraduate degrees. Through UA Online, the goal is to create and offer a targeted general education program that supports faculty and student collaborations and “conversations” across course boundaries. Over the last two years the university has aggressively expanded its online offerings, launching 31 undergraduate online degrees. Fifteen percent of the university’s course catalogue is available in fully online format.
The Challenge

The University of Arizona’s online learning options run the full gamut of availability from web-enhanced courses, to hybrid, to fully online courses. Courses are assembled and packaged for fully online degrees by the Office of Digital Learning while support for all other degrees is provided by the Office of Instruction and Assessment. Teams within the two offices work hands on with instructors to turn teaching ideas into realities and create engaging and innovative learning environments, help with pedagogical planning and curricular design, instructional technologies, multimedia and website design, and course and student assessment. Technologies involved in the delivery of learning are many and varied—from Adobe® Connect™ software, to the Turnitin® solution, to the Panopto® platform for lecture recording—dictated by the faculty and what they want to accomplish. Instructors also use the Brightspace Learning Environment to provide an organized and centralized learning experience for students where they can access materials, engage in related activities to apply their learning, and receive instructional feedback.

Course preparation is always a messy business, and with the rising popularity of online courses and degrees, the two offices found themselves overwhelmed by the effort of building and maintaining 10,000 course sites a year.

“The structure and administration of the student information system and the learning environment can sometimes be problematic,” explains Mark Felix, director of instructional support at the University of Arizona. “We’ve struggled as a university over the last 10 years to create a shared understanding of the educational workflow, the workflow of academic technologies, and the bidirectional impacts of managing the student record.”

In the past, faculty members used something called a “holding tank” to move information from the student information system into the Learning Environment. Predominantly an administrative interface, the holding tank was not accessible to faculty. To make a change to a course site (for instance to merge two sites together) an instructor had to send in a request to staff, then wait on the requested change to be assigned and implemented. Requests for change were always heaviest at the start of a semester, putting additional pressures on both staff and faculty. “Customizing this kind of service was really tragically flawed from the beginning,” says Mark. “I had a team of five and it was not uncommon for me to be forced to take two people off of support during the first week of the semester and have them solely responding to section realignment or section configuration requests. That simply wasn’t tenable as we continued to grow. At that time, we had only 2,500 course sites a semester and I was devoting nearly half my team to the task. Now we’re up to 4,500 course sites in a semester.”
“Over the past year I’ve had many conversations with institutions who are frustrated by the service provided by SIS providers and who are left frustrated and wanting more. The solution we built with the help of the Brightspace Developer Platform is addressing a real need across the industry. It removes the conversations about technology access and control and allows us to all concentrate on supporting great teaching and learning.”

*Mark Felix, Director of Institutional Support, University of Arizona*

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**The Solution**

*A new workflow empowers faculty with the ability to change bureaucracy to meet their needs.*

About three years ago, the University of Arizona set out to create a real-time integration for course site creation, instructor enrollments, student enrollments and final semester grades. It wanted to allow the university's colleges, departments and faculty to take ownership of their courses while still allowing the Registrar and Bursar's Office to conduct business the way they wanted to. Through a newly re-designed workflow, faculty would be able to log into a website, view their information, then drag, drop and rearrange information into the way they want to teach, versus the way the department or university structured the information for the purposes of managing the student record. At the end of the semester, the faculty could then log into PeopleSoft and click a single button to import grades from Brightspace, the university's chosen learning management system (LMS).

“We wanted faculty to be able to solve problems as soon as they realized them. We didn’t want them to have to wait overnight. For instance, it is not uncommon for our distance office to throw in an extra section of students when there is rising demand. This might mean we have to quickly split out a section after the term has begun, changing who is responsible for teaching that section based on the adjunct's schedule and classes," explains Mark. “We wanted to make it easy for instructors to go into the system, remove a section, or add two new sections, so enrollments could happen in real time as much as possible and students could gain the right access to the right faculty member with the right syllabus.”

Turning to the Brightspace Developer Platform, university staff developed a method for instructors to create courses through Brightspace on demand and roll them out to its 43,000 learners.

A data sync process was first created to map out semesters, departments, course templates, course offerings and sections in the system. If a new semester or department appears in PeopleSoft, it would be automatically created in the course management system and in Brightspace. A new mobile responsive website was also created utilizing drag-and-drop functionality, with an alternative navigation process for those faculty requiring a screen reader. This easy to use website makes it easy for nearly 4,000 tenured faculty and adjuncts to build course sites and arrange their sections every semester with no training.
Finally, a single click solution was created to pull Final Adjusted grades out of Brightspace and submit them to PeopleSoft at the end of a semester. This allows faculty to turn in their semester grades quickly, and allows students to see their grades as soon as they are posted by faculty. The solution is powered by Amazon Web Services.

Cascading roles simplify system access
One of the key enablers of this system was the notion of cascading roles within Brightspace, which provides a user enrolled in any organizational unit with access to all course templates, course offerings, and groups and sections under that department. “This allowed us to give instructional designers and support staff in a department one click access to all past, present and future course sites related to that department,” explains Mark. “If the request was college wide then we go through their 20 departments in a similar fashion.” Through the Brightspace learning tool interoperability (LTI) specification, instructors were also given access to all of the University of Arizona’s technology integrations. Says Mark, “this access has really helped us create solutions that are part of the entire learning ecosystem of our university.” Mark has also been able to play with roles and permissions to grant other users across campus with granular level permissions to perform tasks that previously fell to his team. For instance, the university’s library team can add a Panopto link to a course site to provide students with access to streaming video assets and place files into the Panopto platform without being able to edit content or see grades.

D2L technical account management support saves months of time
To guide the two offices through the construction of the new workflow, the University of Arizona engaged D2L’s Technical Account Management program. “We knew we needed help,” admits Mark. “The questions we were routinely asking were too granular for standard documentation, past the expertise of tier one and tier two levels of support, and a sales rep couldn’t devote the time needed to track a technical project. D2L’s Technical Account Manager (TAM) helps cut through to the heart of the issue. We have regular conversations with our TAM, who we consider to be an extension of our internal team. The TAM can track down resources within D2L that I’m simply unable to get even with advisory board access. It’s definitely saved us months and months of time.” The TAM will also be instrumental in helping steer the university through a move from an on-premise solution to a cloud-centric hosted model leveraging Amazon Web Services gives learners access to download their personal certificate directly from the platform itself.
The Results

**Double the course sites and transforming a team from tech support to Instructional support**

The University of Arizona’s use of the Brightspace Developer Platform’s open API and integration tools earned the academic institution the D2L Excellence in Integrations and Extensibility Award for 2017. The resulting new workflow has also saved the Office of Instruction and Assessment and the Office of Digital Learning countless man hours. Where in the past it would require two dedicated persons to manage change requests for 2500 course sites, staff now spend about an hour collectively training faculty, who are able to manage all their own changes to 4,500 course sites containing 8,700 sections. “It has allowed us to double the number of course sites we provide services to,” says Mark. “It’s made a huge difference in allowing our team to stay the same size at five people.”

Because University of Arizona faculty are able to make all their own changes to course sites, they feel more empowered and in charge. “We get feedback that rolls into our inbox every semester saying, “Thank you. I can’t believe it was so easy. I’m already building my course sites. I didn’t have to email anyone and ask for permission,” says Mark. “It doesn’t matter now if they are working on a course in April for the fall semester, or implementing a last-minute change the day before classes begin in August. With Brightspace and all of our campus wide technologies we’re ready and able to meet them on their own terms to get them started and up and rolling.”

Results courtesy of University of Arizona.

Mark Felix and team are also continuing to evolve the system so college level instructional designers can create course sites without being given admin rights to the entire learning environment.