Technology is ready to learn too

Finding new ways to better serve students and faculty
Instructional technology once upon a time meant rolling a cart with a TV or projector strapped to it into the classroom. Today, educators expect to have all materials available at their fingertips, whether they are teaching in the classroom or online.

Beyond classroom tools, technology has become an integral part of the education experience. Gone are the days of waking up early and standing in line at the registrar’s office to get the courses you need to complete your major. Even books have moved online. Teachers reserve space outside their classrooms and resources for the class through online portals. Schools communicate via email and text rather than hard copy letters. In the competitive world of higher education, and to a lesser extent elementary and secondary education, schools have to meet students’ expectations of being a digitally-driven organization with many services available online. And of course, all of this has to happen with tight budgets and high levels of security.

The prospect of managing these technology demands is almost as daunting as the mission of these institutions to shape the minds of tomorrow. As this book details, educational institutions worldwide are successfully meeting these challenges by building their operations on a platform that:

• Prioritizes self-service
• Utilizes an easy to access and search knowledge base
• Enables predictive insights for proactive data-driven decisions
• Visualizes measurement and metrics to show status and support funding decisions

The stories that follow show how institutions are enhancing the student experience, easing administrative work for faculty, and streamlining the management of it all for IT teams. All of the examples presented in this book were detailed at our virtual Knowledge 2020 event.

Please check out the sessions linked throughout for a more detailed discussion of how organizations have implemented new technology and new processes to move their institution forward into a digitally-driven educational environment.
Supporting the whole student

Universities function like self-contained cities, providing more than just education. Housing, food supply, transportation, employment, healthcare, and public safety are all part of the responsibility universities have to their students. Similar to how government is focused on streamlining its citizen experience, universities are focused on better enabling students to answer their own questions, get help when and where it is needed, and have a cohesive and consistent experience with the university.

Universities can centralize student services with a technology platform approach that connects once disparate departments, providing a universal look at how the institution is interacting with each student. This shift requires more than just technology, it also means a focus on the people and processes that serve students.
Beyond ABCs, focusing on PPP

Deakin University in Australia serves over 65,000 students. General inquiries about making payments, dropping classes, etc. went to a variety of sources. There was no coordination between the contact centers. Contact with students took between 4 and 14 minutes to resolve and many times involved transferring to other departments. Additionally, the university saw that students frequently "shopped" around until they got the answer they wanted, since there was no record of previous conversations. To address this, the school wanted to centralize the response to students. The effort included changing and agreeing on processes and utilizing the ServiceNow platform to enable both self-service and facilitate a single pane of glass view for school staff.

This effort was focused on the four Ps—people, process, platform, and performance. Deakin knew that by engaging the people (staff) early and often and gathering data to right-size processes, they could use the ServiceNow platform to continually improve the performance of their service team.

Deakin created a knowledge management ecosystem for use by students and staff alike. This allowed students to look up answers to their questions and provided a central point of truth for staff who fielded calls. Centralizing contact allowed the university to spot and react to trends. For example, they could see that questions about choosing classes ramped up about a week before registration started. This enabled them to pull information together from the knowledge base and present it front and center to students via a communications campaign. This effort saw a 34% decrease in calls/contact coming in around registration time. This ability to quickly coordinate information and answer frequently answered questions also proved helpful in supporting students unable to travel to the university during the COVID-19 pandemic. For example, international students were flagged in the system so that they would be the priority for contact staff.
Making knowledge an asset

The University of South Carolina knew that back-to-school move-in week was a peak time for their IT helpdesk as students got settled on campus. Focusing their efforts on building a knowledge base, the IT group created an option for students to self-serve through an intuitive website that linked to information and documentation that was created through the normal course of work.

At its peak, they logged 2,200 contacts in one week. With the knowledge base in place they were able to deflect 450 of those calls to the website, moving people off the phone and into a place where they could get the information and do the activity themselves. This resulted in $8,000 in savings in just that week.

In another case, the university used the knowledge base to facilitate a shift to multi-factor authentication. Over half of the people who used the knowledge base were able to solve their issue without further contact. Only 16% of people who read articles ever started a ticket.

Schools are there to empower students with knowledge of the subject-matter they are learning. This same value on knowledge and self-discovery should carry over to how these institutions serve students in the business of learning.
Tapping into faculty passions to improve employee experience

Teachers are inherently focused on facts and measurement, as evidenced by the research they conduct and the way they test students on information use and retention with grades. In serving the faculty of an educational organization, administrative staff should tap into this belief in and thirst for data. In an education environment where research is a passion, the move to self-service through knowledge base articles is almost easier than other industries.

Creating this knowledge base requires work centralizing information and response via a shared service model. ServiceNow is proud to have helped a number of organizations take distributed HR functions and move to a centralized structure that can better support faculty and staff needs with a combination of self service and visibility across employee support services to get the right help to employees at the right time.
Transforming HR into a provider, not a watchdog

Ohio State University had a goal of modernizing the employee experience, and this started with centralizing the HR functions of the university into a single, shared service. Previously, HR was spread across the colleges and provided an inconsistent experience. HR staff was used to walking into meetings and hearing, "Oh watch out, HR is here." They wanted to be seen as a partner and service provider, not a group solely focused on punishment or admonishment.

The now centralized HR team rolled out a new case and knowledge management system using ServiceNow. This meant the first introduction to this new way of doing HR was around transactional activities like adding to benefits after getting married or having a baby, as well as administration related to labor relations. All interactions with staff are now logged into the system so that baselines for service could be created. With this view of interactions, anyone within HR can see where the staff member had come to HR before and what they had been told. Conversations could continue rather than having to start at square one with a series of questions that often feel interrogative. This initial roll out is the first step in transforming the view of HR from parental to partner.
While a single customer portal is the goal for many organizations, several ServiceNow customers have discovered that portal and homepage are not synonymous. A homepage tends to be static and not tailored to the individual viewer. It still relies on email communications to get work done. Digitally-focused groups are evolving the homepage concept to create an individualized experience for their customers that ties directly into service management systems, creating a single workflow for request and response.

For example, the University of San Francisco wanted to increase self-help and automation, allowing users to help themselves and improve resolve time. Staff were unsure of the best way to get their IT issues resolved. They felt like emails got lost, so many called the help desk many times, duplicating requests.

In creating the IT service portal, ticket creation was not an immediate option. Instead, users were presented with an intuitive search interface that encouraged self-service. This one move decreased emails and calls by 5,000 in the span of one year. As staff got more comfortable with the portal their use increased with knowledge article views going up by 20,000. When a ticket was created, users could see the status via the portal without having to constantly contact the help desk. This was one factor in resolve time dropping from 9 days to 6 days after one year and down to 1.7 days after 2 years of portal use.
Eliminate the drive-by

At the University of Cincinnati, requests for IT support and Instructional Design services were made by phone, at the watercooler, and via email. All of this was tracked through spreadsheets. Faculty felt their requests were best heard when they were able to grab a member of the IT team in the halls and talk through what they needed. This meant that support was provided by individuals, not by the team. The only way to change this culture was by creation of an intuitive portal that ensured staff felt heard and the technology team could track all requests to better manage response.

The portal, backed by a knowledge base, allowed faculty to look up information and self-serve, but a ticketing option was still front and center. To ease the cultural shift, the portal provided an option to send an email (which was routed into the ticketing system, not into individual email boxes). An automated, immediate response was generated informing staff how they could track the progress of their request via the portal. Follow-up also frequently included direction on how they could use the portal to solve their issue in the future. The team pushed portal use with reminders in their email signatures and in every ticket response.

With all of the incidents captured in a single system, the IT and Instructional Design teams can work together to ensure faculty have the technology resources they need. They can also be more proactive in designing new solutions as well as providing documentation in the knowledge base to increase self-service.

Enabling self-service and capturing all interactions not only benefits end-users with a quicker response, it also vastly improves efficiency for IT teams. With routine questions and basic administration automated, IT support can focus on more strategic efforts, including app development and higher-level support.
As the demand for technology grows exponentially in the classroom as well as in the business of education, IT teams serving educational institutions have to learn how to work smarter, not harder. The keys to doing so involve:

- Automation of routine tasks
- Enablement of self-service with knowledge bases
- Measurement and metrics for prioritization of tasks
- Predictive analytics for proactive support

Digitally determined organizations have introduced automation and self-service, as well as collected enough data from daily workflow to present metrics that show the success of these efforts. A key measurement of working smarter is deflection rate—how many calls are not coming into service desks as a result of self-service and virtual assistants.

The University of Maryland introduced a combination of virtual agents and contextual search for self-service, decreasing incidents by 24.7% per month. For submitted incidents, they were able to close 85% on first contact and 96% within two points of contact. Further, the calls that do come in can inform changes that need to be made to the knowledge base that powers self-service. For example, if people are calling in after reading knowledge articles, that indicates that the material provided is not clear or is not addressing the real issues people are having.

With these successes, organizations can move into the next phase of digital maturity by adding in AI and machine learning technologies for a predictive approach to IT service.
Virtual Agent Tier 0

Western Governors University (WGU) was looking to make their service desk more efficient in responding to the needs of faculty and staff. They used the virtual agent capability embedded in ServiceNow to act as Tier 0 support. When staff visited the ServiceNow site, they could use the virtual agent to check the status of tickets. The agent also fed users links to knowledge articles to answer questions.

To further adoption, the IT group also embedded the virtual agent in Microsoft Teams, a platform staff was using extensively. It was well received with users finding that the virtual assistant was 75% quicker than previous methods. By deflecting cases to the assistant, the service desk saves nearly 100 hours/month.

To expand on the success of the virtual assistant, WGU is implementing predictive analytics for Tier 1 contacts. Currently the technology is used to automatically identify ticket categories and sub categories, saving service staff from filling in those sections on the 17,000 incidents they handle per month. The analytics are performing with 86% accuracy, driving down talk time by 15 seconds per call and achieving 100% satisfaction with Tier 1 agents.
Reducing staffing, not staff

The IT service team at UNC Greensboro manned their service desk 24/7/365. They wanted to move people out of the operations center and into more proactive roles in the organization.

They began by automating a number of manual processes, such as weekly testing of a DSL back-up line and managing physical access to data center. Building automated workflows and logic for some other tasks was more complicated, but the team was able to program in logic that would identify root cause and limit the number of calls that went out to staff.

For example, if a central component went down and impacted 15 applications, the system was taught to first call the owner of the central component, since fixing that would solve the chain reaction of problems. With this automation, only one person got a call and started working, as opposed to all 15+ owners who might end up working at cross purposes.

Over winter break, 14 incidents were generated yet only two needed human interaction. This efficiency meant that in-person staffing could be reduced for service and those employees could instead work on proactive IT projects or provide support for truly complex tickets.
Knowledge is power

Perhaps more than any other industry, higher education professionals know that knowledge is power. As we now walk around with all of the world’s knowledge in our pocket (via our phone), there is no excuse to stop learning and discovering.

Institutions that harness all of the information about their systems and processes in an easy to access knowledge base find that their users, students, faculty, and staff alike are more than happy to be able to help themselves to information that solves questions when they arise. This self-service enables IT and the customers it serves to look beyond immediate troubleshooting and develop the next technology solution that will have an impact on how learning happens and business get done.

Behind every great experience is a great workflow. Over and over at Knowledge 2020, we heard determining those workflows is dependent on listening to the people involved and making them part of the digital transformation of their work. Looking at how people want to interact with the organization and then building to that goal is the only way to evolve service delivery and enable a digitally-driven educational environment.
About ServiceNow

Globally, education institutions of varying sizes rely on ServiceNow to support their digital transformation. With one platform, we connect, automate, and optimize an entire education institution to better deliver on its mission.

For more on ServiceNow’s education solutions, visit: [servicenow.com/solutions/industry/higher-education.html](servicenow.com/solutions/industry/higher-education.html)

Additional Resources

Infographic: The new standard in higher education
Brief: Delivering great experiences while building resiliency
Knowledge 2020: Education playlist