We expect teachers to be on the cutting edge of their fields. To be familiar with the latest research, to understand the history of current trends, and to see the nuance at play even in relatively settled subject matter.

We also expect they’ll be at the forefront of their practice, regularly testing new approaches to teaching and readily adopting those pedagogies that better engage and educate their students.

All of which is likely why it’s so common for individual faculty and departments to lead the adoption of academic technologies in most institutions of higher education. Individual instructors experiment, and when they find a tool that truly helps, they share that wisdom with their colleagues.

Yet when it comes to teaching and learning, this ad hoc approach to implementing classroom technology can be both an opportunity and a burden. On one hand, such an approach enables faculty to independently reshape learning experiences and better support the needs of their specific classrooms, while at the same time, giving students more flexibility and control over their own learning. On the other hand, some technologies can be challenging to adopt and support on a one-by-one basis, and can create headaches for administrators, instructors, and students alike when each class has its own subset of tools and technologies to work with.

The University of Washington

Enhancing Teaching and Learning With A Single Campus-Wide Video Solution

98%

Students agree Panopto contributes to their learning

9 in 10

Students report viewing recordings helps them improve their grades

60K+

Hours of classroom video content recorded with Panopto

About the University of Washington

Founded in 1861, the University of Washington (UW) is one of the world’s preeminent public research universities. Ranked No. 14 in the 2018 Academic Ranking of World Universities, the UW educates more than 54,000 students annually. With multiple campuses in the Seattle area, UW offers more than 1,800 courses each quarter and confers more than 12,000 bachelor’s, master’s, doctoral and professional degrees annually.
At the University of Washington, recording lectures proved to be such a challenge. Early on, individual instructors and departments each began selecting their own lecture capture solutions. But with multiple solutions in place, adoption and satisfaction among both staff and students were lower than expected. Students were frustrated by having to find course videos within different systems, video quality was often an issue, and faculty found that some tools were either hard to use or they lacked the capabilities they needed to create course videos.

Finally, in 2011 the university’s CIO and provost became interested in adopting a single video solution in order to standardize the institution’s video capture capabilities and ensure student learning experiences would be consistent.

Working hand-in-hand with a group of faculty and staff who supported teaching and learning, the UW Information Technology team set out to find a single, comprehensive video solution that would be easy to use, while still meeting the diverse set of needs of faculty and students across all three UW campuses.

The challenge:
Meeting Diverse Needs For Video Technology

As they began their search, the UW Information Technology team first wanted to make sure that they had a clear understanding of where their existing tools were falling short — and what capabilities their ideal video solution should have to fully support the needs of faculty, staff, and students.

They began by conducting a technology needs assessment that surveyed faculty and staff in twelve different schools and departments. Here’s what they learned.

Meeting The Needs Of Students

Almost immediately, recorded lectures had proven to be an extremely popular and valuable resource for students. The problem was they weren’t always available and they weren’t always accessible.

Availability

Students had quickly come to rely on lecture videos to improve their comprehension of difficult subjects, and used them heavily when studying for midterms or finals. And with a mix of on-campus and commuter students, as well as many Division 1 athletes, lecture recordings were a well-used failsafe for those who couldn’t make it to class.

The UW wanted to ensure that lecture videos were more widely available to students. They needed a video capture solution that would enable them to automatically record lectures in all of their classrooms, and they wanted to be able to centrally schedule and manage recordings from a single dashboard. This would enable the school to offer lecture recordings for most courses, while minimizing the resources and time needed to manage lecture capture at scale.

Accessibility

Accessibility was also a top priority for the UW — administrators were dedicated to making campus technologies beneficial for all its students. That meant any video platform the team might select would need to be ADA Section 508 compliant, with ample support for video captioning, screen reader use, and keyboard-based navigation.
Accessibility would of course be essential for students with specific learning challenges or for whom English was not their native language. Yet the benefits of accessibility would be felt by a far greater number of students, as captioning and other accessibility-focused features had also been shown to support comprehension and learning for all students.

Meeting The Needs Of Faculty

In adopting a new video platform, UW administrators envisioned creating a learning environment that could use video alongside other technologies to make learning more active and engaging for students.

To encourage faculty to experiment with new video-supported pedagogies, the school needed to remove as many barriers to entry as possible and chose a solution with maximum flexibility.

Ease of Use

Between planning for classes, delivering lectures, grading assignments, staying up to date in their field, conducting their own research and study, and the other professional demands of faculty members in higher education, instructors seldom have time to learn every last detail about every new academic technology. When testing a new tool for the classroom, the criteria for judging success is often quite straightforward: how easy is this tool to use?

For UW, the new video solution needed to be reasonably easy to learn quickly, even for those without much technical know-how or prior experience with video. That meant it would need an intuitive interface and supportive documentation, and that it should require as little interaction from the instructor as possible while in use.

Flexible Recording

While recording lectures would be the primary use for the new video platform, UW faculty also wanted to do more with video. The needs assessment showed that they wanted to be able to record their own videos outside of class, enabling them to experiment with new pedagogies as they chose.

With the ability to record from anywhere, on any device with a camera and microphone, faculty hoped to be able to incorporate video into learning in more ways, including:

- Recording microlectures to introduce or go deeper on a particular topic
- Recording from the field in order to share more direct details in the sciences and performing arts
- Sharing knowledge and information from professionals and other experts working in a particular field to give students new perspectives
- Capturing student presentations and providing detailed feedback to improve their skills
- Improving distance learning with more interactive video resources

With the detailed information from the needs assessment in hand, the UW Information Technology team set out to find and test a video solution that would be easy to use, enable recording and editing from anywhere, support accessibility, and make capturing and managing video at scale easy.

“Panopto has been a partner in our mission to provide the best possible learning experience for students. The company listens to our input, continues to evolve their service based on our feedback, and actively works with us to ensure that our implementation is always well supported.”

— Tom Lewis, Director, Academic Experience Design & Delivery, University of Washington Information Technology
The solution:
A Flexible Video Platform
And A Partner For Accessibility

The search for a flexible and robust, yet intuitive video solution led administrators at the university to Panopto.

In the Panopto video platform, UW found a secure end-to-end video solution that could capture multi-camera video inside classrooms and from the faculty’s own devices, offered simple online editing tools for cutting and splicing, enabled video captioning at scale, and supported central administration of scheduled recording and video management.

On paper, Panopto met the full range of UW’s needs. Before investing in the platform, however, the school wanted to be sure that faculty and students agreed. To find out, UW first launched a quarter-long pilot in which Panopto was installed in four lecture halls and put to the test among eight instructors and 530 students.

Tom Lewis, Director of Academic Experience Design & Delivery for University of Washington Information Technology, remarked on the results of the pilot. “Panopto offered a superior user experience and a range of features that impressed both faculty and students. From our standpoint, the decision to make Panopto the video solution for the entire university really made itself.”

When comparing Panopto to its previous lecture capture systems, the UW IT team saw other benefits as well. Since Panopto was software-based, it could be implemented quickly across campus. Panopto also leveraged the architecture of the Internet to deliver video much in the way Netflix or YouTube do, which made video playback both more reliable and less stressful on the university’s network bandwidth. And Panopto integrated easily into many of UW’s existing systems, including its learning management system, Canvas, as well as the in-room AV equipment the school already had.

When it came to accessibility, UW was at the forefront of identifying and advocating for technology features that would truly make video accessible to all students. In fact, the UW had a vision for video accessibility that was ahead of where most industry-leading video solutions were at that point. Before, during, and after rolling out Panopto across all three campuses, the UW team worked toward a shared ideal for making video accessible to everyone. After the rollout, Panopto’s CEO and founder, Eric Burns, went to the UW campus to meet with the school’s accessibility leaders to establish a collaborative partnership to help ensure that Panopto would support the UW team’s roadmap for future accessibility.

The results:
An Adaptive Video-Enhanced Learning Experience

With Panopto, the University of Washington was quickly on the path to growing a scalable video learning ecosystem. In just two years, faculty at the UW had created over 16,000 recordings totaling over 15,000 hours of video. By 2018, they had captured over 30,000 hours of video.

In the years following UW’s implementation of Panopto, the IT team conducted multiple surveys to gauge satisfaction with Panopto among faculty and students and to understand its impact on teaching and learning.

The Student Perspective

98 percent of UW students agreed that Panopto contributed to their learning, and 9 in 10 believed that viewing recordings helped them improve their grades. Students reported that Panopto was helpful when studying for exams and made it easier to review difficult or confusing material. Students also appreciated being able to re-watch a lecture as many times as they wanted, and at the speed they wanted.
Here’s how students reported using Panopto:

• Reviewing what they did not understand (67%)
• Studying for an exam (66%)
• Reviewing a missed class (60%)
• Taking notes within a recording (46%)
• Using recordings to prepare for a class in advance (30%)

The Faculty Point of View

By and large, faculty found Panopto to be easy and reliable, and to work well with existing systems and devices. As more and more faculty have incorporated video into their teaching practices, they reported Panopto has enabled them to:

• Flip their classrooms and encourage active learning
• Record guest speakers
• Cover more content and have deeper discussions
• Review video analytics to improve course content

Faculty, too, believe Panopto has helped improve learning for students. According to the survey responses, faculty report it’s now easier for students to get content and make up assignments when they miss a class due to illness, athletics, or even traffic on their commute. That means students can come to office hours with productive questions instead of looking for information they missed. Faculty also feel Panopto has been especially beneficial for non-native English speaking students, as well as those with disabilities, and has helped in providing an equal academic experience to all UW students.

Lewis and his team expect the use of Panopto at UW to continue to grow. “Panopto has made a positive impact on teaching and learning at the University of Washington,” said Lewis.

Bringing Panopto To The Internet2 Community

A few years after choosing Panopto for its own campus, the University of Washington was asked to be a part of the process of evaluating Panopto for inclusion in the Internet2 NET+ program.

Internet2 is a non-profit, advanced technology consortium that provides national, globally interwoven technology infrastructure and collaboration capabilities for the nation’s researchers, scholars, and learners. It exists to facilitate mission-critical technology services for U.S. higher education institutions in support of their educational, research, and community service missions. Today Internet2 serves 316 US universities along with 43 regional and state education networks, supporting over 100,000 institutions.

One of the ways Internet2 provides value for its member universities is to validate and streamline procurement for select cloud services through the Internet2 NET+ program. To ensure that Panopto’s video platform would meet the diverse requirements of its members, Panopto underwent a rigorous service validation process with University of Washington, as well as Northwestern University, University of Arizona, University of Central Florida, and University of Notre Dame.

“Since we implemented Panopto at the University of Washington, it’s become a critical asset for our faculty and students,” said Lewis. “Over the last three years, our faculty and staff have created more than 60,000 total hours of academic recordings that students use as a valuable study aid. Just as importantly, Panopto has been a partner in our mission to provide the best possible learning experience for students. The company listens to our input, continues to evolve their service based on our feedback, and actively works with us to ensure that our implementation is always well supported.”

The two-year validation process included a comprehensive review of Panopto’s functionality, security, identity, accessibility, compliance, network architecture, and legal terms. After successfully completing the process, Panopto has become the first video platform provider for education to join the Internet2 NET+ program, offering Internet2 member institutions discounted pricing, simplified purchasing with a common customer agreement, and secure, reliable streaming delivered over the Internet2 Network.

“Panopto has made a positive impact on teaching and learning at the University of Washington.”

— Tom Lewis, Director, Academic Experience Design & Delivery, University of Washington Information Technology