

University of Newcastle

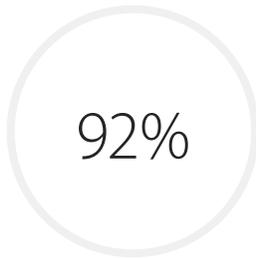
From on-premises to the cloud —
how switching to Panopto prepared
the University of Newcastle for tackling
unforeseen challenges.



of academics are recording
with Panopto



increase in student engagement
with video content



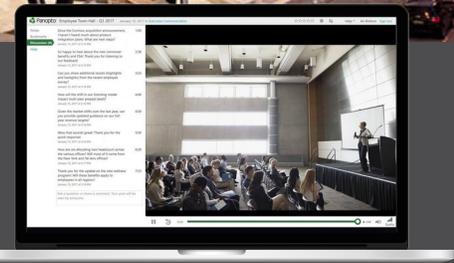
decrease in system
downtime

At the University of Newcastle, lecture recordings evolved quickly from a nice-to-have to a learning tool that students couldn't live without. Among the many benefits lecture recordings offer, they relieve students from taking notes in class so they can fully engage with lecture content, and enable students to personalise their learning so they can master new concepts.

While lecture capture technology had been available on campus at the University of Newcastle for several years, lectures were not always recorded and made available to students. In 2015, students spoke up and demanded the University take action to provide lecture recordings for every course.

Understanding the learning advantages of lecture capture, the University responded with a plan to record every lecture on campus. They equipped 150 teaching spaces with lecture recording technologies that could record, process, and upload the videos to their on-premise servers, from which the content could then be shared and made available to students. And, it was mandatory for academics to record their lectures.

The University went to great lengths to expand lecture capture across campus. However, it wasn't long before technology leaders encountered complications with their on-premise solution.



About University of Newcastle

The University of Newcastle is an Australian public university that provides a world-class education to over 37,000 students across more than five campuses. Established in 1965, the research-intensive University focuses on supporting its academics, students, and staff in pursuing innovative solutions to the world's great challenges.

The challenge:

Managing Lecture Capture at Scale

With the infrastructure and policies in place to ensure the University could meet its commitment to students, technology leaders soon began to feel the stress of managing a system that did not scale easily.

The University of Newcastle's video library grew rapidly. Just as quickly, the University began to approach its storage limits, which in turn impacted system performance. This meant that system administrators had to engage with individual instructors to identify old content that could be deleted, then manually delete each video. Ben Armstrong, a Learning Technology Support Specialist with the University's Learning Design and Teaching Innovation unit, described the laborious process required to free up storage and continually manage system performance.

"There was no real way to automate the content lifecycle," he said. "We had to identify the oldest video content, then delete recordings either one-by-one or, at best, a hundred at a time."

System downtime also became a problem and frequently prevented students from accessing critical course materials when they needed them. These outages impacted student engagement, which caused the University of Newcastle to make the shift to a cloud-based solution for more reliable uptime and system availability.

Lastly, even with the improvements made across campus to expand lecture recording, academics lacked the tools to easily create video content for their courses outside of the classroom. Teachers who wanted to flip their classes or implement blended learning methodologies that would free up more class time for engaging with students had to find other solutions for recording and sharing course videos.

The solution:

Switching from On-Premise to the Panopto Cloud

Given these limitations and manual overhead, technology leaders at the University of Newcastle sought to evaluate the capabilities of other solutions on the market. A rigorous investigation of several vendors followed, leading campus administrators to choose Panopto's cloud-based video management system.

Compared to other campus video technologies, Panopto offered a complete platform that was as sophisticated as it was affordable. The University of Newcastle had found not only a scalable solution for securely hosting and streaming video content online but also a flexible set of native tools for recording and editing that would give teachers the ability to create course videos on their own.

In 2018, the University made the switch away from their on-premise system to Panopto.

"Panopto was a game-changer and a lifesaver for us," said Ben. With fine-grained permissioning capabilities and tools for setting content

retention policies that automated the removal of older videos, Panopto provided the University with an efficient means of distribution for all campus video content.

Learning technologists no longer worried about hitting storage limits and frequent outages, either. Instead of outages every two weeks, the new system was only unavailable for periodic upgrades, which occurred once on average every six months — a 92% reduction in system downtime.

"Panopto has just made our work so much easier," said Ben. "It gives us more control over the video content, and our increased usage hasn't impacted the system's availability, or its performance."

With Panopto, the University of Newcastle was also able to arm its academic staff with the technology they needed to create rich and engaging course content, then share it from anywhere, on any device.

"Teachers can use their desktops, their phones — any recording devices they have — then upload the videos from anywhere in the world," Ben said. "Panopto's app interfaces are very intuitive, which has made it easy for instructors to record, edit, and share video content with students."

The results:

They Were Prepared for the Unexpected

An academic contacted Ben while on an overseas business trip in Switzerland, as he wanted to share a message with his students back in Australia. Ben recommended the Panopto mobile app. The academic pulled out his mobile phone one morning and recorded his video message with a background vista of the Swiss Alps. Using the Panopto mobile app, his video was uploaded, processed, and available in his Blackboard course site within a matter of minutes.

“It doesn’t matter where you are with Panopto; it just works!” said Ben. “In the cloud and on AWS, Panopto makes it easy to create and upload videos from anywhere in the world to connect with your audience.”

The extensive capabilities of their video management system would prove to be critical for maintaining the continuity of education when the coronavirus pandemic hit in early 2020. While there was no precedent for such an event, the University of Newcastle leveraged Panopto to begin transitioning to e-learning as the pandemic forced universities across Australia to close their campuses.



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— **Ben Armstrong,**
Learning Technology Support Specialist, Learning Design and Teaching Innovation Unit, University of Newcastle

Circumventing the Great Firewall

Supporting students overseas was one of several unexpected challenges the University of Newcastle encountered as the pandemic disrupted both on-campus operations and international travel. Behind the Great Firewall in China, students experienced frequent difficulties accessing

online course materials through their Blackboard LMS, which made remote learning, at best, frustrating and, at worst, impossible.

After several unsuccessful efforts to improve the learning experience for students in China, the University stepped outside of its LMS to implement an innovative solution. Ben explained, “When students could no longer download attached media files and course materials, our teachers were able to upload content and communicate with their students in China using Panopto.”

Transforming Teaching and Learning

“Panopto has been an essential part of our COVID-19 response,” said Ben. “And we’ve found that when a presentation includes a video presence of the teacher, there is a higher level of student engagement in that class.”

In stark contrast to the “sage on the stage” lecture-centric teaching methodology that most academics at the University of Newcastle had used prior to the pandemic, 90% of them now use Panopto to record lectures and other asynchronous learning content for students to watch on their own, outside of live class sessions.

Academics use synchronous class time (via Zoom or Blackboard Collaborate) to engage students in active learning, rather than delivering

didactic lectures. Recordings from synchronous sessions held via Zoom are then automatically uploaded to Panopto where it's easy for remote students to find, watch, and review live sessions.

The University of Newcastle's strategic use of both synchronous and asynchronous video technologies has driven a 25% increase in engagement with course videos in Panopto — the central point of distribution for all of the University's recorded course content.

"We're beginning to see more academics using the flexible, blended model of learning where students absorb the information prior to class and then spend their in-class time actually working through problems and engaging with teachers," explained Ben.

Looking towards the future, Ben believes that, with the transformations and trends in teaching and learning happening in response to the pandemic, "The day of the lecture might soon be dead."

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