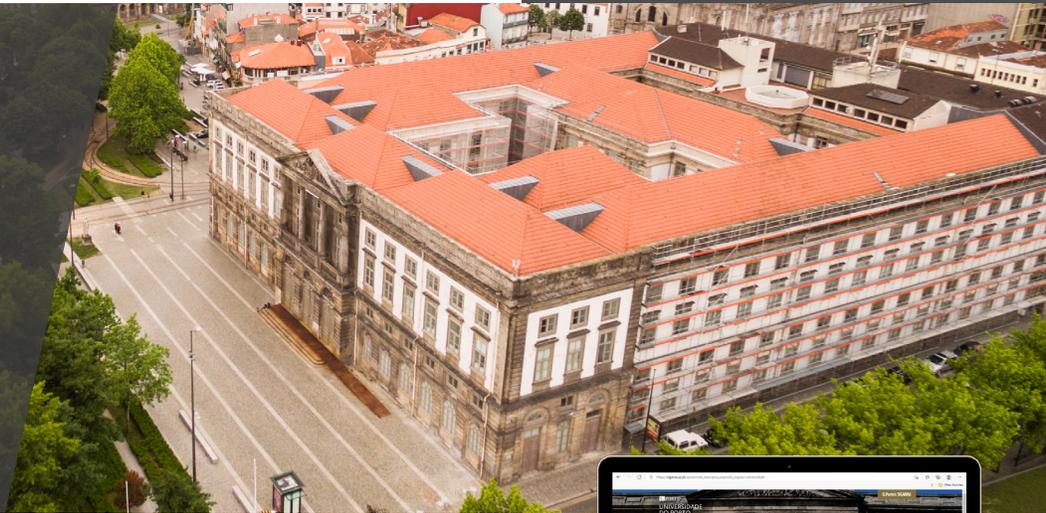
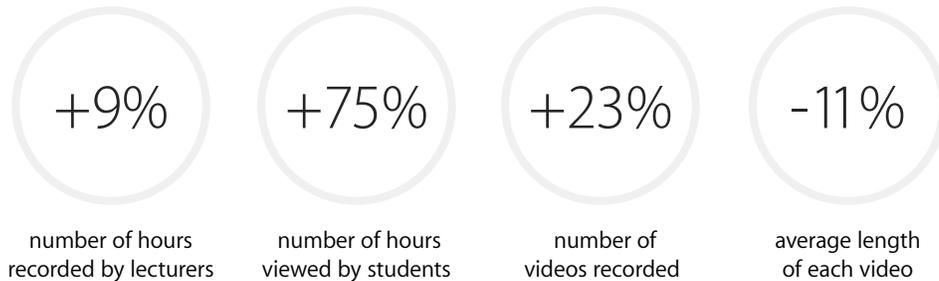


University of Porto

Reimagining the learning experience: University of Porto embraces a streamlined video solution to embed innovation in education



In comparison to 2019-2020, the 2020-2021 University of Porto academic year experienced the following:



Excellence in education attracts Portugal's brightest students to the University of Porto. Over its century-long history, the school has established a track record of leadership in learning innovation.

Video had long been among the tools offered to faculty to augment their courses, but most educators were reluctant to use it. The Pedagogical Innovation and Educational Technologies Unit, with deep expertise in educational design, multimedia resources, and emerging learning technologies, had an ambitious vision: to make video a core element in the academic experience at the University.

In that vision, video would enrich all students' educational experience by giving them opportunities to reinforce key concepts, catch up on missed material, and study for exams. But video technology would also support new styles of learning, make courses more accessible to disabled students, and bring university education to nontraditional audiences. And, although staff did not know it at the time, video would enable the University to seamlessly transition to fully remote learning during the pandemic.

But attaining this goal required a much more streamlined, versatile, and easy-to-use video management system.



About University of Porto

The University of Porto stands out for its rich academic community and commitment to excellence in teaching. As a center of scientific research, the University puts innovation at the core of its mission.

More than a century old, it is the second-largest public university in Portugal, with nearly 33,000 students and 2,500 faculty members. The institution consistently ranks among the top universities in Europe, and its faculties of architecture, science, economics, and engineering are especially highly regarded.

The challenge:

Cutting through complexity to bring the benefits of video to faculty and students

Under Instructional designer and E-learning Specialist Nuno Regadas, technical staff were all too familiar with the shortcomings of the older video management system in place in 2014. Its complexity deterred users and resulted in limited adoption across the Porto campus. Regadas knew that for the University to tap the full potential of video as an instructional strategy, barriers had to be removed.

The goal:

An easy-to-use, flexible video management system that everyone would love

The Educational Technology team began exploring new video content management systems to meet these challenges. Regadas and colleagues researched video management systems available commercially as well as a system offered to Portuguese public educational organizations.

Along with team coordinator Margarida Amaral, Regadas identified the University's most important criteria for comparison:

- Ease of use
- Flexibility and compatibility
- Cost
- Screen recording capability
- Permissioning
- Subtitling functionality
- Reporting
- Specific features

As a baseline, University of Porto required a system that was secure, simple to use, straightforward to manage, and offered streaming, screen recording, lecture capture, picture in picture, editing, and other core aspects of video management. Beyond that, the institution sought a platform that was affordable and did not rely on a rigid hardware-based architecture. The team also demanded full LMS integration, robust permissioning where users could access only their course units' videos, the ability to measure student engagement, and adaptability for emerging academic applications. Also critical was to find a scalable solution with low complexity that a nine-person team could manage.

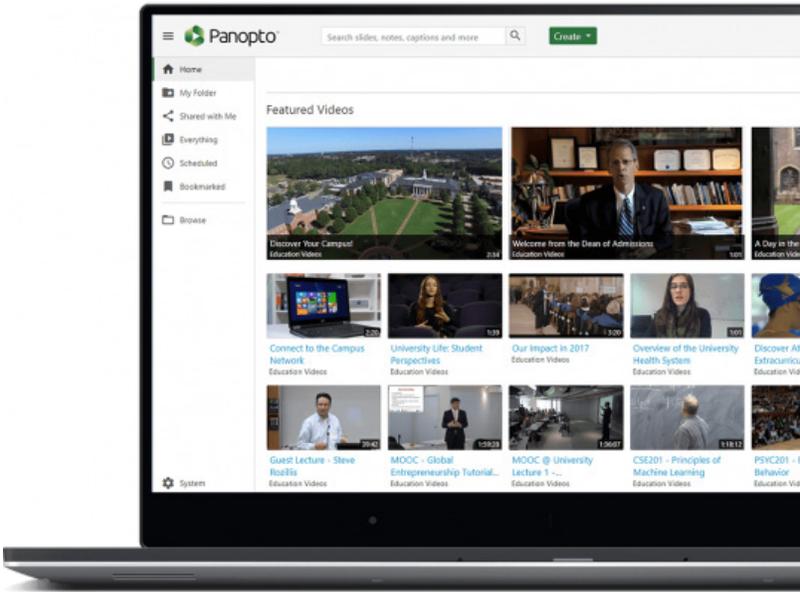
“ We see a new era of teaching and learning innovation in which video plays a central role, driven by Panopto. ”

— **Nuno Regadas**, *Instructional Designer and E-learning Specialist, University of Porto*

After narrowing down the list of potential choices, the University implemented a pilot project with Panopto. The Educational Technologies unit saw that Panopto offered superior technology and cost-benefit value over other products.

Panopto's ease of use and flexibility for faculty, students, and technical staff were the major selling points. The system was simple to learn and versatile for all users. This meant the Educational Technologies unit would be able to scale implementation across the campus with existing staff capacity. The team could also easily administer the platform, which gathered all videos in a central, searchable library.

For instructors and students, simplicity promised a positive user experience. Regadas knew this was crucial if the team was going to convince faculty without technical expertise that they could manage video creation frustration-free and reap the learning benefits for their students.



In the trial, Amaral soon saw other advantages including fast video processing and uploading to the cloud, fine-grained access controls, and how Panopto's software-as-a-service model worked with any device or operating system from any location. Also, it is a versatile tool not only to be used by teachers and students, but also by faculty staff in the production of tutorials, onboarding videos, reporting and service presentations.

“Video will be one of the most important tools to help the University of Porto to reach new target audiences.”

— **Nuno Regadas**, *Instructional Designer and E-learning Specialist, University of Porto*

The results:

Panopto drives University's transition to video-rich learning experience

Based on the success of the pilot project, the Educational Technologies team selected Panopto and implemented it in 2015. The platform integrated seamlessly with other technologies already in place, in particular the University's learning management system, Moodle.

The Educational Technologies unit began gradually rolling out Panopto to the University user base. The team worked closely with faculty members to ensure a smooth transition. User feedback on the platform's ease of use was highly favorable, and instructors found the privacy, security, and access controls reassuring.



From 2015 to 2020, the tech team managed a new influx of users, with 25% year over year growth. Faculty experimentation drove this growth. Faculty often started by making short videos, such as explaining a specific learning point or answering common questions, so students could reinforce their understanding of the material as needed, Regadas said. This enabled instructors to better allocate their time.

Previously resistant teachers became more willing to record videos and capture lectures. Their experience demonstrated the value of video for several use cases: to give students a way to deepen their understanding of course material, catch up on missed classes, fill in context for notes taken during class, aid review, and prepare for tests. Adoption was strongest in the sciences.

Another important application was assisting students with disabilities. Panopto offered a way for students who were unable to attend in person to take classes remotely. In the 2017-18 school year, Regadas' team launched a pilot project at the Faculty of Arts and Humanities for a student with disabilities. The project used iPads and remote recorders to capture on video all of the student's classes. That produced 85 videos totaling nearly 142 hours.

“One of the major findings was observing how effective those videos were and how useful they were to each student,” says Regadas. That led to efforts to equip more classrooms for lecture capture. “Students with disabilities tell us that they feel more integrated than before.”

As usage grew, the University administration also turned to Panopto for staff video content such as tutorials, learning, development, and training videos.

When the COVID-19 pandemic struck in 2020, University of Porto went into lockdown along with the rest of the world, and having Panopto in place was an enormous advantage. Panopto was used by all of the University's 14 faculties, and lecturers, even holdouts, quickly became comfortable recording with Panopto.

The solution's ease of use enabled instructors to be largely self-sufficient, facilitating the massive ramp-up in video recording that the crisis required. Several classrooms were set up for recording, but classes were also recorded remotely using applications such as Zoom and Teams. Synchronous and asynchronous uses were popular, and mobile usage soared. The number of videos viewed and downloaded jumped 10-fold between the first seven months of the school year

and the period after lockdown. In the final 4-½ months of the school year, just under 1 million views and downloads took place compared to 86,000 between September 2019 and March 11, 2020. Although usage of Panopto has increased, upon analysing the support request system, only 82 requests were registered, “a low number that shows that, despite heavy usage, users did not have a lot of issues using the platform”, Amaral says.

The Educational Technologies team also benefited hugely from Panopto: 65 tutorials for teachers and students on how to use Moodle and other tools were produced!

Looking ahead: Using video to reach new audiences for university education

The University of Porto expects continued growth for video technology led by Panopto. “We see a new era of teaching and learning innovation in which video plays a central role, driven by Panopto,” Regadas says.

Among the emerging applications is serving nontraditional students such as working adults and lifelong learners.

“Video will be one of the most important tools to help the University of Porto reach new target audiences. Online courses or courses that are blended learning, with both onsite and online classes, will be more prevalent in the future,” Regadas predicts.

Porto’s professors are also embracing Panopto for flipped courses, using the platform to create and share videos that enable students to learn key material in advance of class sessions. And students are adopting video to submit work, make presentations, and demonstrate their progress in learning.

“We foresee increasing numbers of people using Panopto at the University. There’s a bright possibility for innovation in the teaching and learning processes,” Regadas concludes.

¹ Ventura, I., Correia, T., Regadas, N., Ribeiro, H., Leitão, S., Amaral, M., Veloso, J., Martins, I. (2021). Teaching support strategy during COVID-19 pandemic at University of Porto. : Proceedings of EDULEARN21 Conference 5th-6th July 2021. <https://doi.org/10.21125/edulearn.2021>

