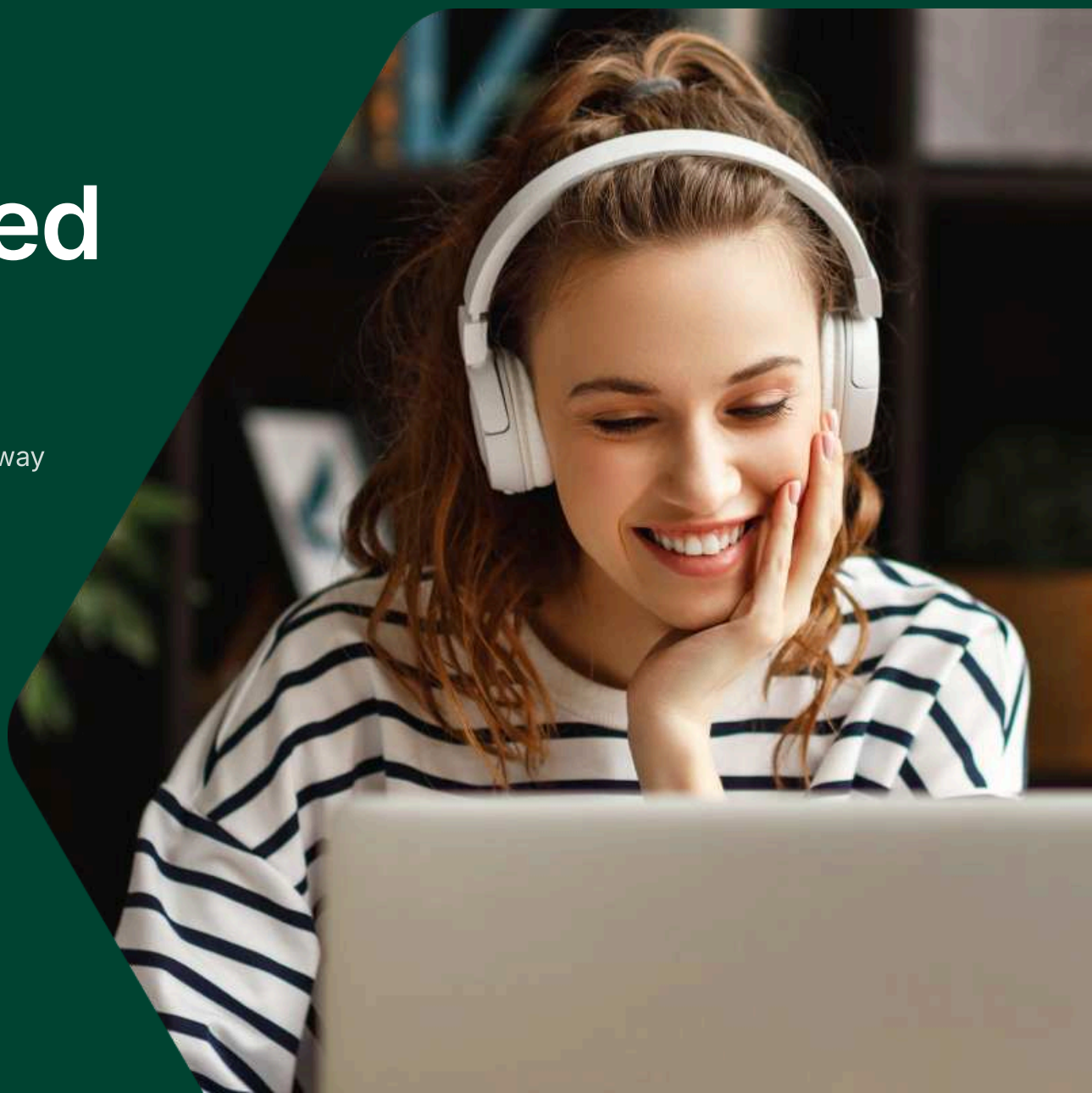


Research report

The next era of video-based learning

Global research reveals how AI is reshaping the way
students find, trust, and use course video

In partnership with



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About this research

This report draws on a survey of 760 higher education students conducted by Hanover Research and Panopto in April 2026. Respondents were regular users of video-based learning tools in curriculum from the US, Australia, Germany, Italy, Japan, South Korea, and the UK.

Executive summary

Students already use video to learn, and it works. But generative AI has changed what they expect: a direct answer to a direct question and knowledge they can engage with. Institutions already have trusted, faculty-created material sitting inside their video libraries. The opportunity now is scaling that material's impact, turning what a student can access into what a student can actually use, in the moment they need it.

This report draws on a survey of 760 higher education students conducted by Hanover Research and Panopto in April 2026. Respondents were regular users of video-based learning tools in curriculum from the US, Australia, Germany, Italy, Japan, South Korea, and the UK.

760

higher ed students surveyed

91%

use AI in some form to study



Based on the research, three-quarters of students save an hour or more of study time each week using video, and 69% estimate a grade improvement of six points or higher (see page 8). Yet 38% struggle to locate a specific topic inside a video, 35% cite missing summaries, and another 35% cite missing chapter markers or timestamps.

Ninety-one percent also use general AI tools like ChatGPT and Gemini to study, and most of those users turn to them several times a week or more. But there's a factor of trust. Fifty-six percent of AI non-users distrust the accuracy of AI-generated content, and 35% of AI users name the fear of an academic integrity accusation as a challenge of using these tools at all.

Video has already demonstrated its value.

The next opportunity is how fast students can retrieve what they need, how much they trust what they find, and whether that knowledge is captured in a form they can put to use. A video library full of institutionally trusted content is only as valuable as a student's ability to act on what's inside it.

To move forward, institutions should:

1

Make video content searchable at the moment-of-need level, not just at the video level

2

Meet student expectations with curated AI tools anchored in clear use policies

3

Ground AI-generated answers in trusted, institution-created video rather than the open internet



What students expect now: A direct answer to a direct question

Three-quarters of students who use video-based learning tools report saving an hour or more of study time each week. Nearly seven in 10 say their grades have climbed by six percentage points or more as a result. By most measures, video has delivered on its promise as a teaching tool. But the arrival of generative AI has moved the goalposts.

Students increasingly study the way they'd consult a peer: asking a direct question and expecting a direct answer. Video-based learning platforms, built primarily to store and stream content, must now include direct, conversational exchange to meet student expectations.

A 50-minute lecture recording and a direct answer in seconds serve different moments in a student's learning journey, and students want both. That's where trust becomes paramount. Survey results suggest students are more likely to rely on answers grounded in an institution's content than on a generic AI response pulled from the open internet. A small number of non-AI users cite integrity concerns serious enough to keep them away entirely.

Three forces shape this report. Findability gets a student to the content they need, trust determines whether they believe the content they receive, and usability makes that content effective. Video has already extended the reach of learning. The opportunity now is to use responsibly adopted technology to extend its impact.

The pages that follow examine how students actually use video and AI to study, where friction remains, and where institutions can close that distance. The report draws on a survey of 760 higher education students conducted by Hanover Research and Panopto in April 2026. Across its findings, a pattern repeats: students value video, and increasingly value AI, but neither delivers on its promise while the right piece of content stays out of reach. The institutions best positioned to serve students will be those that treat findability, trust, and usability as the foundation their platforms are built on.

The three forces that shape this report



Findability

Gets a student to the content they need, when and how they need it



Trust

Determines whether they believe the content they receive



Usability

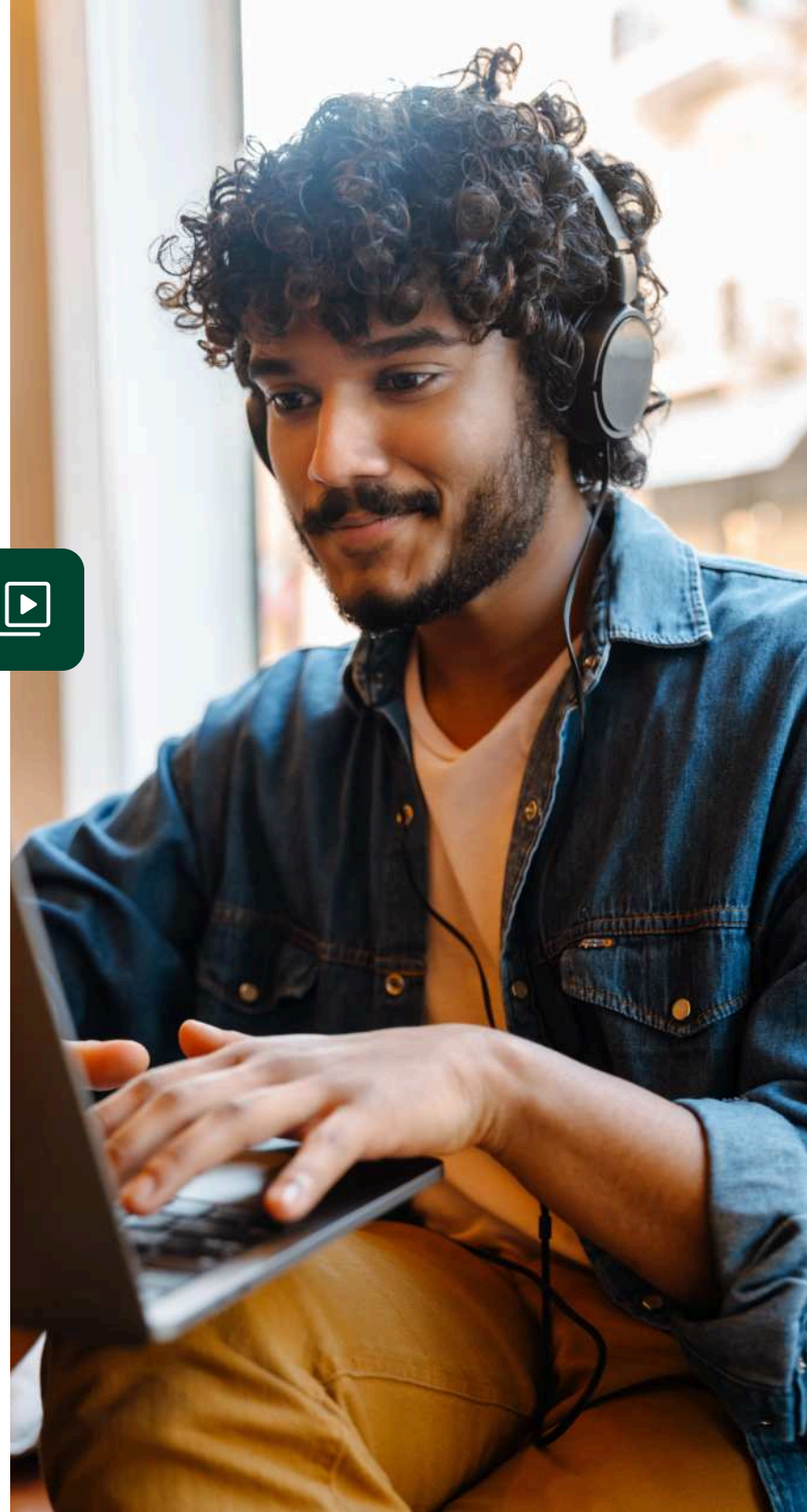
Makes that content effective and engaging

Video is paying off for students

In a [2024 survey Panopto conducted with College Pulse](#) across more than 1,500 US colleges and universities, over two-thirds of students (68%) said they preferred enrolling in courses that offered video content, and 85% said video technology enhances their learning experience.

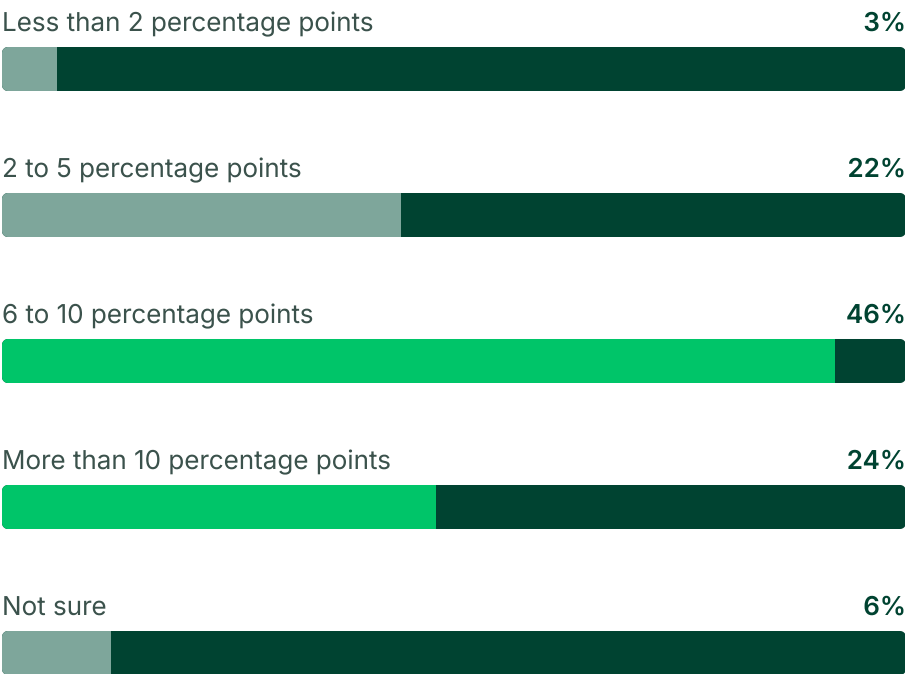
This new global research reflects that preference becoming the default. Half of students (49%) say video-based tools are required for some of their courses, and a third (33%) say they're required for most. That requirement shows up in behavior: two-thirds (65%) access video-based learning tools several times a week or more, including a third (34%) who use them daily. Video has become deeply integrated into their coursework and learning workflows.

Required use at that scale would be a burden if students weren't getting anything back. They report that they are. Video-based learning tools improve student outcomes when it comes to catching up on missed classes (70%), comprehension of course material (66%), overall studying or learning efficiency (64%), feeling prepared to move forward (64%), and exam preparation (64%). The improvement spans the moments that matter most to a student's grade.



Nearly all students (98%) report at least some grade improvement tied to video-based learning, and two-thirds (69%) put that improvement at six percentage points or higher. For an institution weighing where to invest next, that scale of self-reported gains is a meaningful signal.

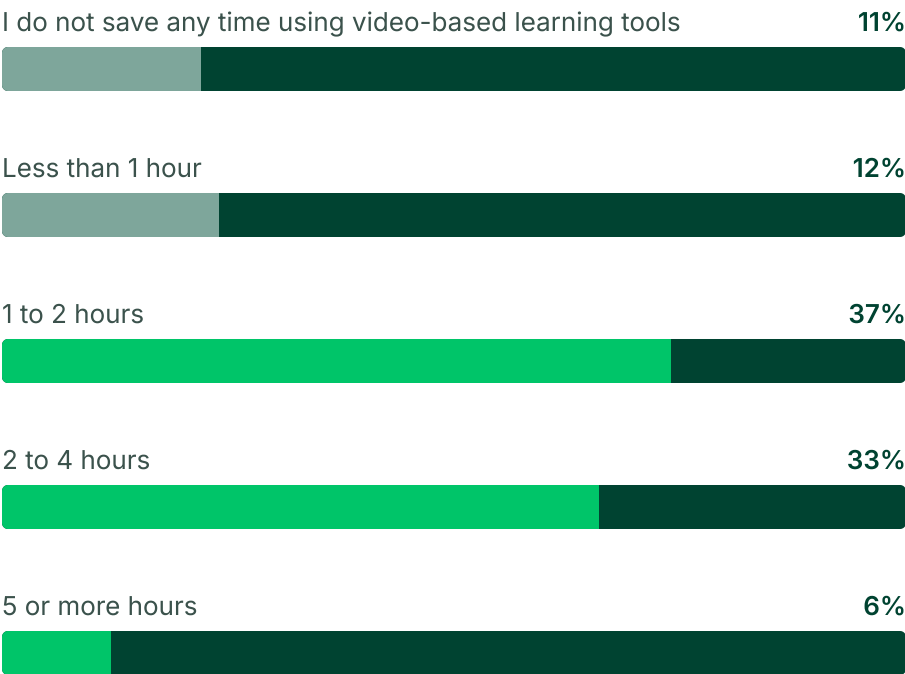
Impact amount of video learning on grades



69% estimate gains of six percentage points or higher

Axis runs to 50%. Rounded to the nearest whole number.

Study time saved with videos



77% save an hour or more

Axis runs to 50%. Rounded to the nearest whole number.



The time savings follow the same pattern. Three-quarters of students (77%) save one or more hours of study time per week using video-based tools. That time comes from getting back on track after missing a lecture (57%), reviewing before exams (56%), clarifying confusing topics (55%), or completing assignments more efficiently (53%). Each of those use cases is a moment where a student would otherwise be stuck, and video helps them keep pace and take more agency over their learning.

These findings establish something institutions can build on with confidence: video-based learning is already delivering measurable value at scale, in the outcomes institutions are most accountable for.

How students extract that value is where the story gets more complicated.

How students really watch

Watch a student study with a recorded lecture, and you'll see something closer to an editor at a cutting table than an audience member in a seat. They rewind, speed up, skip ahead, hunt for one specific explanation, and take notes along the way. The usage and outcomes data indicate whether video works, and these behaviors describe how students are making it work for them.

Three-quarters of students (73%) prefer course content videos to run 30 minutes or shorter, a clear indicator of attention when instruction runs long. Inside the video, students lean on a specific toolkit to manage their own learning: half use rewinding and note-taking (55%), and many also rely on subtitles (50%), connections to the course website (46%), adjusted playback speed (43%), watching at faster speed (41%), or fast-forwarding through parts of the video (41%). Most students still watch the full video at least once (56%), and a comparable share (55%) rewatch specific sections multiple times.

Students aren't just watching video; they're operating it, scrubbing and hunting for the section they need because the platform doesn't yet do that work for them.

Key takeaway for institutions

The return on video is proven, but students are manually extracting much of that value themselves. Taking that effort off their hands is the next improvement institutions can own.





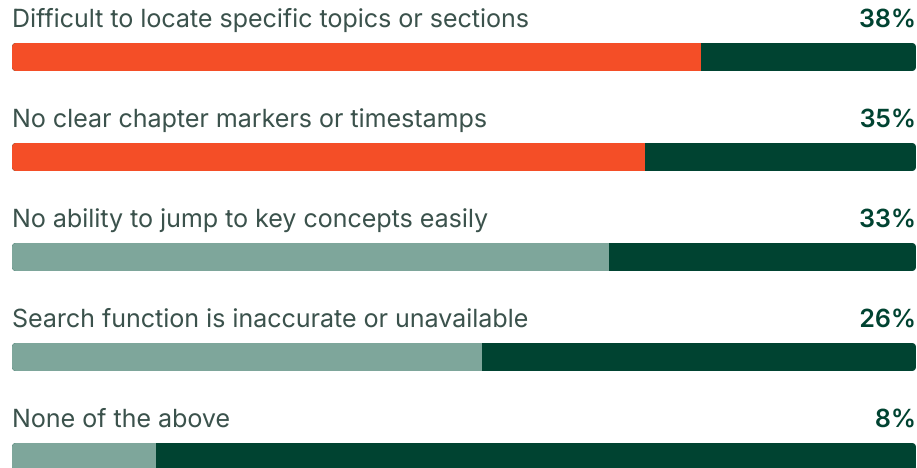
Turning recorded content into actionable answers

Students have figured out how to extract value from video with scrubbing, skipping, rewatching, and speed-adjusting. But the biggest challenge comes when a student knows they need something specific but has no way to find it inside a recording.

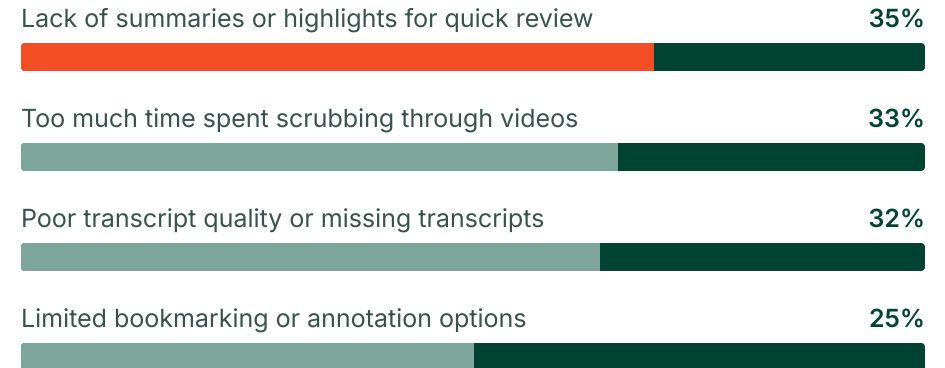
The navigation data bears this out. About a third of students report difficulty locating a specific topic within a video (38%), the absence of summaries for quick review (35%), or the lack of clear chapter markers or timestamps (35%). A related share say they spend too much time rewatching sections just to understand a concept (30%). The content exists, but the path to the right sixty seconds doesn't.

Students are already saving hours and improving grades with video, but only once they do the manual work of turning a recording into something usable. Every minute lost to scrubbing, rewatching, or guessing is a minute not spent on understanding, applying, and reinforcing what was covered. Removing friction from the learning process helps students stay engaged.

Video navigation issues



Axis runs to 50%. Multiple responses possible.



The technology to close the gap already exists, provided the platform is built to be searched. Within Panopto's video content management system, Smart Search indexes everything spoken and shown on screen, including on-slide text, so a query returns the exact moment a term appears instead of a list of videos that might contain it somewhere. Automatically generated chapters and bookmarks turn a single, undifferentiated recording into something closer to a table of contents. Timestamp navigation carries students from a search result to the right second of video immediately. And AI Search takes this a step further by allowing users to query a conversational interface and get a synthesized answer drawn from the relevant video content, along with time-stamped links to the source material.

"The value of video increases when students can do more than simply watch it. Search, navigation, notes, and assessment give students more control over how they interact with course content, turning a recording into a resource they can actively use to build understanding."

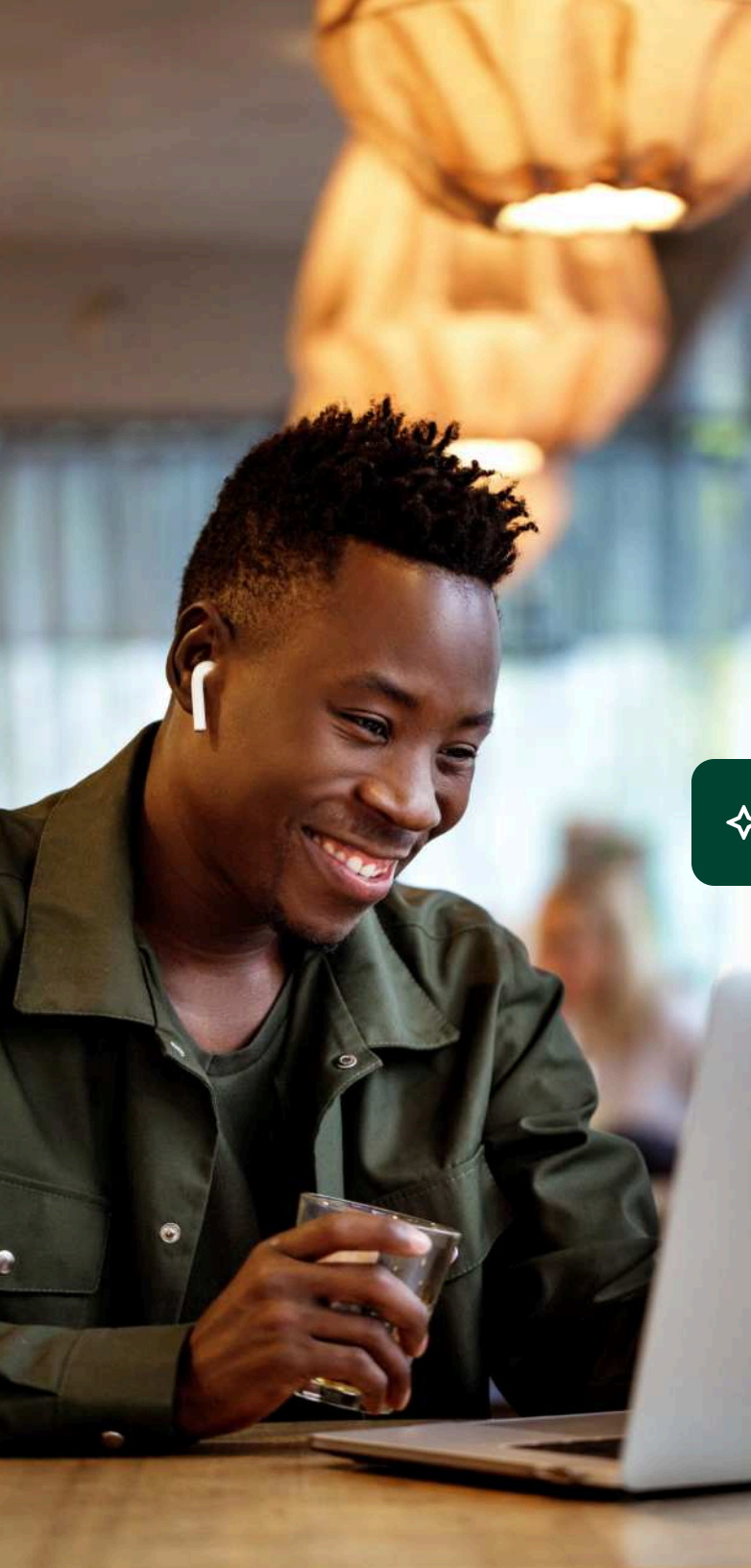


Andrew Borts, M.Ed., CTS

Senior Instructional Technology Support Specialist,
University of Nevada, Las Vegas (UNLV)

Key takeaway for institutions

Improving findability is likely the highest-leverage, lowest-cost improvement available on content you've already created. Making that content findable and usable redirects student effort from searching and scrubbing videos to understanding and applying concepts.



AI is already the default study partner

The biggest challenge students name with video-based learning is that they can't ask questions or get clarification in real time. A recording doesn't answer back. So students found something that does, and they didn't wait for their institutions to provide it.

Most students studying today have an AI assistant open in another tab. Ninety-one percent of students use AI in some form for studying. Among them, use is frequent rather than occasional: nearly two-thirds (65%) turn to it several times a week or more, including 36% who use it daily or several times a day.

91%

use AI in some form
for studying

65%

several times a week
or more

36%

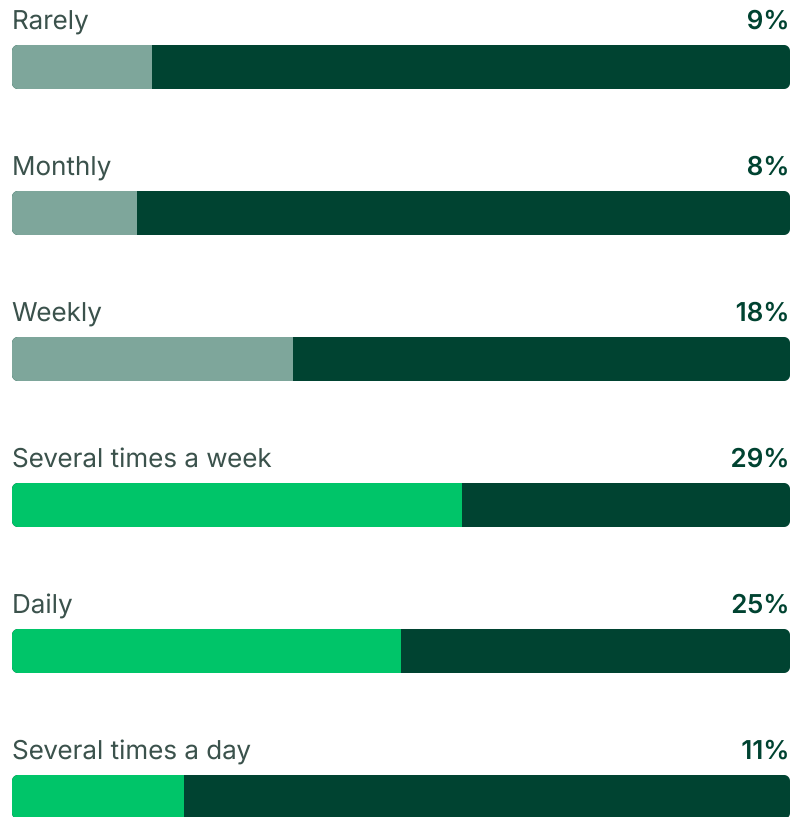
daily or several times
a day

ChatGPT (60%), Google Gemini (51%), and Microsoft Copilot (36%) carry most of that usage, and how students use them tracks closely with each tool's particular strengths. ChatGPT users lean on it to search for information (47%), explain complex concepts (45%), and prepare for exams (42%). Gemini users lean hardest on concept explanation (50%). Copilot users reach for it most often to check grammar or writing style (52%). The common thread across all three: students ask general-purpose AI to explain what they didn't fully understand the first time, and to locate information faster than searching for it themselves.

AI study tool usage methods

	ChatGPT (n=277)	Google Gemini (n=135)	Microsoft Copilot (n=84)
Summarization of video content	37%	30%	36%
Creating flashcards or quizzes	31%	30%	26%
Generating study notes	41%	30%	42%
Translating content	28%	29%	20%
Explaining complex concepts	45%	50%	46%
Writing or drafting essays and papers	33%	36%	37%
Checking grammar or writing style	43%	43%	52%
Organizing study schedules	31%	27%	33%
Searching for information	47%	48%	40%
Preparing for exams	42%	33%	39%
Getting help with coding or programming	30%	29%	21%
Getting help with homework or assignments	41%	44%	43%

AI tool usage frequency



65% use AI tools several times a week or more

Axis runs to 50%. Rounded to the nearest whole number.

The impact students report is significant. Roughly two-thirds of AI users say it strongly improves study efficiency (63-71%), comprehension (61-70%), and their confidence while studying (55-62%). Across all platforms, over half also credit AI with a deeper understanding of course material, which is a different and arguably more important claim than convenience. Time savings and easier access to information are useful, but a student leaving a study session with a better grasp of the material is the outcome that matters most.

Every general-purpose AI tool students already rely on shares one limitation none of them can fix on their own: it doesn't know what's actually inside a student's course. It can explain photosynthesis, but it can't explain photosynthesis in the way this professor taught it, referencing this week's slides and the exam in view. As we see in the rest of this report, students are wary about the difference between a plausible answer and a course-grounded one. Fifty-six percent of AI non-users outright distrust AI accuracy.

Students won't stop using AI. If institutions don't provide a solution that meets their expectations, they'll continue using what's available: external AI that searches the open internet instead of course materials.

With emerging tools like Model Context Protocol (MCP), institutions can securely link their video library with external AI platforms of their choice. This way, course data is pulled directly into conversations students are having with platforms like Microsoft Copilot, ChatGPT Edu, and Claude for Education, and their questions can draw on course-specific material rather than the open internet.

Embedded AI makes video interactive

When AI lives inside the video environment itself, rather than in a separate browser tab, students use it constantly, at least where it's available. Rather than just watching, students can use integrated AI features to ask questions, generate study materials, and test their understanding without leaving the video. Seventy-one percent engage these features most times or every time they watch a video, and 84% rate their integrated AI tools as very or extremely valuable to their study process.

Among the broader student population, two-thirds find the idea of AI built directly into video-based learning appealing (65%), and a similar share expect it would significantly improve how they study (61%).

84%

of students with video-integrated AI
rate it very or extremely valuable

Of all students surveyed

65%

find the idea of built-in AI appealing

61%

expect it to improve their studying

What do students want these features to do? Interactive assessment tops the list, with 83% valuing auto-generated quizzes and flashcards built directly from video content. Content-condensation features follow closely: highlighting key points (79%) and summarizing video content (78%) let a student decide what's worth their time before committing to watching all of it. Transcriptions and translation each land at 73%, both features that double as accessibility infrastructure and extend the same content to students who need captions, a different language, or a text-based format to learn.

In the absence of these features built into their course tools, students build the workaround themselves, often outside of their courses entirely. More than half of Quizlet AI users (57%) turn to it specifically to generate flashcards and quizzes from their own notes. Two-thirds of Otter.ai users (67%) use it to summarize video content. Half of Perplexity users (50%) use it to generate study notes.

Each represents a student leaving the learning environment to ask external AI to recreate an experience that could be built from the instructional content itself. That workaround compounds across a student's course load.

Of students with integrated AI features:

83%

value auto-generated quizzes and flashcards built directly from video content, the most wanted feature of any tested

Key takeaway for institutions

Students are already asking external AI to generate study materials from course content. Now institutions can move toward AI-enabled learning experiences that empower students to actively engage with educator expertise without leaving a governed environment.



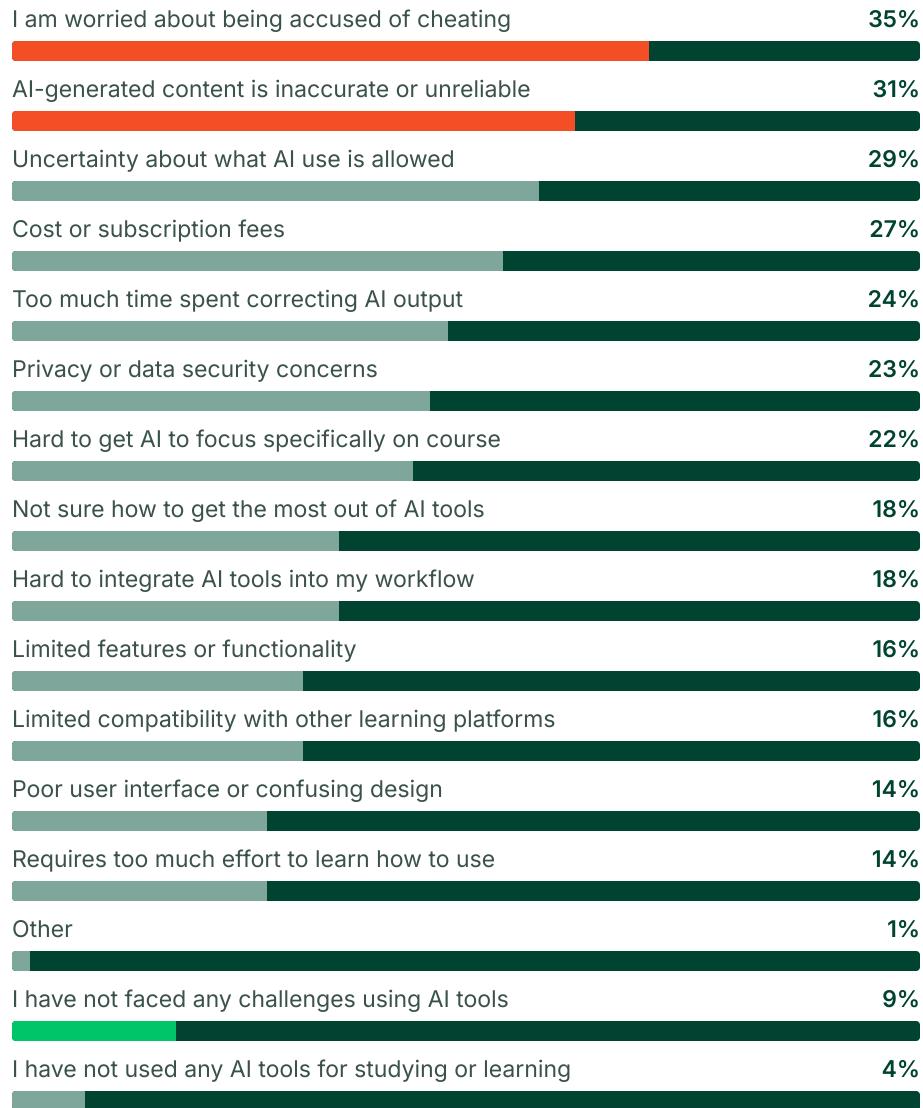
The integrity question slowing AI adoption

Two worries follow students into every AI-assisted study session: is this answer right, and am I allowed to be doing this?

The first is a quality problem. Among students who've used AI tools for tasks like summarization or note-taking, roughly a third report summaries missing key details (33%), AI inventing information outright (31%), unclear explanations (30%), and time spent correcting what the tool got wrong (30%). The second is a more institutional worry. More than a third of AI users name the fear of being accused of cheating as a challenge (35%), and nearly as many are unsure whether their use is even allowed (29%).

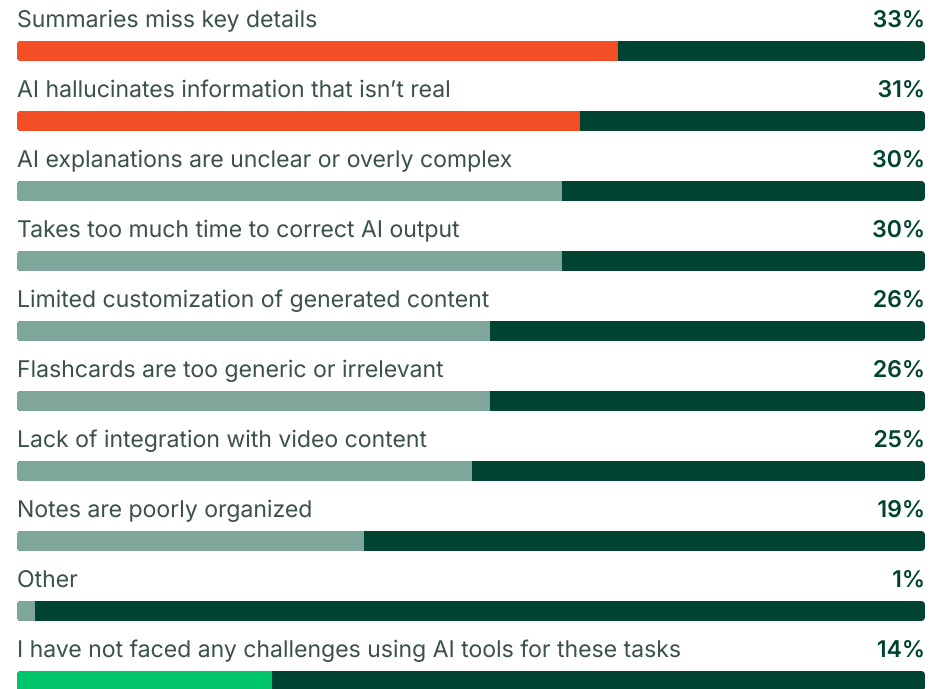
Those two concerns are whether the tool is any good and whether a student is safe using it at all. Policy can address the second. The route to trust on both counts starts with AI that draws its answers from the same faculty-created video content students already trust.

AI study tool challenges



Axis runs to 50%. Multiple responses possible.

AI tool issues experienced



Axis runs to 50%. Multiple responses possible.

Trust remains the biggest barrier

Very few students have opted out of AI entirely; just 9% report using it rarely or not at all for studying. Their reasons are specific. More than half distrust the accuracy of AI-generated content (56%), believe AI undermines real learning (56%), or raise ethical concerns about using AI at all (54%). Fewer than a quarter of these AI non-users express real interest in practice quizzes generated from course content (21%), interactive Q&A based on course materials (20%), or automatic transcription of videos and discussions (20%).

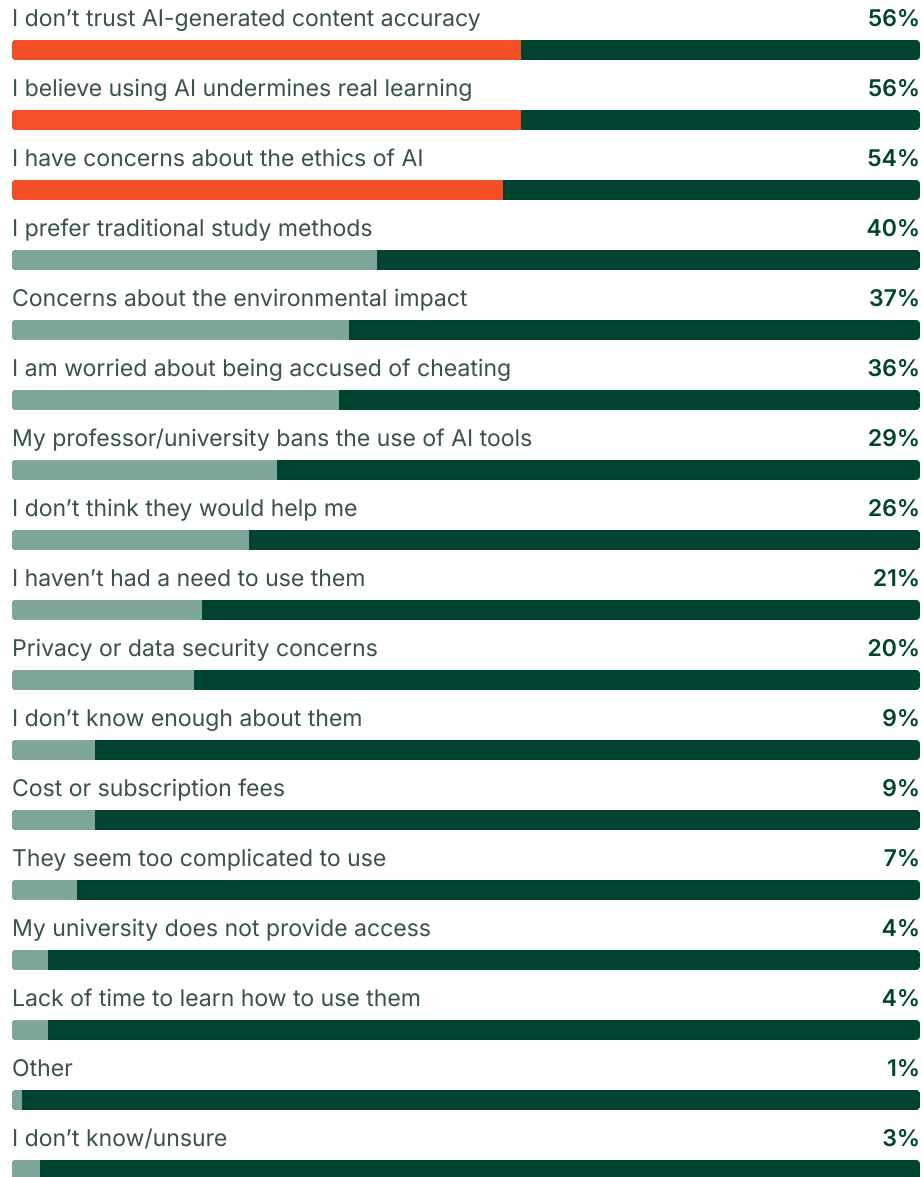
Institutional guidance helps at the margin. Thirty percent of AI non-users say they'd be more likely to use AI if their university or professors recommended it, and 29% say a clear policy on acceptable use would do the same. These findings suggest that clarity, perhaps a paragraph of syllabus language, could solve part of the problem.

56%

of AI non-users distrust the accuracy of AI-generated content, the single most cited reason for staying away

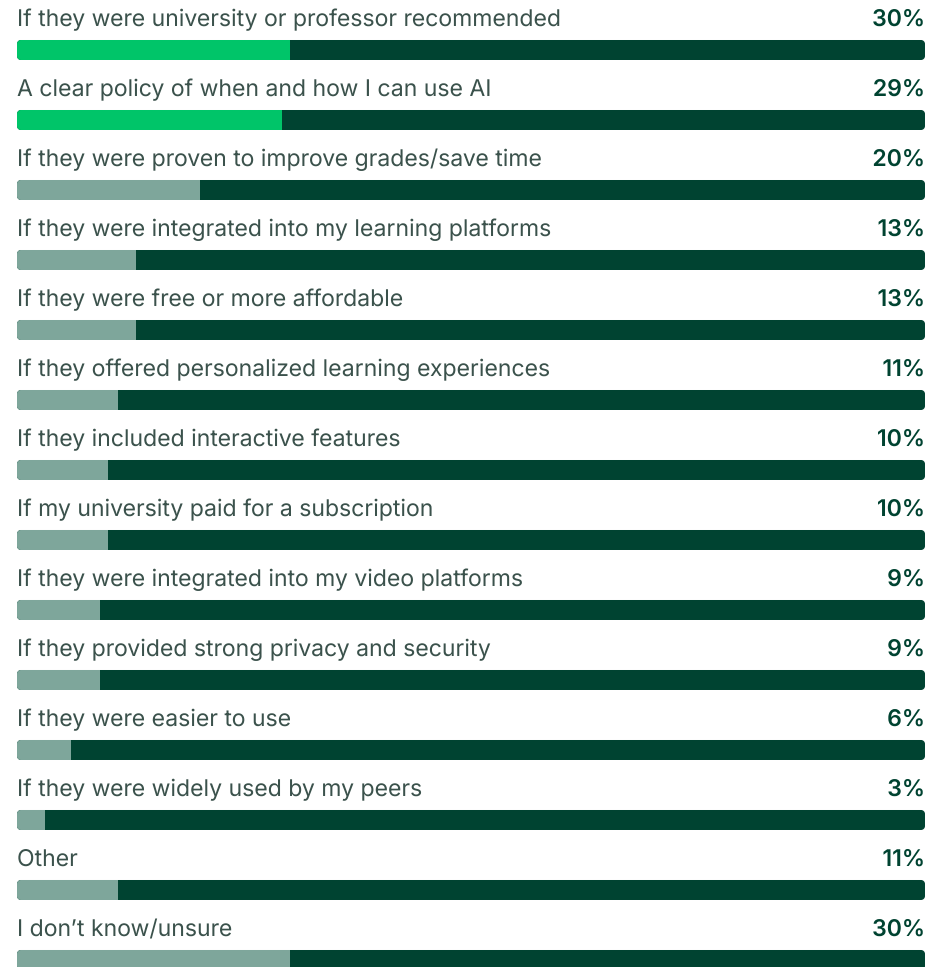


Reasons for not using AI tools



Axis runs to 100%. Asked of AI non-users. Multiple responses possible.

AI tool usage motivators



Axis runs to 100%. Asked of AI non-users. Multiple responses possible.

The larger opportunity for institutions is more than just granting permission. Offering trusted AI that draws from faculty-created video is a fundamentally different experience than a student getting a generic answer pulled from the open internet. When AI is grounded in the course content, the information it surfaces is more reliable and relevant to what the student is learning. That's the difference between learning from the web and learning from a professor with expertise.

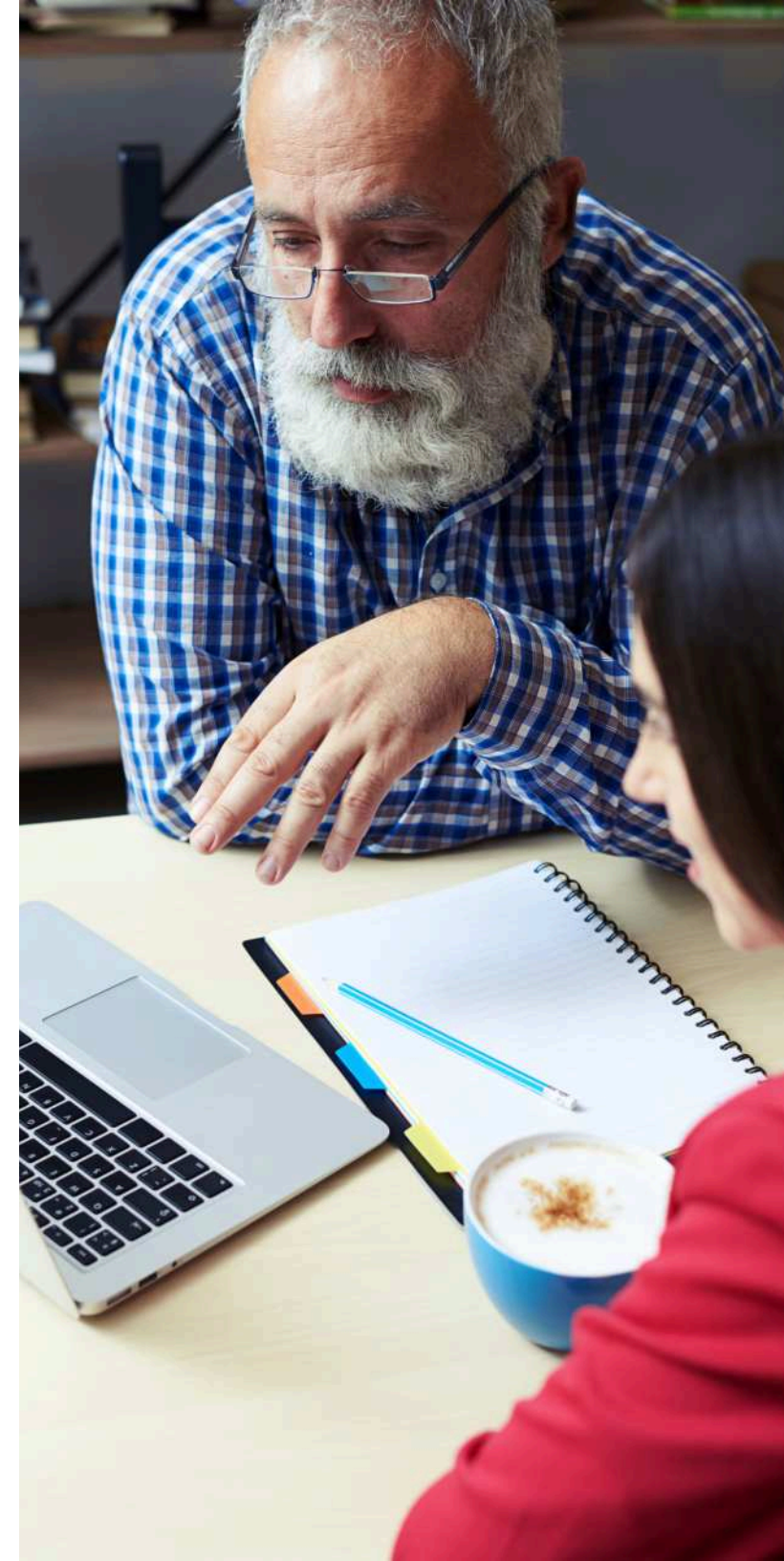
Institutions that remain silent about AI effectively push students toward external tools. Embedded AI tools pair the convenience of AI with the context and the trust students say they're missing. Once trusted, they can transform course material into interactive learning experiences that help all students build greater understanding and confidence.

30%

of AI non-users would be more likely to use AI if it were recommended by their university or professors

29%

say a clear policy on acceptable use would make them more likely to use AI



"The value of course-grounded AI tools and tutors is that they can respond using the concepts, materials, and context students are actually encountering in class, rather than drawing from a much broader body of information that may or may not align with how their instructor is teaching. That grounding keeps the AI connected to the specific materials and examples an instructor has chosen to help students understand a concept."

Dr. Derek Bruff

Educator, consultant and co-author of *The Norton Guide to AI-Aware Teaching*

Key takeaway for institutions

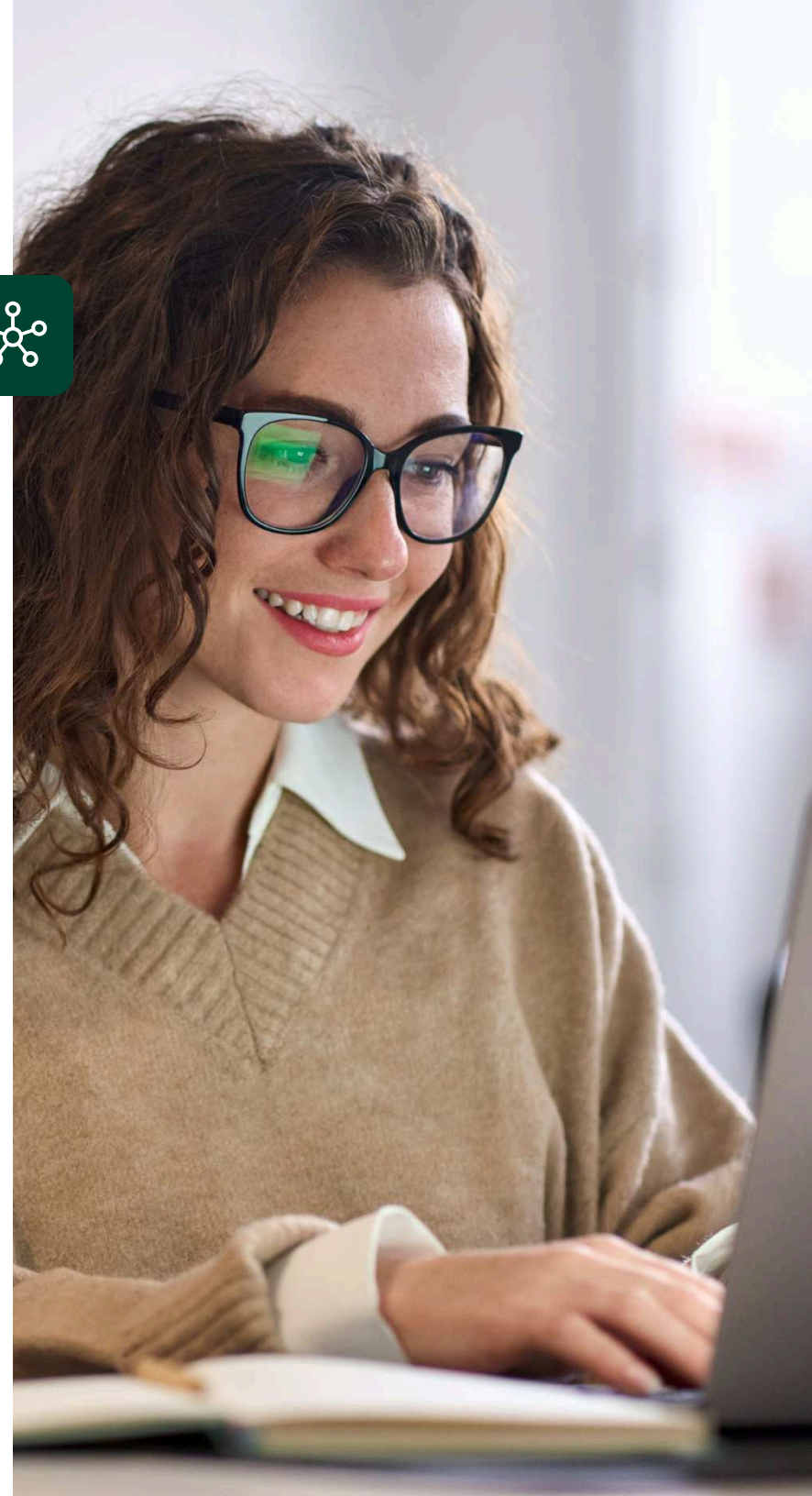
A syllabus policy removes the fear of getting in trouble; grounding AI in trusted, faculty-created video content is what makes students believe the answer.

Building knowledge infrastructure into video libraries

Everything students say they want from AI-integrated video clusters around one focus: doing less work to get to a better result.

Comprehension leads the list, with better understanding of video content (41%) and increased confidence in that understanding (35%) at the top. Reduced effort shows up directly, with 41% wanting notes generated automatically from a video rather than taken by hand. Time savings recur in several forms: saving time overall (40%), getting more value out of the time already spent studying (38%), easier exam review (37%), and less stress heading into a test (36%).

More than a third (36%) want to navigate straight to the moment they need more easily, rather than search for it themselves, and a third (33%) expect a more personalized learning experience.



"AI works best when it works alongside high-quality, human-created learning resources. Its role should be to remove barriers and amplify good learning design—not provide a shortcut around the learning itself."



Shaun Searle

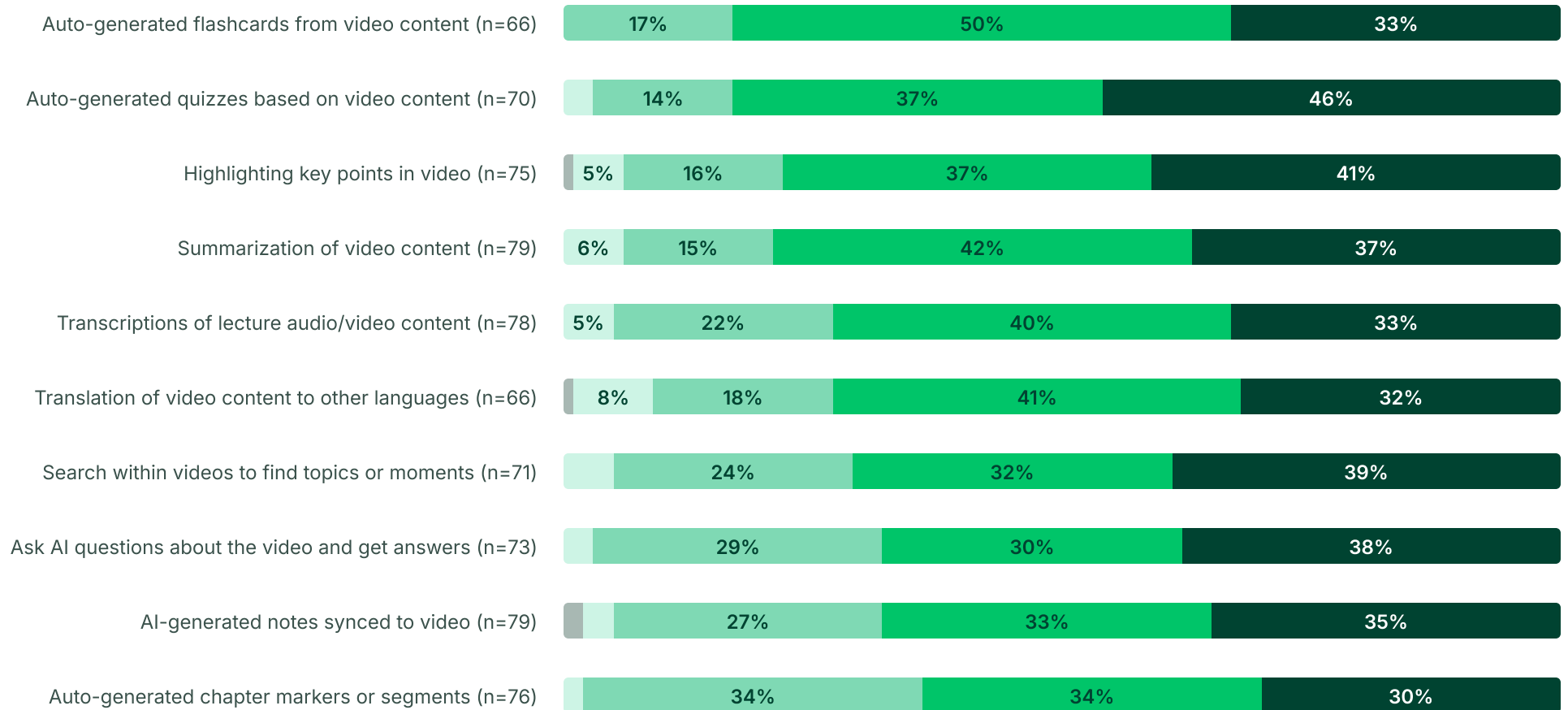
Digital Team Leader, Centre for Academic and Digital Innovation,
University of Portsmouth

A platform that does all of that has outgrown the idea of a video library. A library stores content and waits to be searched. What students are describing is a system that understands its own content well enough to surface the right answer at the right moment, also known as knowledge infrastructure.

These priorities describe a clear trajectory, and Panopto's capabilities are built to meet each stage of it.

Integrated AI feature value for study

Not at all
Slightly
Moderately
Very
Extremely



Rounded to the nearest whole number.

How video-based learning evolves with AI

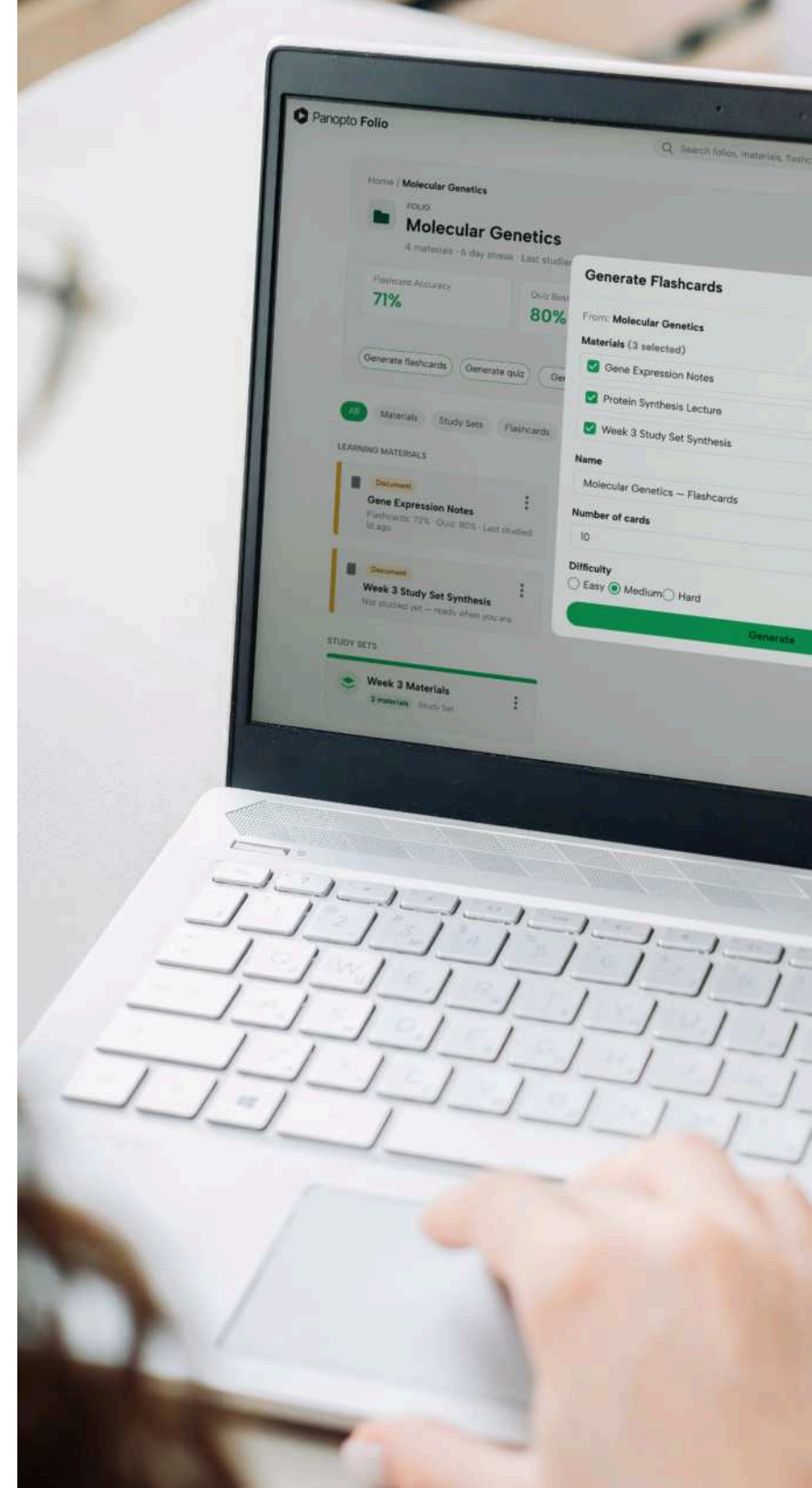
For years, the job of a video content management system was relatively straightforward: capture what happened in the classroom and make it available to students who weren't there. A lecture, demonstration, or explanation could reach far more students than could ever fit into a classroom.

That solved an important access problem. But the research in this report points to a different challenge now. Students already have the content. What they increasingly want is a faster way to find the part that matters, make sense of it, and use it to study. That changes what a video platform needs to do.

Panopto is building beyond the traditional VCMS model in a few important ways. Smart Search, transcripts, OCR, chapters, and timestamped navigation already make the knowledge inside a recording easier to find by breaking a long lecture into transcribed, searchable parts. AI Search extends that idea further, using natural-language questions to return contextual answers tied back to the exact source moment.

Folio goes beyond retrieval, making the video itself more interactive. Instead of treating a lecture or course asset as something a learner can only watch or search, it uses AI to turn trusted instructional content into study guides, quizzes, flashcards, tutoring, and other ways to work with the material actively.

MCP extends access beyond Panopto itself. It allows institutions to securely connect the knowledge stored in Panopto with external AI tools students already use, such as ChatGPT, Claude, and Copilot so that those experiences can draw on institution-specific content rather than the open internet.



Taken together, these capabilities represent a broader shift in what a VCMS can be. Video originally helped institutions scale the reach of expertise by making it available beyond the classroom. AI gives them a way to go further: making that expertise easier to find, easier to use, and more useful in the moment it is needed.

That is how video can begin to scale not just the reach of knowledge, but its impact.

Key takeaway for institutions

Video scaled the reach of institutional expertise. AI can scale its impact. The platforms that lead the next decade will be judged by findability, trust, and usability.



Speed, trust, and usability will define what's ahead

Institutions built video into the infrastructure of teaching, and the data throughout this report shows that bet is paying off in hours saved and grades improved. Video did exactly what it was built to do: it captured institutional expertise and put it within reach of every student who needed it, wherever they were. What's left is deciding what to do with everything already inside it.

There are a few issues a video-based learning platform must address to evolve. The first is retrieval: students have access to knowledge that's been captured, but not a fast way to reach the specific piece they need inside it. The second is harder to fix with a better search bar. When students encounter barriers in finding what they need, they often turn to external AI, despite lacking confidence in its accuracy, or even if they're allowed to use external AI tools in the first place. The third is usability. Students want AI to highlight the key point, generate a quiz, and summarize content before an exam.

Each of these features requires integrated AI that's grounded in course materials to deliver value. Without these capabilities, students will continue to supplement or replace course tools with external AI that meets their expectations. When students find their own AI solutions, institutions lose visibility into which tools they're using and whether those tools are reliable. Students who can afford premium AI subscriptions get better support than those who can't, which deepens existing inequities.

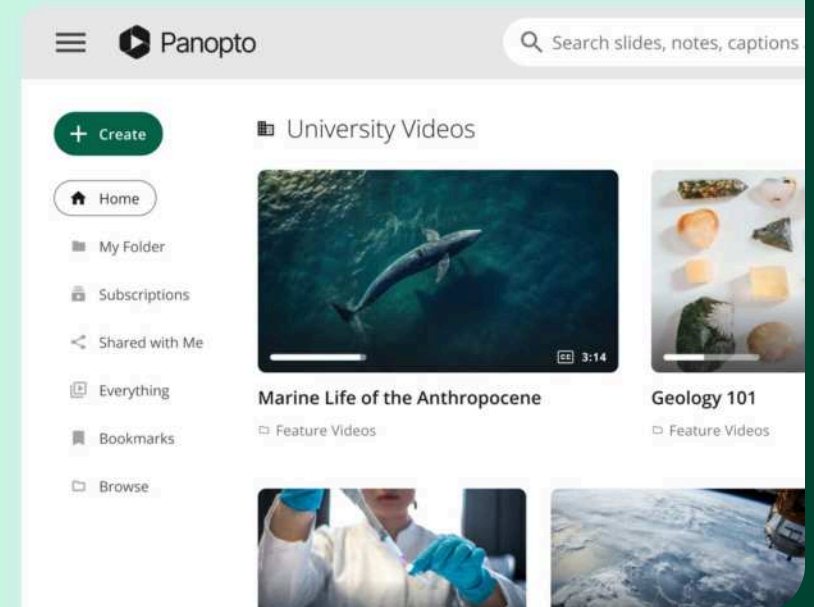
Video has already proved it can capture institutional expertise and scale its reach. Now, AI-integrated video can scale the impact of institutional expertise.

Searchable video, connected institutional knowledge, conversational access, and AI as the interface itself all create the shape of what comes next, and the institutions that treat it as a deliberate platform decision, rather than a wait-and-see one, will be the ones setting the standard everyone else eventually follows.

What's next

Ready to turn the knowledge you've already captured into a searchable, trusted, engaging resource for your students?

Talk to our team



Appendix

Survey methodology

This report is based on a survey conducted by Hanover Research in partnership with Panopto in April 2026. Respondents were 760 higher education students, age 18 and older, recruited through an online panel. All respondents were regular users of video-based learning tools within their curriculum.

Global distribution

United States	51% (n=400)
UK, Germany, Italy	25% (n=193)
Australia, South Korea, Japan	24% (n=178)

Institution type

Public university	37%
Online university	16%
Private university	16%
Community or further education college	15%
Professional school	12%
Online programs at traditional universities	3%

Attendance mode

Mix of in-person and online	57%
Entirely in-person	29%
Entirely online	15%

Enrollment status

Full-time	73%
Part-time	28%

Class standing

Respondents span first-year through graduate and doctoral students, with the largest single cohort in fifth-year-or-beyond standing (19%).

Top fields of study

Health Sciences	14%
Business & Management	13%
Computer Science/IT	13%
Social Sciences	12%



About Panopto

Panopto is the global leader in AI-powered video knowledge management, helping educational institutions capture, activate, and scale the impact of their knowledge. What started as a research project at Carnegie Mellon over 20 years ago is now used by more than 13 million learners every month, across 1,600+ higher education institutions in 70+ countries, including 22 of the world's top 25 universities.

Panopto's platform transforms recorded expertise into trusted, searchable knowledge, so students get interactive learning experiences in seconds, faculty spend less time rebuilding content, and institutional knowledge stays, even when faculty leave.

panopto.com



About Hanover Research

Founded in 2003, Hanover Research is a global research and analytics firm that delivers market intelligence through a unique, fixed-fee model to more than 1,000 clients. Headquartered in Arlington, Virginia, Hanover employs high-caliber market researchers, analysts, and account executives to provide a service that is revolutionary in its combination of flexibility and affordability. Hanover has been named a Top 50 Market Research Firm by the American Marketing Association every year since 2015.

hanoverresearch.com



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