



The State of Video in Education 2016:

A Kaltura Report



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1 Executive summary and key findings

Video use continues to grow in education. It is both growing in volume (the amount of video produced and watched), as well as in the number of use cases where video is being used. As we become increasingly accustomed to using video in every aspect of our daily lives, students and educators expect to encounter video in every step of the educational process, and recognize the importance of digital and video literacy for success beyond the campus. Video has the power to improve learning outcomes, helping increase knowledge transfer and improving outcomes on assignments and exams. But educational institutions are also using it beyond the classroom, to increase student and instructor retention, streamline admissions, and build communities.

To get better insight into how video is perceived and used across educational institutions today, as well as the latest thoughts on digital/video literacy, best practices, and future use cases, we undertook our third annual online survey during April 2016.

Educational video continues to be a hot topic; once again our response rate increased, to a total of 1,500 responses. Many of our respondents also took the time to provide in-depth answers to a range of qualitative questions: you can read some of their insightful comments in this report.

Our survey participants included this year instructional designers, educators, media and IT professionals, senior administrators, and students from around the globe. Around three-quarters were drawn from higher education and about 20% from K-12 institutions. The rest came from education technology organizations, educational non-profits, and other education-related institutions. We are extremely grateful to all participants for their time and insight.

The information they shared makes for compelling reading for anyone in education today. Here are some highlights:

- On video in the classroom:
 - o 86% of respondents say that their organization includes teachers actively using video in the classroom.
 - o 72% are using video for student assignments, and 10% of respondents say more than half of students actively create video.
 - o Flipped classrooms are becoming a widely used form of pedagogy (53%).

- On using video outside the classroom:
 - o *87% of respondents agree that online learning will grow in importance and acceptance, an increase of 4% over last year.*
 - o Video is used in a wide range of use cases, including: recording campus events for on-demand viewing (59%), marketing and

- communications (55%), and even as part of the admissions process (30%).
 - o 74% of institutions use webcasting for various purposes, an increase from 2015, including teaching (51%), broadcasting live events (47%), and training (39%).
 - o Compared to last year, a majority of use cases show display growth.
- On digital literacy:
- o Students and teaching staff are rated as having 'good' or 'very good' digital literacy by most respondents.
 - o However, these rates have fallen since 2015, as 72% of teachers are perceived to have either "good" or "very good" digital literacy levels (81% in 2015), compared to 84% of students (88% in 2015).
 - o This may reflect "changing goalposts" as our criteria for what counts as "very good" rises faster than students or faculty can keep up.
 - o 96% of respondents feel it is important to continue to raise the level of digital literacy in their institution, a figure that remains constant year-over-year.
- On the source of videos used in class:
- o Unsurprisingly, video content from free online resources is the most widely used (77%).
 - o Frequent use of licensed content is down slightly from 2015 (from 46% to 41%). Homegrown content is increasingly important, with 37% of respondents reporting the frequent use of teacher-generated materials.
 - o This reflects the ease of content creation, and the positive impact of video literacy level rates.
- On integrating video into the Learning Management System:
- o For the first time this year, more than half (52%) of our higher education respondents are using a video solution integrated into their Learning Management System (e.g., Blackboard, Moodle, Canvas, Brightspace, etc.)
 - o When those who use the built-in video tools are included, 60% of all respondents say their institution is using video in the LMS environment.
- On how to make video more effective for education:
- o Educators are excited about new features that are becoming common for video such as captioning (rated as useful by 97%) and in-video quizzing (96% considered it useful).
 - o The most anticipated new development is graded quizzes inside videos, with 41% predicting the greatest impact for this technology. Video broadcast from mobile phones and videos that branch to other videos based on in-video actions are also predicted to be high impact.

- On why video is so useful for education:
 - o 93% of respondents believe that video has a positive impact on student satisfaction and 88% agree that it boosts student achievement levels.
 - o 86% think video helps with professional development and collaboration between educators. 85% believe that the use of video as part of their resources toolkit increases teacher satisfaction.

- And finally...a few interesting quotes from respondents:
 - o "Video will become an integral part of every course whether they be face-to-face or online."
 - o "It's hard to answer [what educational video will look like in 10 years], because there are many different uses of video. It's like saying 'what is the role and impact of paper in education.' It will become commonplace."
 - o "It will be included in a large variety of areas. It will supplement many other forms of educational experiences."
 - o "Video will offload material so that face to face can be really meaningful."
 - o "There is a great improvement and impact with video sharing lessons. The new young generation is expecting video with great animations and graphics involved in the video rather than a person just sitting and giving lecture."
 - o "It is imperative to teach how to write for the screen in the 21st century. Video is already the primary form of communication. Students and teachers must learn how to do this. This will become common place in education in the future."
 - o "Video will be integrated into every area of education. Mobile devices will be the overwhelming driving point."
 - o "Video is a game changer in for many educational disciplines, both from a teacher perspective as well as a learner one."
 - o "It's the present and future of education, especially to future generations."

Finally, please do not hesitate to contact us at research@kaltura.com, if you wish to find out more, or contribute to our research.

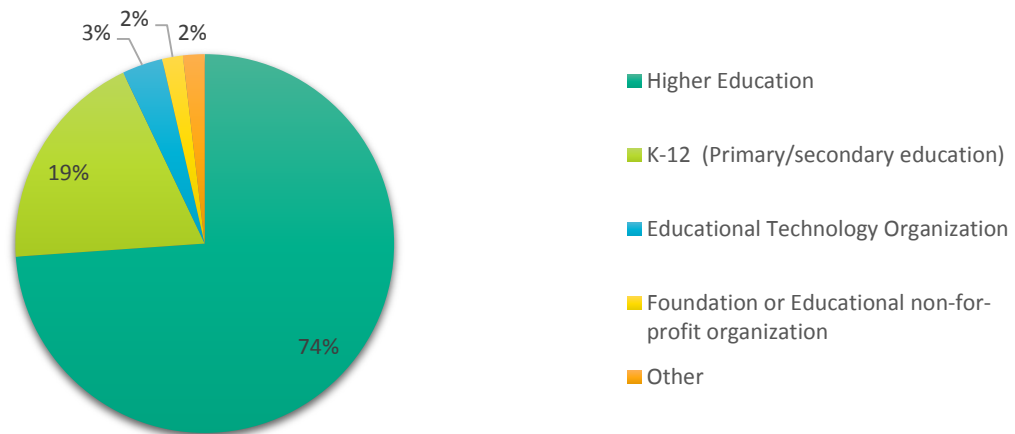
Sincerely,

Dr. Michal Tsur, President, Kaltura Inc.

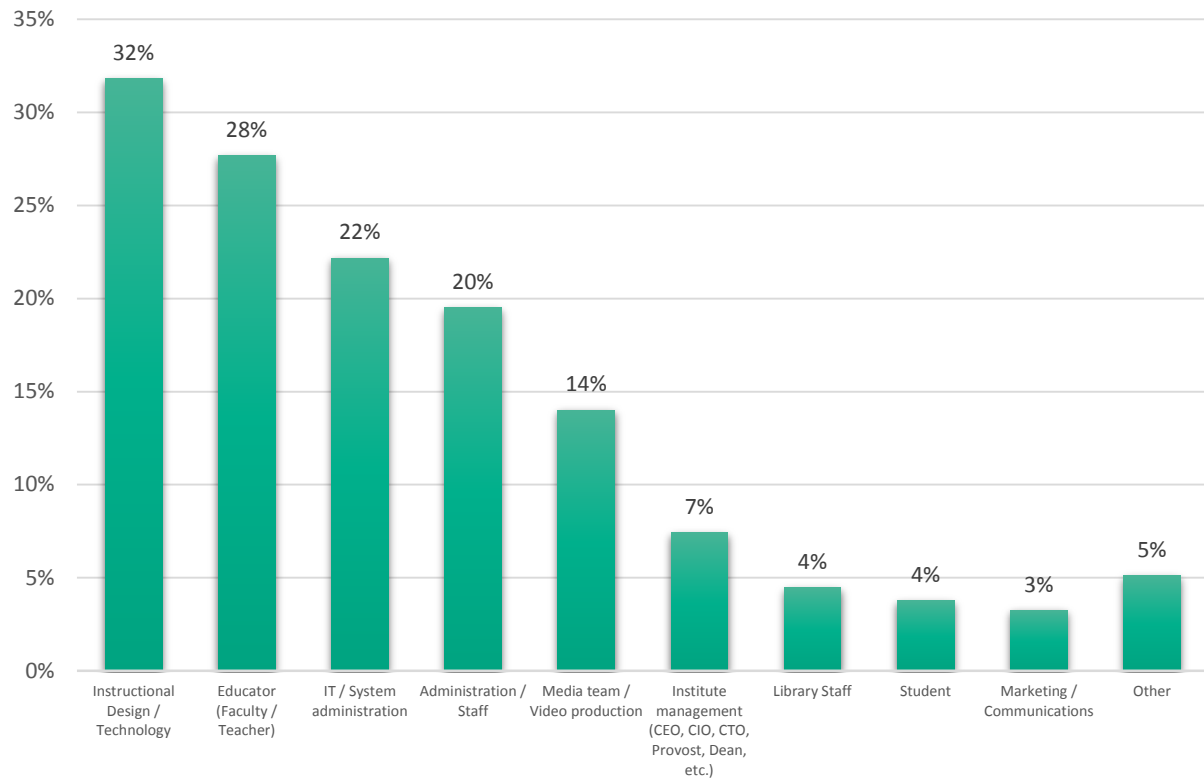
2 Methodology and demographics

Survey respondents came from all sectors of education: almost three quarters from higher education, and almost one fifth from K12 (primary/secondary) education. More than 1,500 respondents contributed insights, and 901 of these completed it. The survey was conducted online during April 2016.

In which sector does your institution fall?



Respondents by Role

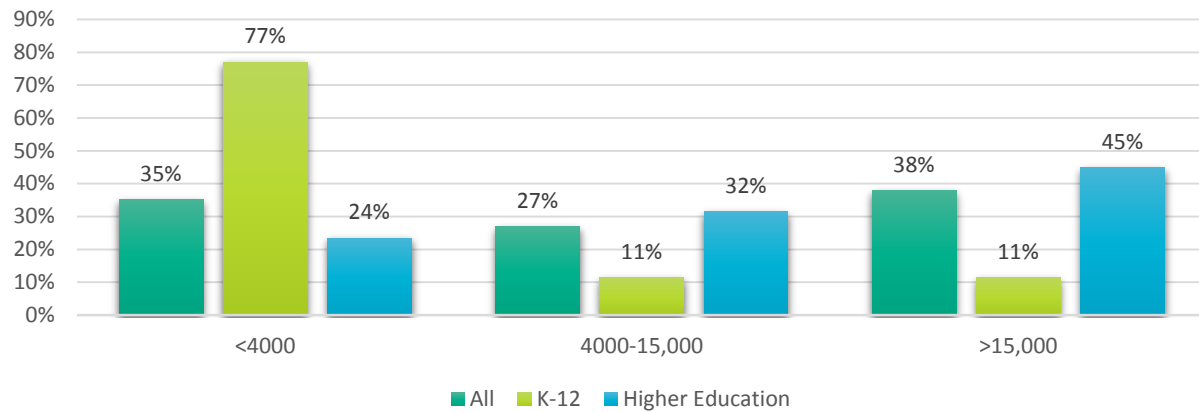


Various roles¹ within the organization were represented, with the most prevalent roles being instructional design/technology, educators, IT/system administration, administrative staff, and media team/video production.

Size of institution, as measured by the number of Full Time Equivalent (FTE) enrollment of students, varied as well. It's important to note, of course, that higher education has a substantially different distribution than K12/primary-secondary education: in the latter group, over 75% reported an FTE smaller than 4,000, compared to only 24% in higher education. Throughout the report, we refer to small (<4K), medium (4K-15K), and large (>15K) institutions, as presented in the following chart:

¹ Many respondents fulfill multiple roles and therefore may be counted in several roles.

How many Full Time Students attend your institution (FTE)?



Some additional notes about the methodology can be found in [Chapter 5](#).

3 Results

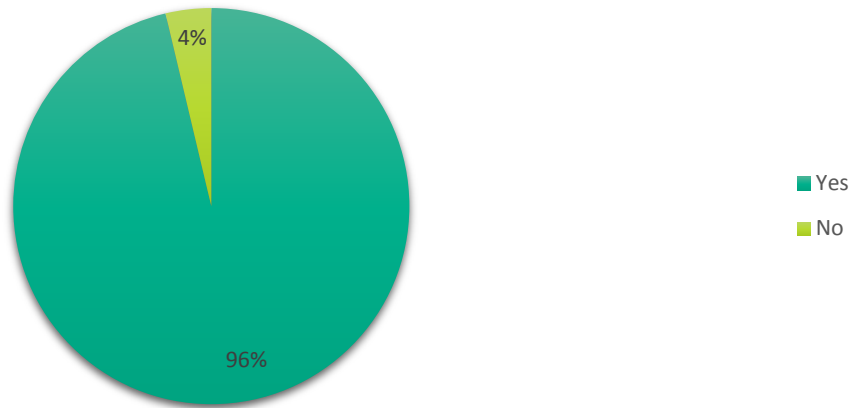
3.1 Digital Literacy

Digital literacy is increasingly important for the modern workforce, and for two years running, 96% of respondents have cited the importance of raising the level of digital and video literacy among the teachers and students in your institution. Most respondents rated digital literacy levels for both teachers and students as 'good' or 'very good'. However, confidence in digital literacy abilities in both students and teachers has decreased in the last year, showing the difficulty in keeping up with ever-changing technology.

In this survey digital literacy was defined as **"The ability to locate, organize, understand, evaluate, analyze, create, and communicate information using digital technologies"**.

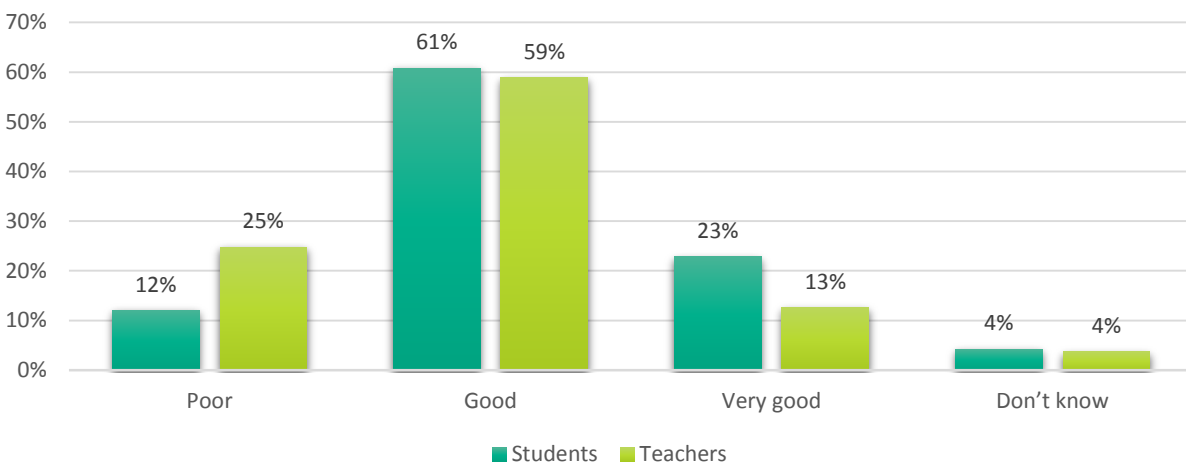
When asked about the importance of raising the level of digital literacy and video literacy in their institution, the vast majority (96%) said it is important to do so, the same percentage as in 2015.

Do you feel it is important to raise the level of digital and video literacy among the teachers and students in your institution?



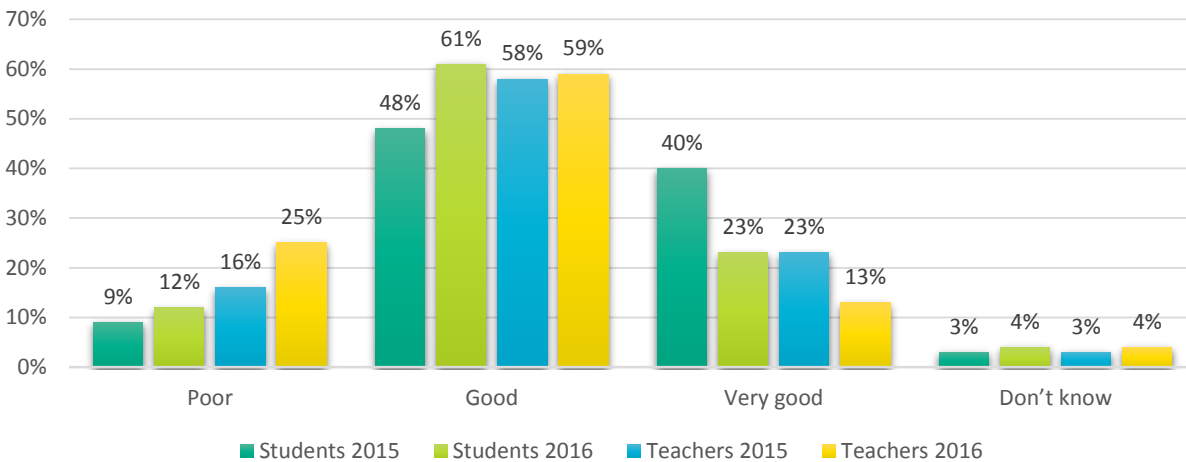
This year, 72% of teachers are perceived to have either “good” or “very good” digital literacy levels (81% in 2015), compared to 84% of students (88% in 2015).

Digital Literacy Levels 2016



Interestingly, the gap between teachers and students has seemingly narrowed since last year, and both categories scored lower this year compared to last.

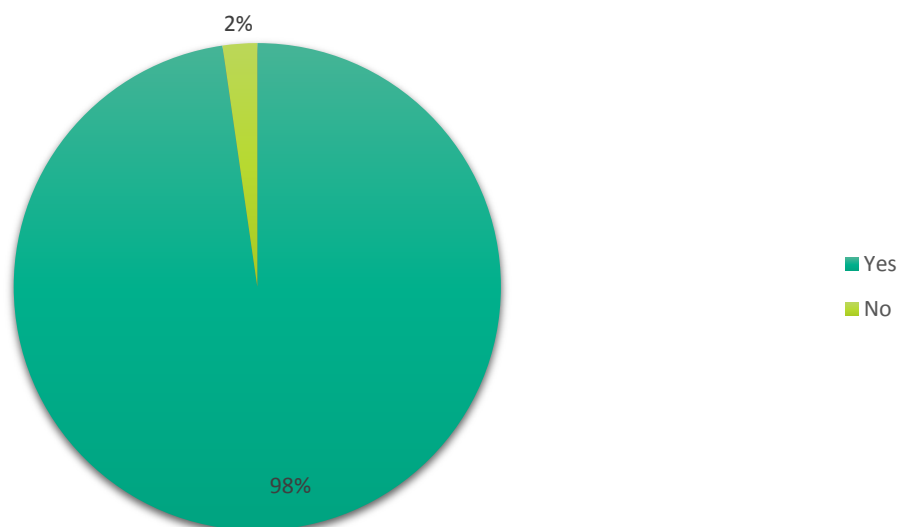
Change in Digital Literacy Levels



It seems unlikely that actual competence for both students and teachers could suddenly drop so significantly. Instead, this decline may be due to the goalposts for what is considered “proficient” being continually moved outwards, and that our understanding of how much effort will be necessary to reach those goals is increasing. As new tools and technologies emerge regularly, both students and teachers are struggling to keep up.

When asked whether knowledge of video tools and technology are an important part of digital literacy, the vast majority (98%) of respondents replied positively:

Do you think knowledge of video tools and technology is an important part of digital literacy?

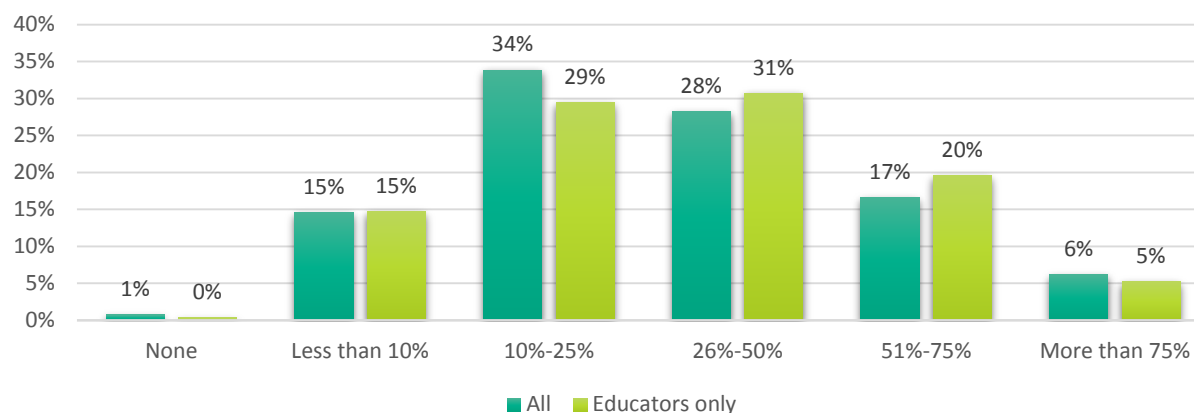


3.2 Video Usage

3.2.1 Frequency of Use - Educators

This chart shows that 23% of all respondents (25% of educator respondents) state that more than half of educators in their institution regularly incorporate video in their classes. This is almost identical to last year's data (24% and 27% respectively). The figures show that the incorporation of digital video as a teaching aid is here to stay - and will likely increase considerably over time.

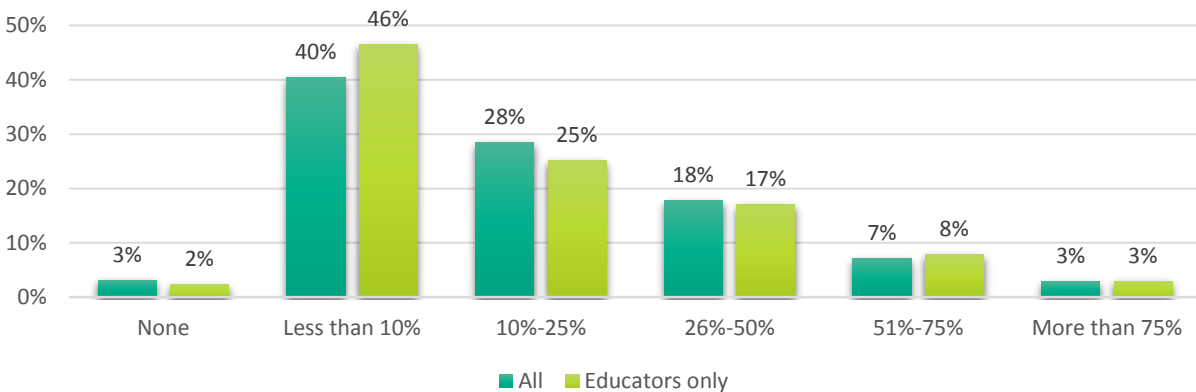
What percentage of teachers at your institution regularly incorporate video in their classes?



3.2.2 Frequency of Use - Students

The active use of video by students (i.e., the creation or upload of video by students, versus passive watching of video), however, is still in early stages, with 10% of all respondents (11% of educators) seeing over 50% of their students actively using video.

What percentage of students at your institution create (or include) videos as part of their class work today?



3.2.3 Use-cases

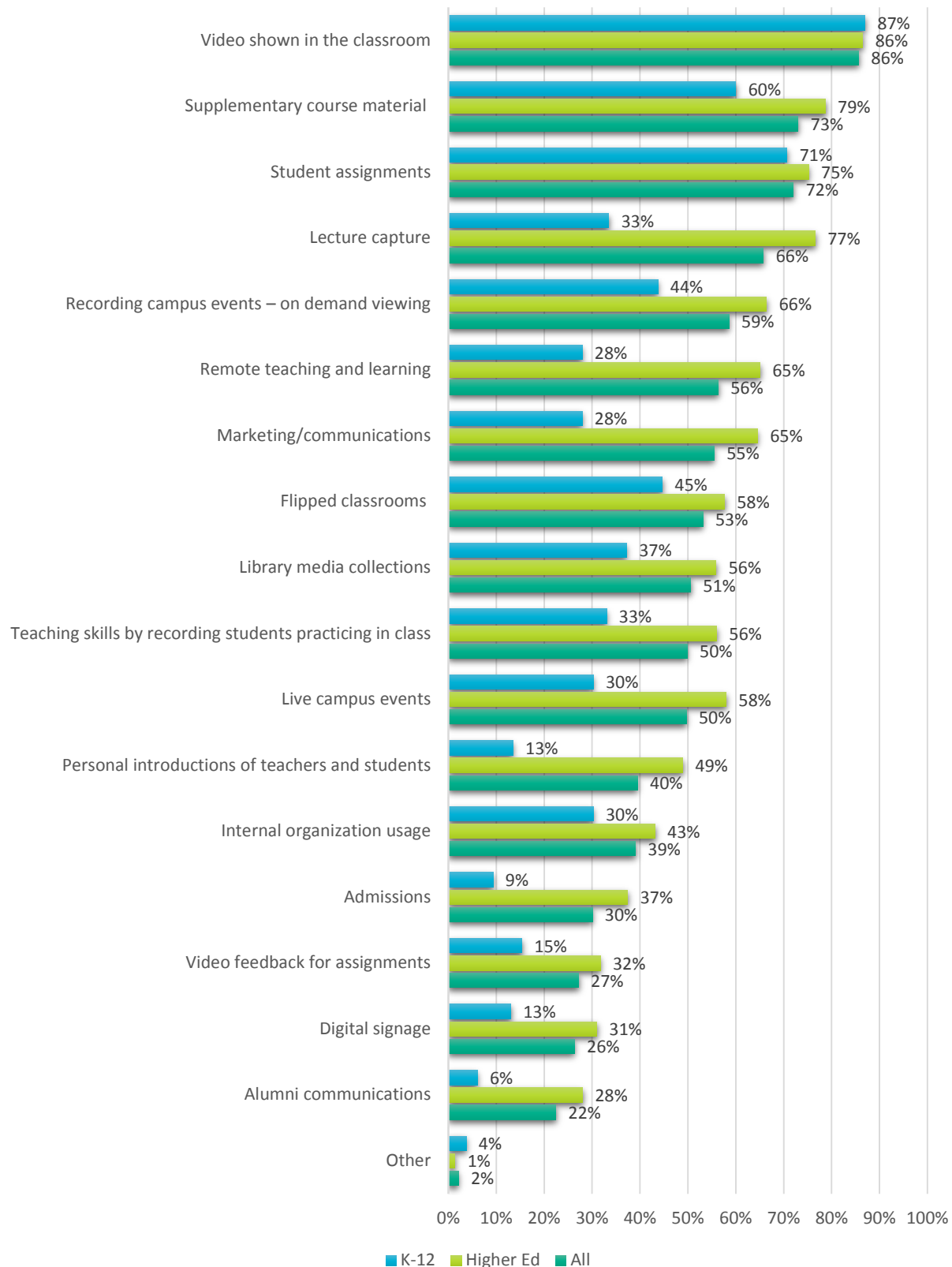
Video is a key tool in teaching and learning. As might be expected, 86% of respondents are showing video in the classroom and 73% use it as supplemental material. More interestingly, though, it's taking an increasingly active role: 72% (75% for higher ed respondents only) say that it is used for student assignments, up from 67% (71% for higher ed respondents only) last year. Half say instructors at their institution record video of students practicing in class to help teach specific skills and over a quarter of them report teachers have started to give video feedback on assignments.

There are marked differences between the use of video in higher education and in K12, which reflect a lower use of remote and online learning in K12 institutions.

Video is also used across the campus for non-teaching and learning uses: recording campus events for on-demand viewing is at the top of the list with 59% and live events are broadcast on video by 50%. 55% of marketing and communications departments, 51% of library media collections, 30% of admissions departments, and 22% of alumni communications departments are also making use of video. 39% report using video for internal organization purposes, such as internal collaboration, employee training and professional development, IT support, and FAQs. Digital signage is just starting to take advantage of video, with a little over a quarter of respondents using it.

As one might expect, higher education and K12 often use video very differently. This makes sense considering the use of remote/online learning is much less prevalent in K12, and considering that the budgets for marketing, admissions, alumni relations, and live events are far smaller at K12 institutions. K12 has an even higher rate of using video in the classroom than higher ed, as teachers discover that video is an optimal way to reach these “digital natives”. In student assignments, as well, younger children are creating video at nearly the same rate as their older peers.

What is your institution using video for?



A similar question was asked in the State of Video in Education 2014 and 2015 surveys, which allows us to compare trends over time. Since previous surveys were heavily dominated by higher education, we provide below the comparison for higher education specifically.

Overall, video use continues to increase across the board. The most notable increases are in supplementary course material (with an increase of 7%) and flipped classrooms (with an increase of 8%).

The following use cases also have a marked **increase** since last year:

- o Recording campus events for on demand viewing
- o Live campus events
- o Admissions
- o Video feedback for assignments

Interestingly, we see a decrease in lecture capture. While we do not have enough evidence to know why, we can speculate based on some other trends in the field. It could be a simple regression to the mean. It could also be a sign that traditional lecture capture is losing traction. While traditional lecture capture is helpful for students who missed a class or want to review for a test, many do not want to sit through an hour-long video and are more interested in snackable content. At the extreme end, one administrator at a medium-sized higher education institution declared,

“Video content with high production values that is designed communicate the subject matter and maintain viewer interest is great. Hour long single camera classroom captures suck. They kill the interest of all but the most intent students.”

The increase in flipped classrooms may feed into this trend, as more educators use video to prep students for dynamic classroom sessions rather than just passively recording lectures. Another contributing factor may be the increase of high-quality free online resources from MOOCs, OER, and the general openness trend.

Use Case	Higher Ed (2014)	Higher Ed (2015)	Higher Ed (2016)	Trend
<i>Video shown in the classroom</i>	76%	84%	86%	▲
<i>Supplementary course material</i>	76%	72%	79%	▲
<i>Student assignments</i>	61%	71%	75%	▲
<i>Lecture capture</i>	72%	72%	65%	▼
<i>Remote teaching and learning</i>	67%	66%	65%	≈
<i>Recording Campus events – on demand viewing</i>	56% ²	61%	66%	▲
<i>Marketing/communications</i>		63%	65%	▲
<i>Library media collections</i>	36%	54%	56%	▲
<i>Teaching skills by recording students practicing in class</i>		54%	56%	▲
<i>Flipped classrooms</i>	51%	50%	58%	▲
<i>Live Campus Events</i>		52%	58%	▲
<i>Internal organization usage</i>	45%	41%	43%	▲
<i>Personal introductions in online learning environments</i>		45%	49%	▲
<i>Admissions</i>	31%	31%	37%	▲
<i>Video feedback for assignments</i>		26%	32%	▲
<i>Alumni communications</i>	22%	25%	28%	▲
<i>Digital Signage</i>			31%	

² The 2014 survey inquired about campus events without mentioning live/on demand viewing.

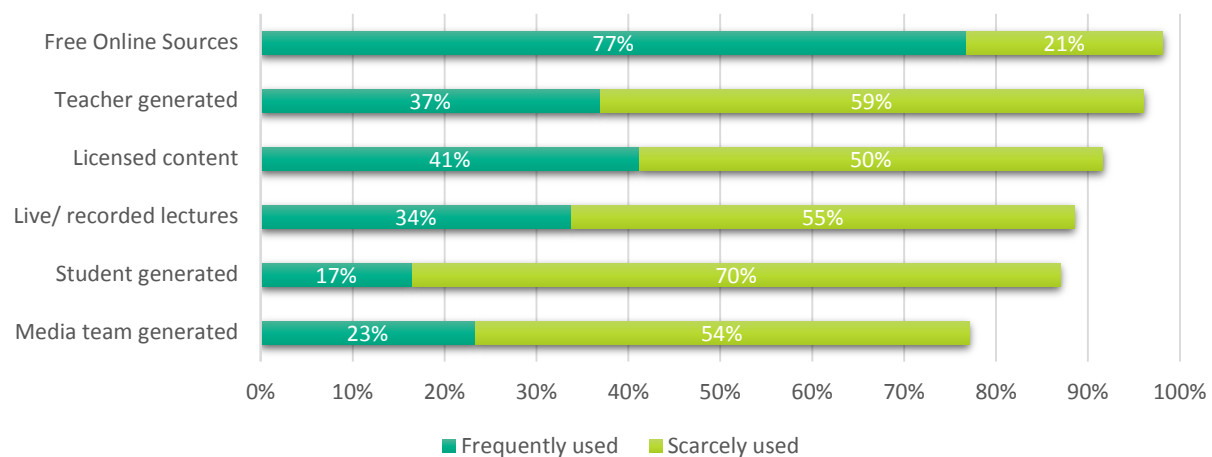
Empty cells signify that this use case was not covered in that year's survey

3.2.4 Distribution of video content sources used in teaching and learning

The most widely used source of video in classes is content from free online resources (77% of respondents said it is used frequently), followed by licensed content (41%).

However, frequent use of licensed content is down slightly from 2015 (when it was 46%). Use of live and recorded lectures in class has increased slightly from 31% to 34%. Homegrown content is also important, with 37% of respondents reporting the frequent use of teacher-generated materials, 23% stating that content generated by the media team is used frequently, and 17% stating that student-generated content is used frequently.

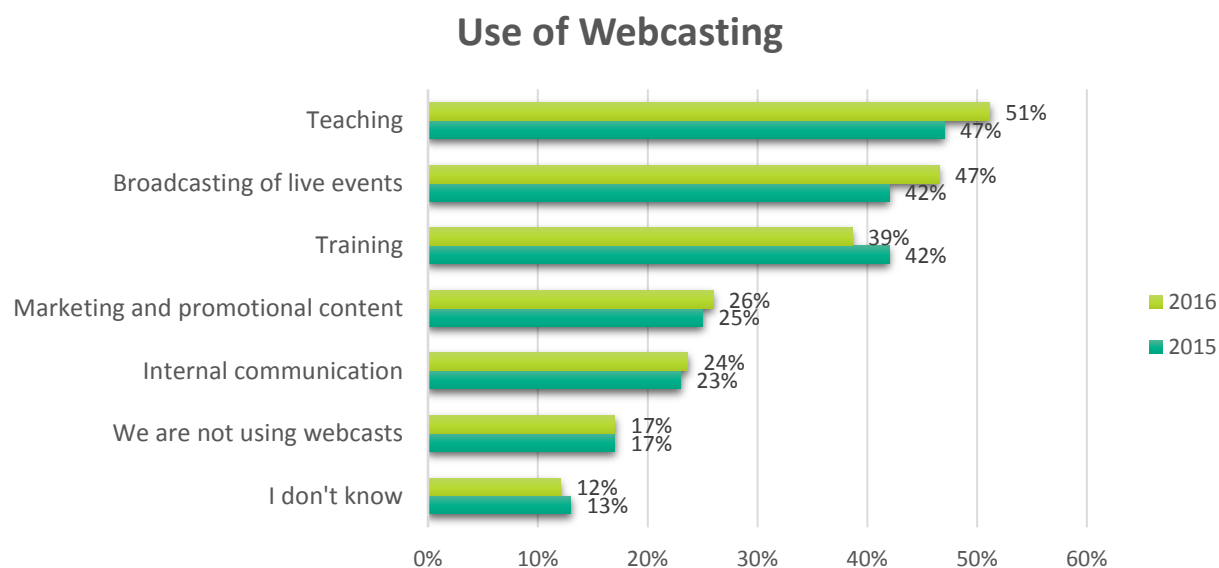
Source of Video Used in Class



3.2.5 Use of Webcasting

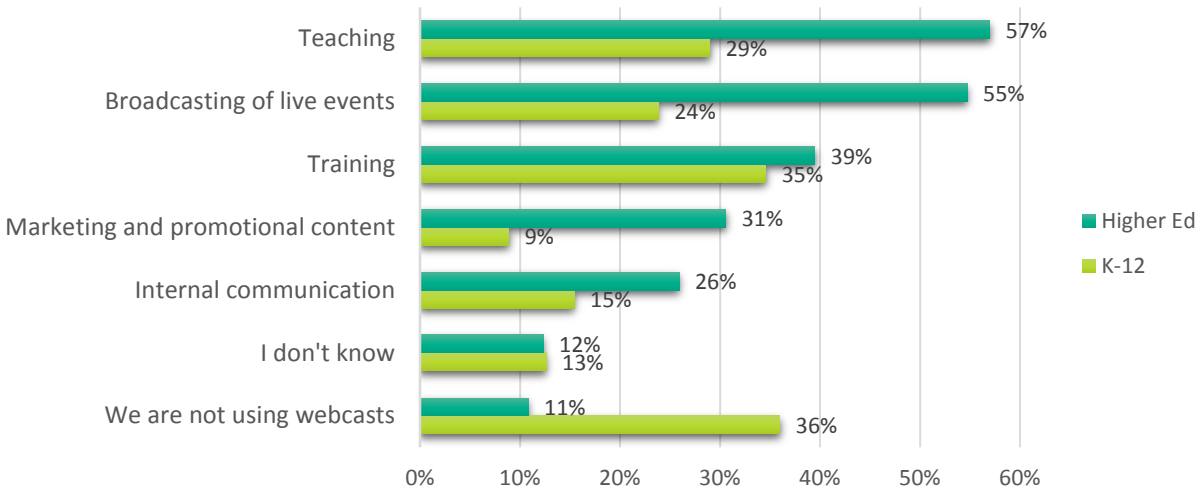
The popularity of webcasting continues to rise, with the majority of institutions using it for both internal and external purposes.

74% of respondents' institutions are currently using webcasting for at least one purpose, up from 70% last year. For use cases including teaching (51%) and broadcast of live events (47%) as well as marketing and internal communication, the percentage of institutions using webcasting has increased in the last year.



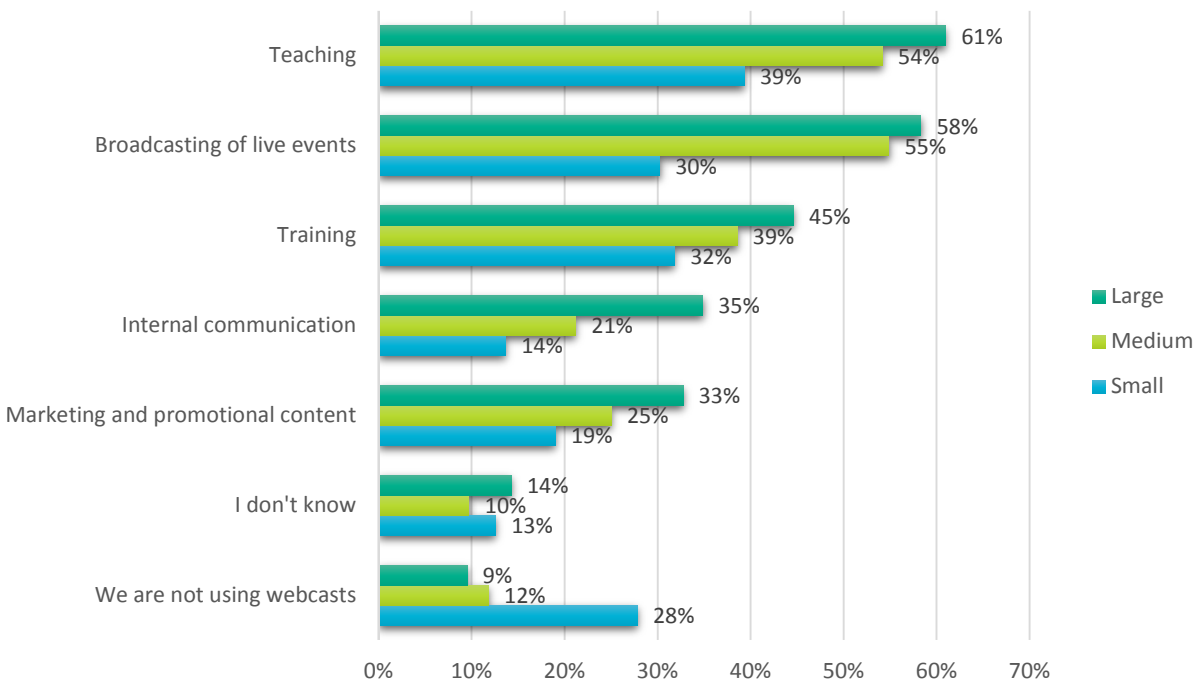
When comparing K12 to higher education, there is a similar pattern to 2015 in that there is more widespread use of webcasting in higher education, and that the training use case remains the most popular for K12:

Use of Webcasting by Sector



When comparing higher education institutions of different sizes, it is clear that larger institutions use webcasting more extensively:

Use of Webcasting by FTE

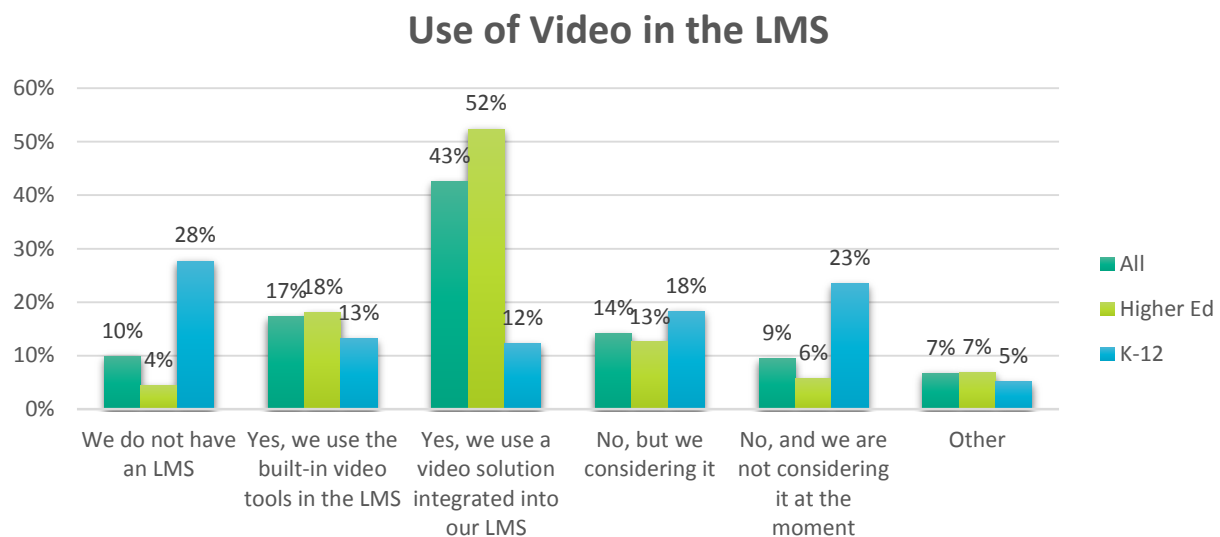


3.2.6 Use of Video in the Learning Management System (LMS)

The use of video in the LMS is very popular, with the majority using a video solution integrated into their LMS on top of the built-in tools offered by the LMS.

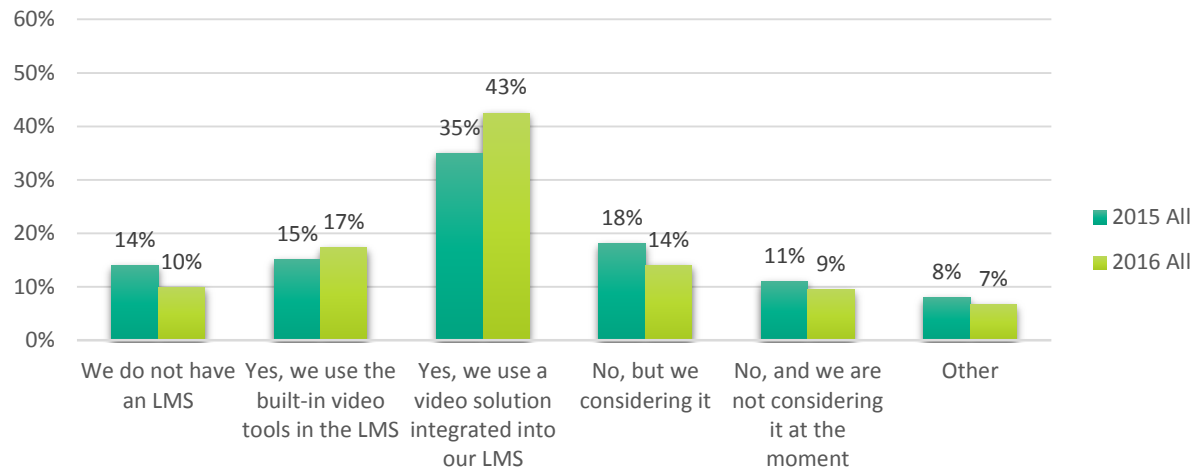
This year, we reached the point that more than half (52%) of our higher education respondents are using a video solution integrated into their Learning Management System (e.g., Blackboard, Moodle, Canvas, Brightspace, etc.). Even the general response had 43% plugging a video system into their LMS. When those who use the built-in video tools are included, 60% of all respondents say their institution is using video in the LMS environment. Only 9% have no intention of using video in the LMS.

When analyzing the responses of higher education institutions versus K12 institutions, as might be expected, a higher proportion of K12 institutions report no use of an LMS, and a lower proportion reports using a video solution integrated into the LMS, as well as not considering adding video to their LMS.



There has been a noticeable shift in the last year, as fewer institutions report not using an LMS at all (only 10% do not report having one, down 4% from 2015). The reported use of video within the LMS has also increased (up by 8% since 2015).

Change in LMS Video Usage



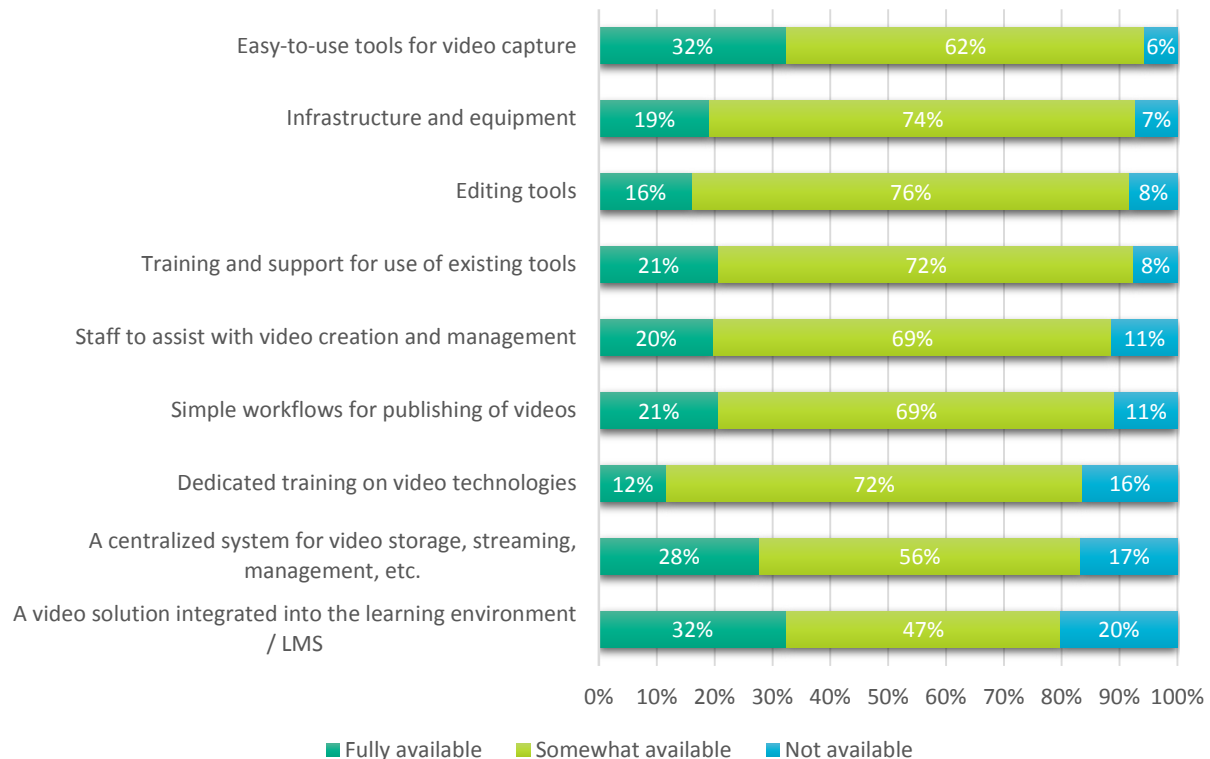
3.3 Maximizing the Use of Video

3.3.1 What Educators Have Available

While most educators have at least rudimentary access to the tools and training they need to create and manage video, the degree of support varies considerably across institutions.

Easy-to-use tools for video capture are the most widely-available tools, while dedicated training seems to be the most lacking. While most educators have at least some access to infrastructure and editing tools, relatively few have complete access.

What is available to educators at your institution?



3.3.2 What Educators Need

There is a huge appetite for improved tools to truly get the most out of video's potential.

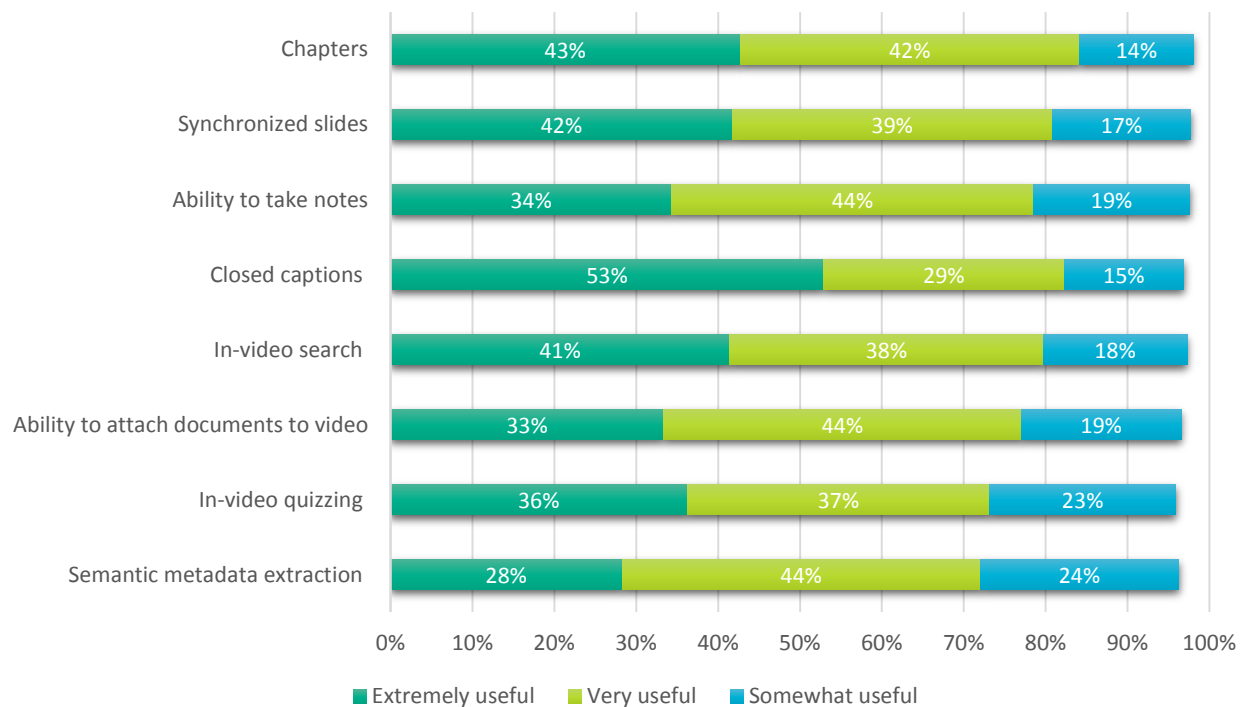
The most valued advanced video feature is closed captioning, whether for accessibility or greater reach in other languages. 53% rated captioning as “very useful” with 97% believing captioning to have at least some usefulness. A newly emerging capability, in-video quizzing, received a 96% interest rating (with 36% considering it “very important”).

Other options of interest (and the proportion of respondents thought they were extremely or very useful):

- Chapters (splitting longer videos into browseable chapters): 85%
- Synchronized slides (upload a presentation and synchronize it with the video): 81%
- Closed captions (for hearing impaired or international audiences): 82%
- In-video search (ability to search for every spoken word and skip to the right point in the video): 79%
- Ability to take notes (with notes that are synchronized with the video, searchable, and shareable): 78%
- Ability to attach related documents to the video: 77%

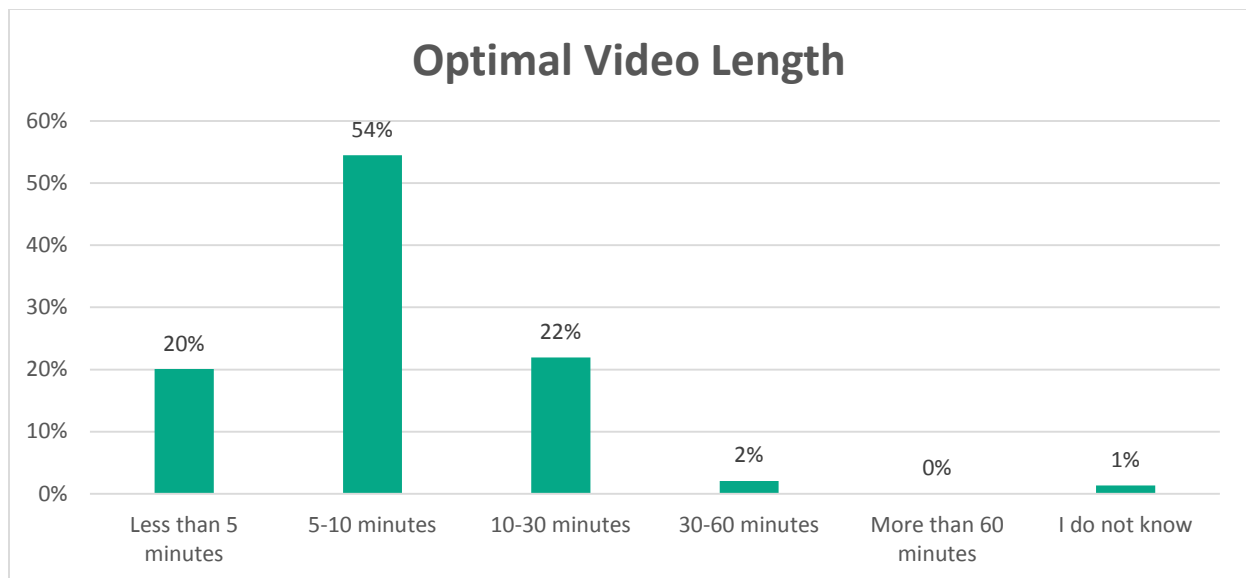
- In-video quizzing (with grading and analytics): 73%
- Semantic metadata extraction (automatically detecting topics and speakers, improving search): 72%

What Educators Need to Maximize the Use of Video

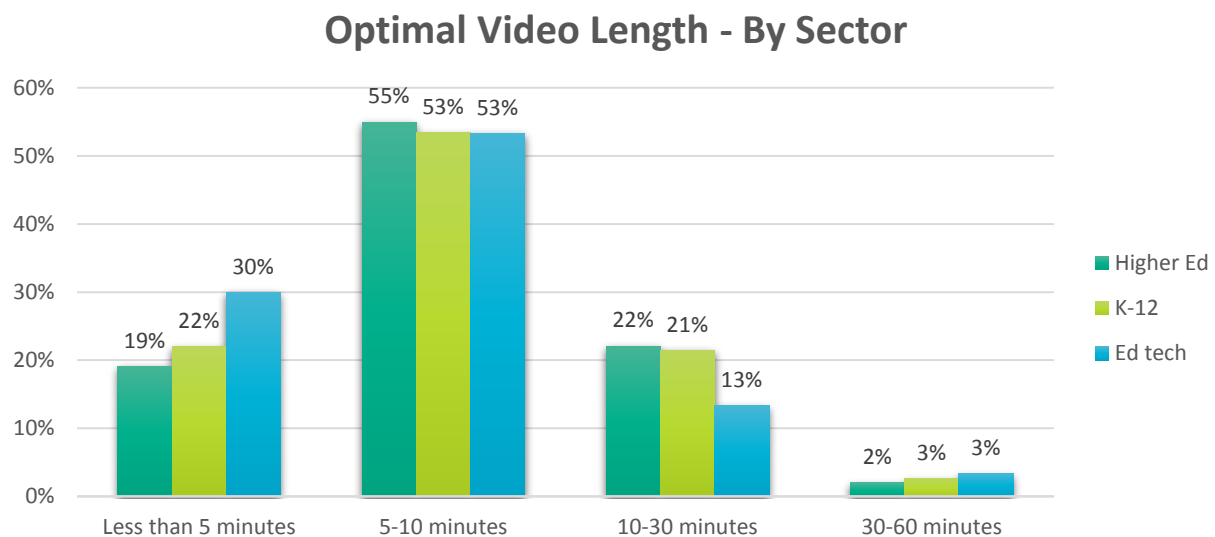


3.3.3 The Optimal Educational Video Length

When asked about optimal video length, 75% of respondents state that the optimal educational video should be no longer than 10 minutes, but there are still many that believe 10-30 minutes is ideal.

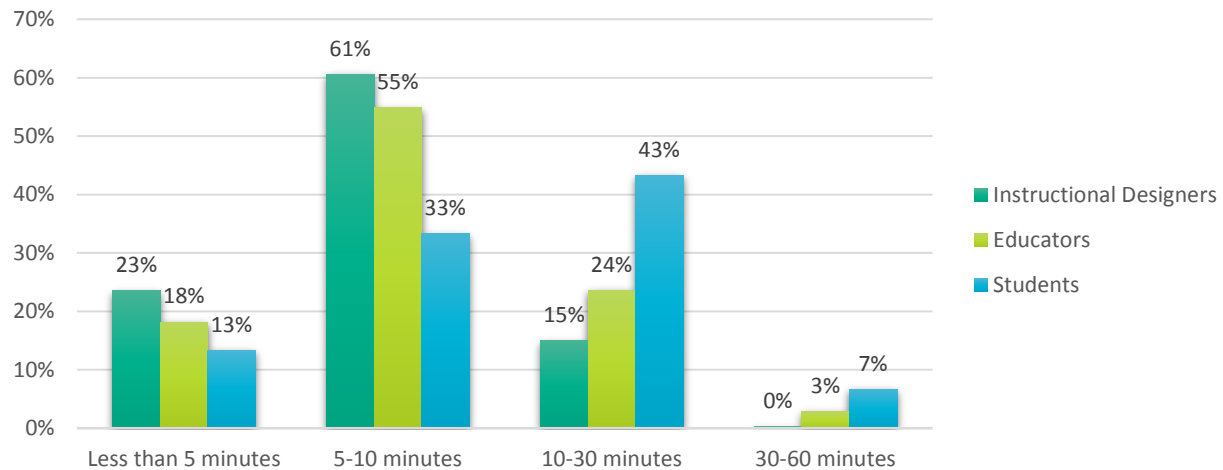


When comparing Higher Education against K-12, we see fairly similar preferences, with those working with younger ages slightly preferring the ultra-short videos (less than 5 minutes), which might be more appropriate for younger viewers' attention spans. Interestingly, educational technology organizations more strongly prefer the shortest length. (Omitted from the below charts: 60+ minutes and "I do not know", both of which received insignificant numbers of responses.)



More diversity is seen in the opinions of respondents holding different roles in the classroom. Instructional designers are pushing hard for the shorter length videos, with 23% preferring less than 5 minutes and 61% believing 5-10 minutes is most effective (for a total of 84% desiring videos less than 10 minutes). Educators aren't so sure; 79% prefer 5-30 minutes. Most interestingly, the students tip the other way—43% want videos of 10-30 minutes! However, everyone agrees that interest drops off a cliff after 30 minutes.

Optimal Video Length - By Role

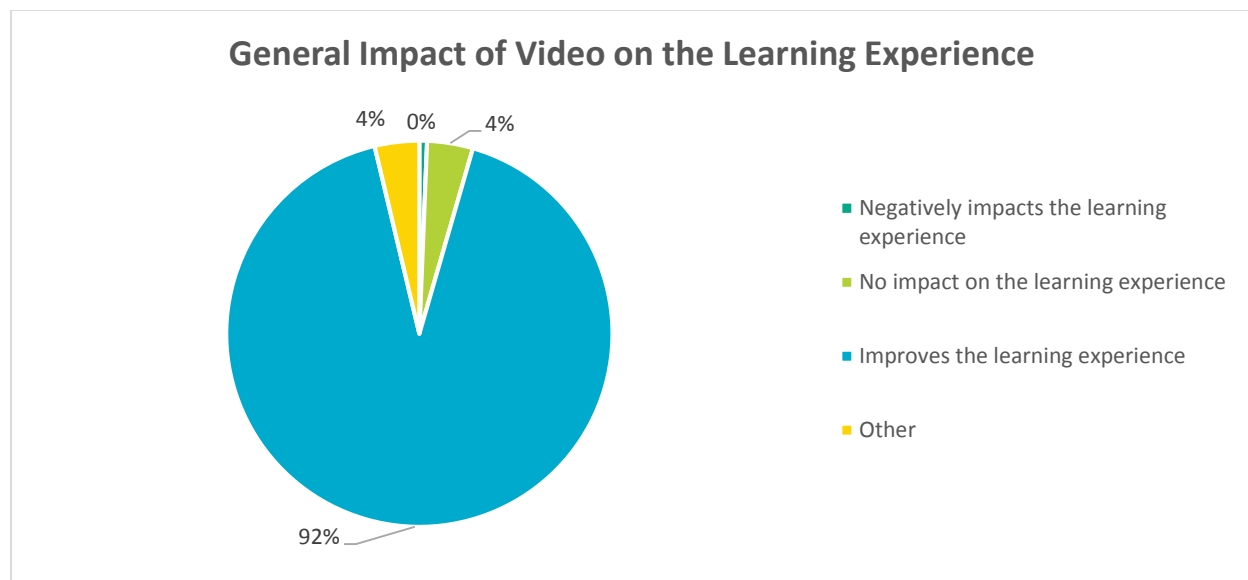


3.4 Impact and ROI

3.4.1 General impact

92% of respondents believe that video improves the learning experience

When asked about the general impact of video on the learning experience, a whopping 92% replied that video improves the learning experience. This is nearly identical to last year, showing a stable impression of video in the educational community.



We allowed respondents to elaborate their response. Below is a selected list of responses, grouped into the major themes that were mentioned:

- **On the value of video on learning outcomes and engagement:**
 - o *"Video is generally better for effective communication and engagement. It can often (especially high production value) present complex issues in ways that are interesting to watch." (Online learning researcher)*
 - o *"The video stimulates the senses, is the language that best fits the new generations, and also allows the presentation of content supported by different narratives." (Instructional Designer at a medium South American higher education institution)*
 - o *"Video can facilitate concept absorption and retention, while making the learning experience more engaging." (IT staff at a large North American higher education institution)*
- **On concepts that are better shown on video:**
 - o *"Video is sometimes the most effective way of demonstrating visual content, hands-on content, for example, lab experiments or clinical skills." (Media production staff at large European higher education institution)*
 - o *"I use videos/animations to teach difficult scientific concepts and students find them very useful." (Educator at a small North American higher education institution)*
 - o *"In ESL education, for example, [video is] really effective to teach/show cultural aspects of English language/culture, like to show table manners, food habits, taboos. [It] also shows ESL learners how to use the language properly in the required setting. For example, if they learn about food and restaurant vocabulary and grammar, the relevant videos would show them how to use them in when they are in a restaurant." (Educator at a small East Asian K-12 school)*
 - o *"I did find it beneficial was when I learned Adobe Dreamweaver. The lecturer made videos of all the classes, so it was great to be able to watch them afterwards when I did the homework, because it is impossible to remember everything." (Media Team/Instructional Designer at a small African higher education institution)*
- **On the value to educators:**
 - o *"[Video] allows teacher to make something once and have it for multiple years. Allows teacher to redo something if they didn't like how it turned out the first time - not limited to live only, one shot teaching." (Educator at a small North American higher education institution)*
- **On fostering a sense of personal connection:**
 - o *"It can provide a better connection if the video is of the instructor, which has a direct correlation to completion and persistence." (Institutional management at a medium North American higher education institution)*
- **On giving a wider perspective:**

- o *“Video allows educators to span space and time restrictions; allowing learners to see environments and time scales too small or too large for ordinary learning environments. While most of our instructors can only conceptualize lecture capture, they could be using video so much more powerfully to illustrate concepts in multiple and abstract dimensions (including time).” (Instructional designer at a large North American higher education institution)*
- o *“Provides the student with experience and expertise beyond the instructor's.” (Instructional designer at a medium North American higher education institution)*
- **On encouraging interaction:**
 - o *“Students are more likely to watch a video than read instructions on how to complete a task. Videos also allow for a better understanding of how to complete a task as it is more interactive than reading. Videos that stop and wait for a student's response (like clicking on a spot on the monitor) are the best in my opinion.” (Educator at large North American higher education institution)*
 - o *“Quizzing as they watch enables me to highlight points that I want them to focus on.” (Educator at large North American higher education institution)*
- **On freeing up time in the classroom:**
 - o *“Videos are re-runnable and skim-able. Video make the teachers able to spend more quality time with the students.” (Media/IT/Instructional Designer at medium European higher education institution)*
- **On video assignments:**
 - o *“Video improves learning, when the learner is the one who is making the video and showing what they have learned or using video as a reflective tool.” (Educator/instructional designer at medium North American higher education institution)*
- **On gaining digital literacy skills and why video is important for this generation:**
 - o *“It is helping students learn the skills necessary to compete in an increasingly digital world.” (Educator at a medium North American higher education institution)*
 - o *“Students are media-literate by the time they are in 2nd grade now. To hook a student on content, one needs multimedia integrated with every other form of teaching to engage all learners.” (Instructional designer at large North American K-12 district)*
- **On video as a way to reach different kinds of learners:**
 - o *“More and more people are visual learners. Showing students videos allows them to witness things that otherwise would be inadequately described. Having students create their own videos fosters a sense of pride and level of collaboration that would not be reached from written work.” (Educator at a small North American K-12 institution)*

- o *“Reinforcement for different learning style by including different instructional modalities is helpful.” (Educator at a small North American higher education institution)*
- **On non-native speakers and viewers with disabilities:**
 - o *“I feel that Closed Captions are helpful for more than students with hearing loss; they also help those with English as a second language.” (Student at a medium North American higher education institution)*
 - o *“[Video helps] accessibility, particularly for those with dyslexia.” (Independent consultant covering corporate and higher education in Europe)*
- **On working at students’ own pace and the importance of replay:**
 - o *“It allows students to replay content with which they struggle. It also allows students in locations outside the classroom to engage when it is convenient. Video with captions provides assistance to nearly all students” (Institutional management at a small North American higher education institution)*
 - o *“Video content management systems have given rise to the self-directed student. It empowers students to easily deep dive into a concept for further understanding and exploration of a concept.” (Video production staff at an educational technology organization)*
 - o *“If the video is well designed (good quality and explicit) students will value it even as a reference later on after graduation.” (Media team/IT at small North American higher education institution)*
- **On scalability and consistency:**
 - o *“Video has allowed for scalable learning. The ability to reach any number of students at a given time and over time to teach a course rather than be confined to a single classroom environment.” (Video Production at medium higher education institution)*
 - o *“Provides uniform quality and content among all students in different classes and locations across the country.” (Institutional management at Education Investment Fund in Central America)*
- **On online / blended education:**
 - o *“For us, as the producers of online/distance education, video is the learning experience.” (System administrator for a large higher education institution)*
 - o *“We have 45% distance students/courses. And we direct our workflow for the educational concept to be Flipped Classroom, Hybrid Learning and blended learning for the campus courses. In this, video is a vital part - to record lecture material in beforehand (preferably with video quiz included) for the student to see before, after, and just-in-time/on demand.” (Media/IT/Technology staff at a medium European higher education institution)*

Some respondents had specific suggestions for increasing the impact of educational video.

- *"It is important to consider the pedagogical aspects of the videos, to align the videos with learning outcomes and assessment tasks, otherwise they would contribute little to the learning experience." (Instructional designer at a large East Asian higher education institution)*
- *"The experience is improved if the content has some entertainment value." (IT staff at a small North American K-12 school)*
- *"We're still in the early stages of analyzing metrics, but so far the students seem to be more engaged with shorter, more engaging videos." (Administration at large North American higher education institution)*
- *"Students in classroom need the stimulation that video provides, although sometimes some "rumination" is needed for them to really integrate the ideas enhanced in the video. Video satisfies their desire for "immediacy" but, on the other hand, does NOT always support the association the need to make with content. That is why tools of semantic search (inside the video) and content based assignments (or even testing) would improve the balance of these challenges." (Educator at a large North American higher education institution)*

Some remain cautious about how poorly used video can impact the academic climate:

- *"Video, just like any classroom tool, can be used well or poorly. Being able to present videos is fantastic as part of a lecture or session. However, many academics at my university feel that lecture recording is encouraging many students not to turn up to lectures in person, missing the face-to-face classroom dynamic. People are seriously worried about this change." (Instructional designer at a small North American higher education institution)*
- *"Most students feel it helps them. Some report that they don't watch the provided videos though." (Instructional designer at a medium North American higher education institution)*

Some potential pitfalls that are warned of include:

- **Overly long video:**
 - o *"Most often, video is misused and offers no significant improvement to the learning experience. Most students tell us they would rather read the transcripts than sit through a video. Videos are often too long and full of fluff." (Instructional designer at a large North American higher education institution)*
- **Using as a passive medium:**
 - o *"It is too often used as a passive activity, with no measurement of learning." (Library staff/Instructional Designer at a small North American K-12 system)*
- **Uninteresting or dated videos:**

- o *“When appropriately applied, video is a powerful tool for education. When videos are dated, poor quality, too lengthy, etc. they become a barrier to education.” (Instructional designer at a large North American higher education institution)*
- o *“Boring on video is still boring.” (Institute management at a small North American K-12 system)*

In general, many educators are excited about how helpful video can be, but they stress that video is not a shortcut. Doing video well takes effort, thought, and training. Just recording lectures from the back of the classroom and making no effort to use of the many potential advantages of video squanders that promise.

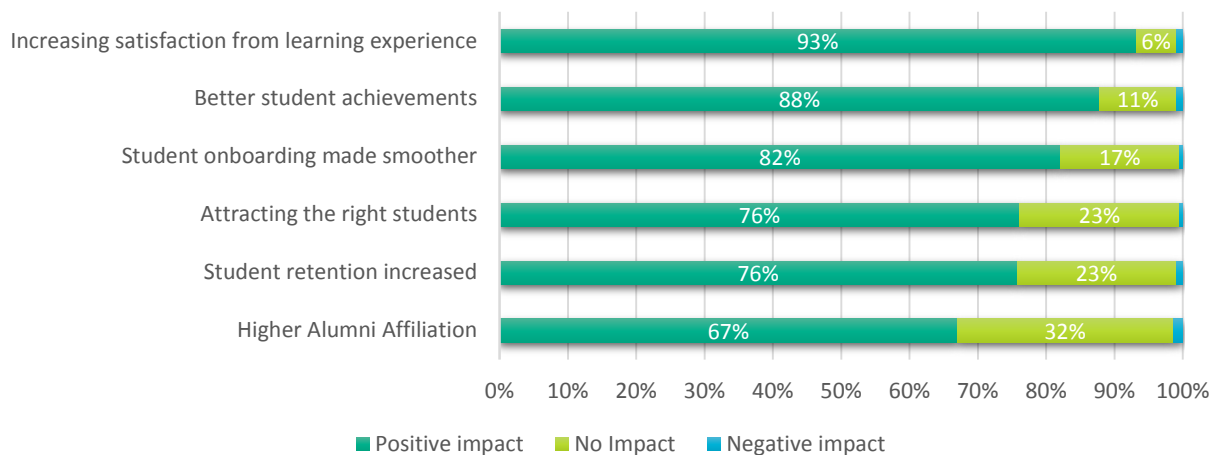
3.4.2 Video impact on institution goals

When asked about the effect of using video on various educational goals, there is a strong perception that video would have a positive impact on these goals.

3.4.2.1 Impact on student oriented goals

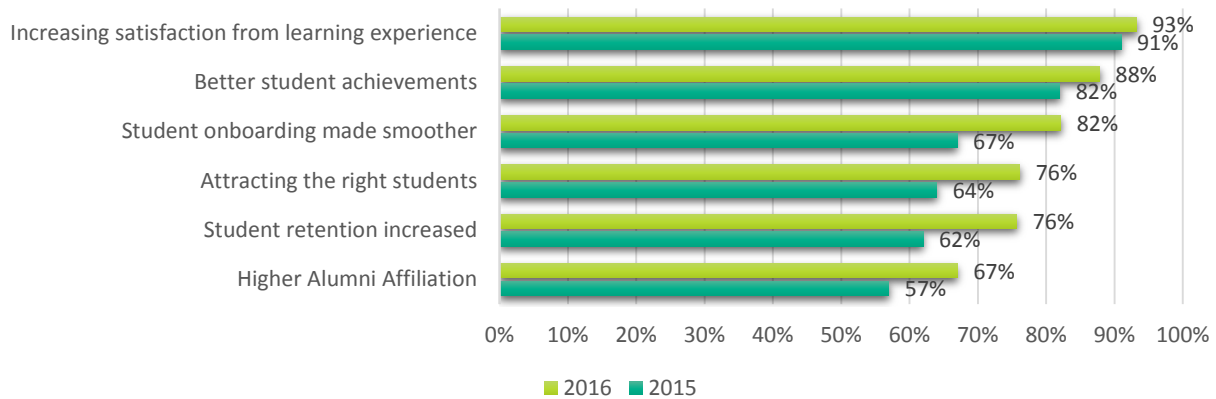
93% of respondents believe that video has a positive impact on student satisfaction and 88% agree that it boosts student achievement levels. Outside of the learning experience, 82% of respondents believe it makes student onboarding easier and 76% feel that it increases retention rates. 76% feel that it increases retention rates.

Impact of Video on Student-related institution goals



Compared to 2015, the confidence in the positive impact of video has increased, sometimes drastically so. While 2% more respondents think video has a positive impact on increasing satisfaction from the learning experience, for categories like student onboarding, attracting students, retention, and alumni affiliation, belief in video's positive impact has increased by 10% or more in only a year.

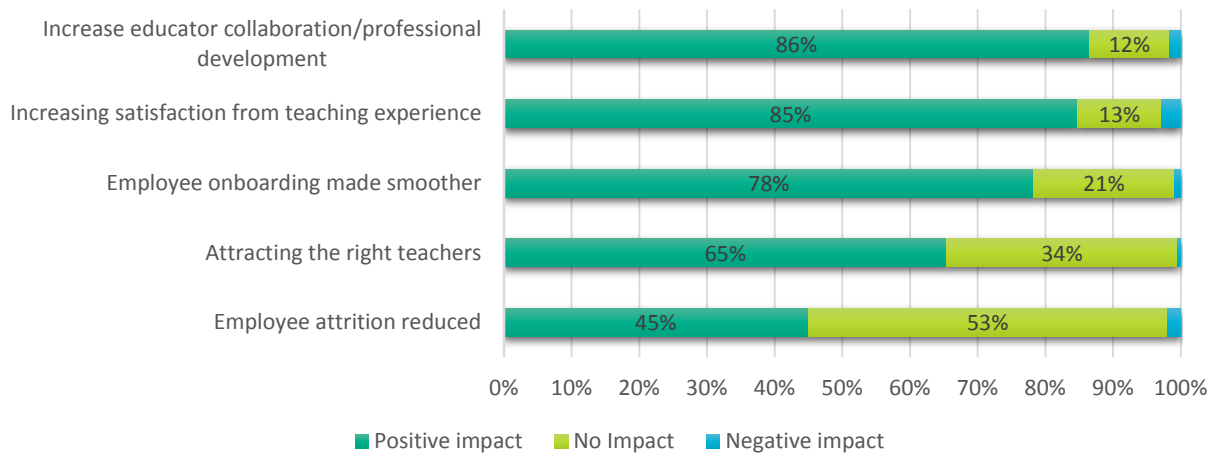
Change in belief that video has a positive impact on student-oriented goals



3.4.2.2 Impact on teacher and employee oriented goals

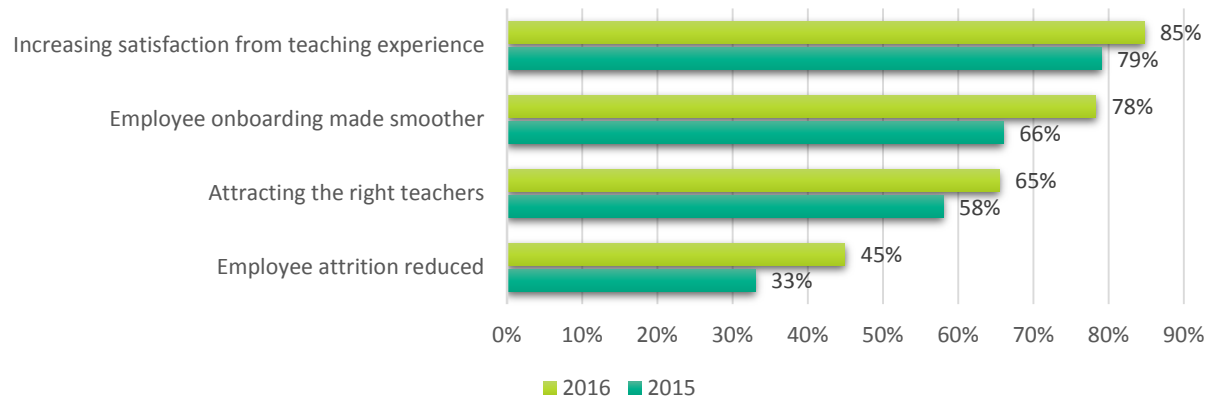
86% think video helps with professional development and collaboration between educators. 85% believe that the use of video as part of their resources toolkit increases teacher satisfaction, while 78% believe that employee onboarding is made easier.

Impact on Teacher and Employee Oriented Goals



Similarly to with student-oriented goals, we see significant increases in the belief that video has a positive impact. (Note that professional development/educator collaboration was not included as a category in 2015.)

Change in belief that video has a positive impact on teacher-oriented goals

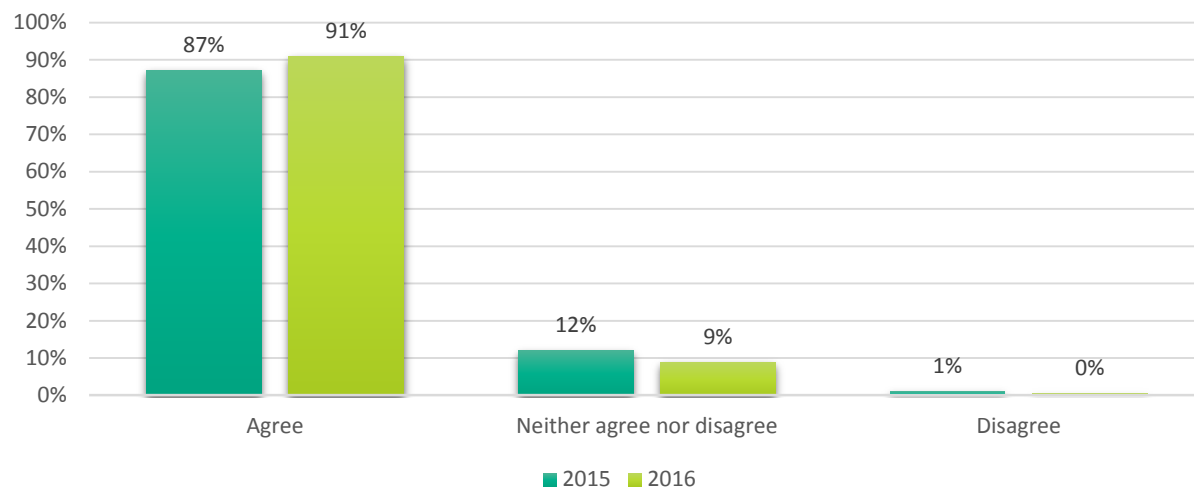


3.5 Looking forward

3.5.1 Video will be a mainstay in education

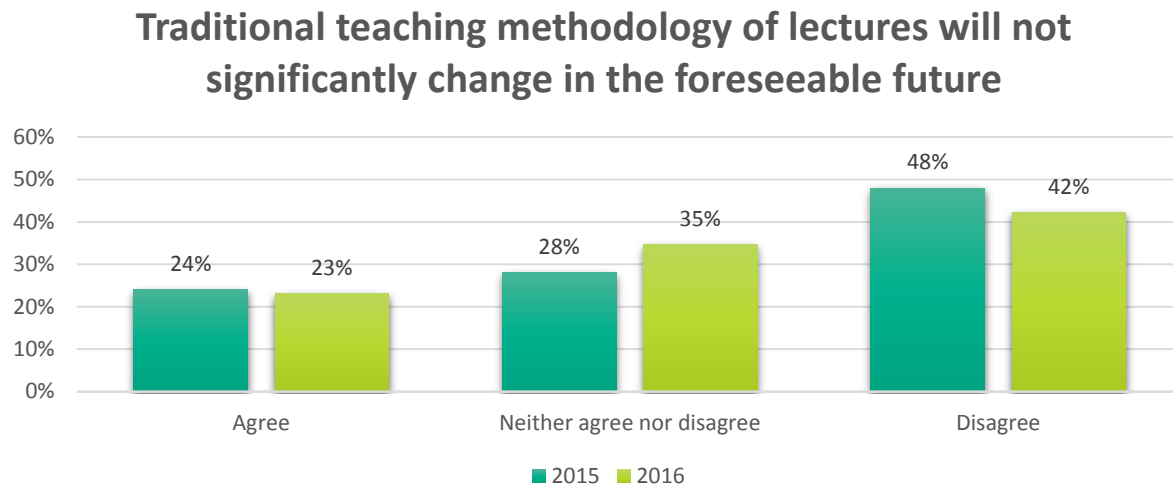
91% of all respondents agree that video will play a major role in education in the future, an increase of 4% from 2015.

Video will be a major part of education in the future



3.5.2 Traditional lectures

23% of respondents believe that there will not be significant changes in the way lectures are undertaken in the foreseeable future.

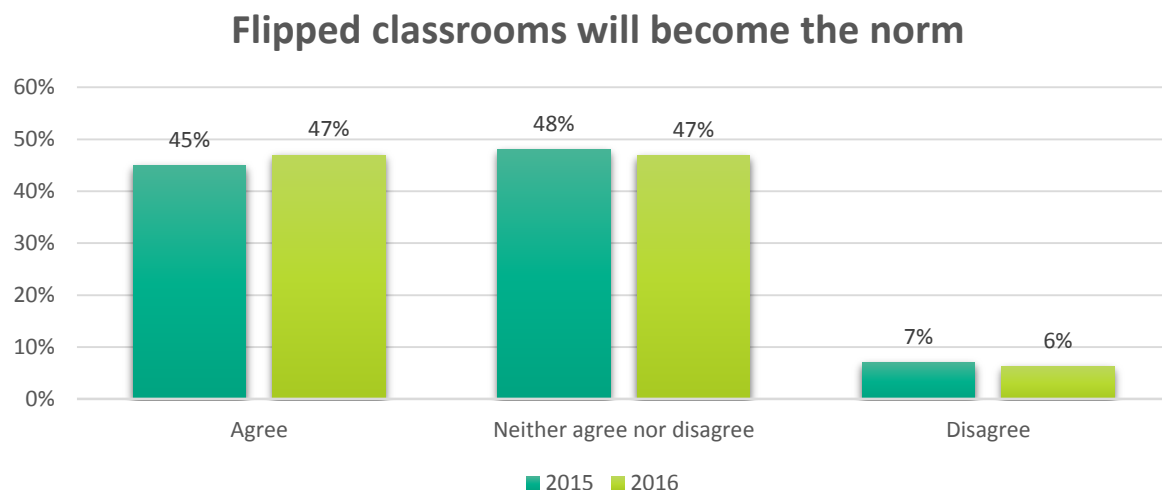


Essentially the level of agreement is the same as last year.

3.5.3 Flipped classrooms

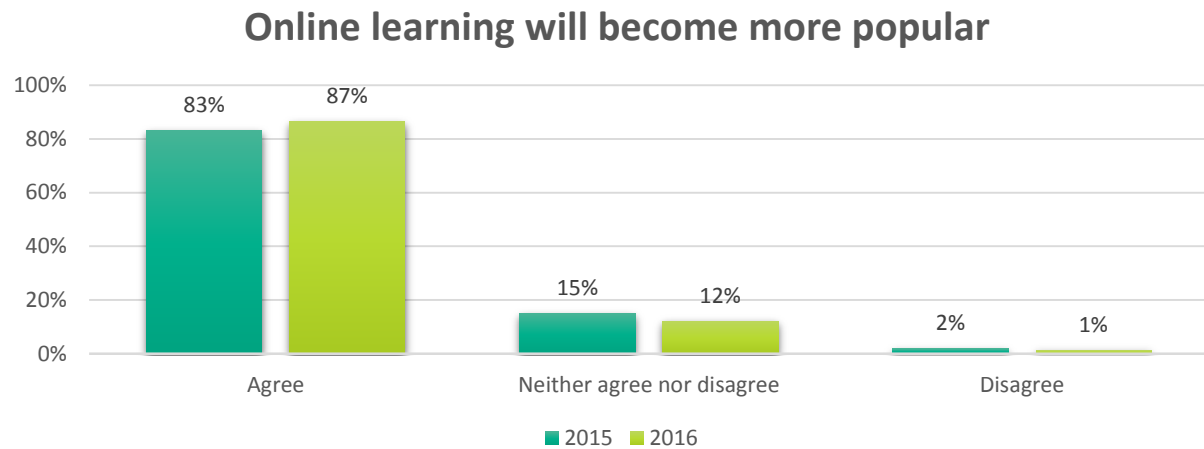
When asked about whether flipped classrooms will become the norm, there is a perfect split between those answering in the affirmative and those who are undecided (47% each).

Again, in the last year, opinions have been basically stable.



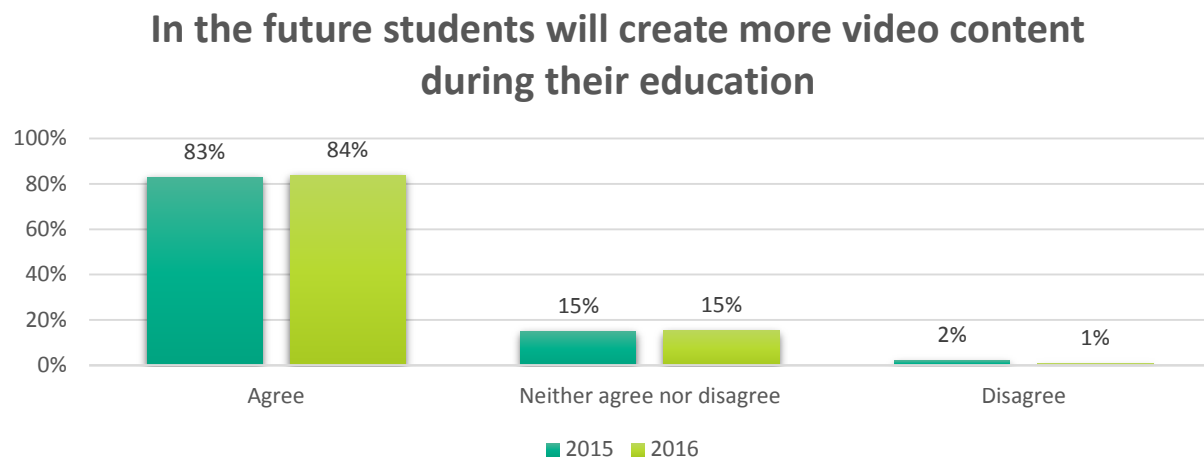
3.5.4 Online learning

87% of respondents agree that online learning will grow in importance and acceptance, an increase of 4% over last year.



3.5.5 Student Generated Content

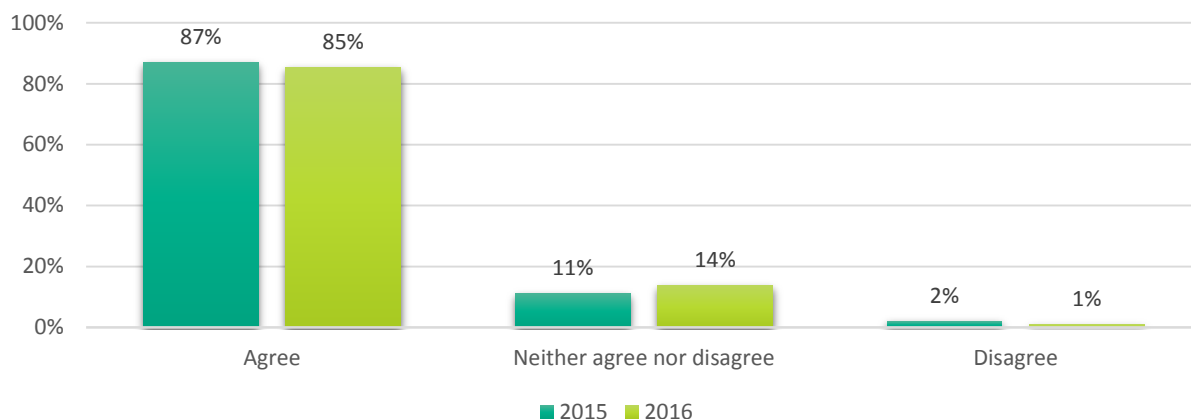
84% believe that in the future students will generate more video content during their education, consistent with last year's results.



3.5.6 Student Expectations

In terms of student expectations, only 1% of respondents do not believe that future students will expect video to be a part of their learning experience, again consistent with last year's results.

In the future students will expect video to be part of their learning experience

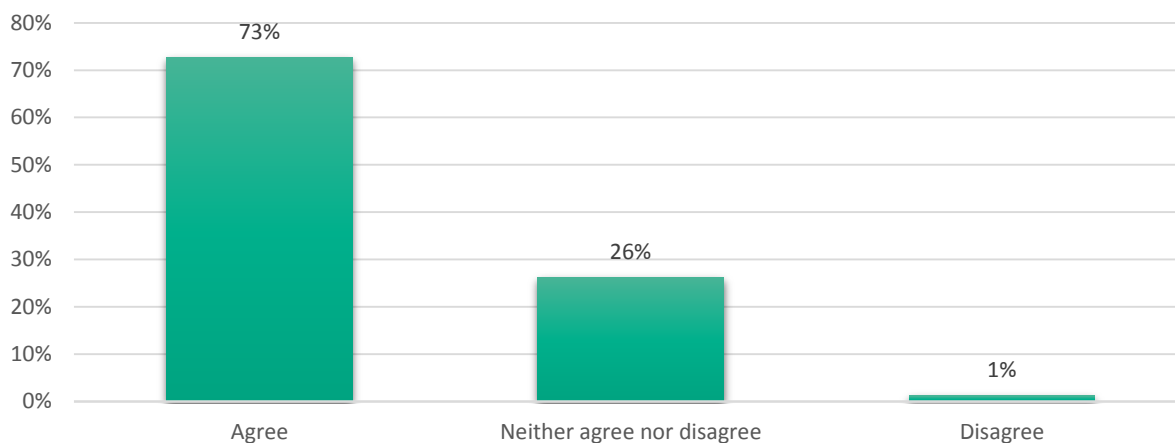


3.5.7 Return on Investment

In the future, 73% of respondents expect video to have a positive Return on Investment (ROI) in education.

(This question was asked for the first time this year.)

The use of video in education will have a positive Return on Investment

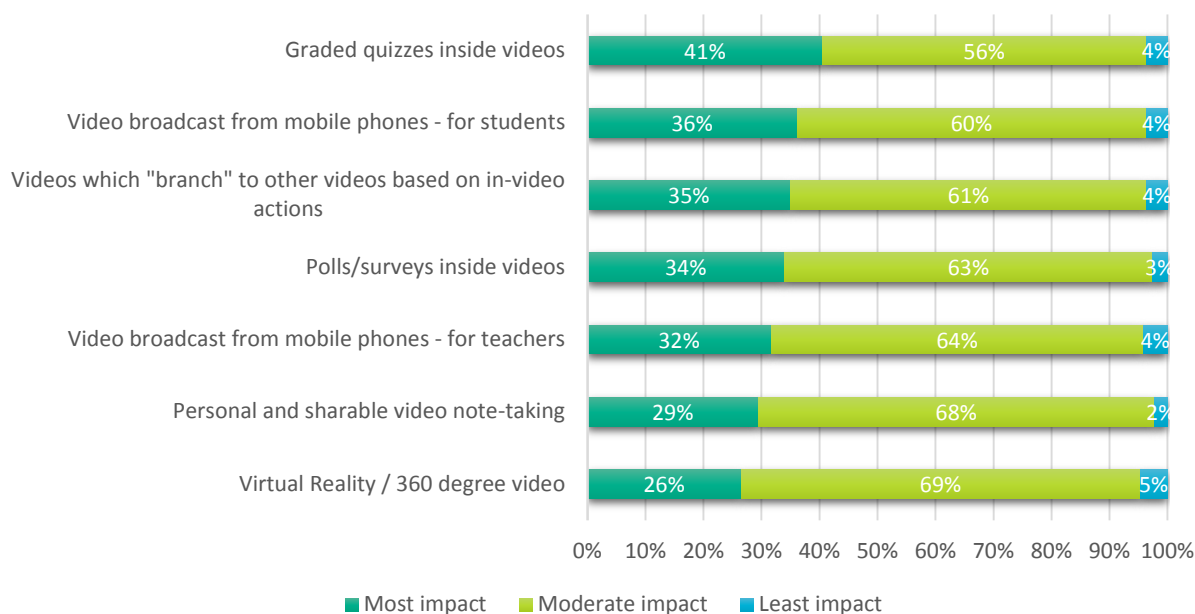


3.5.8 Impact of future video technologies

As new video technologies come of age, respondents are looking forward to their impact on the classroom.

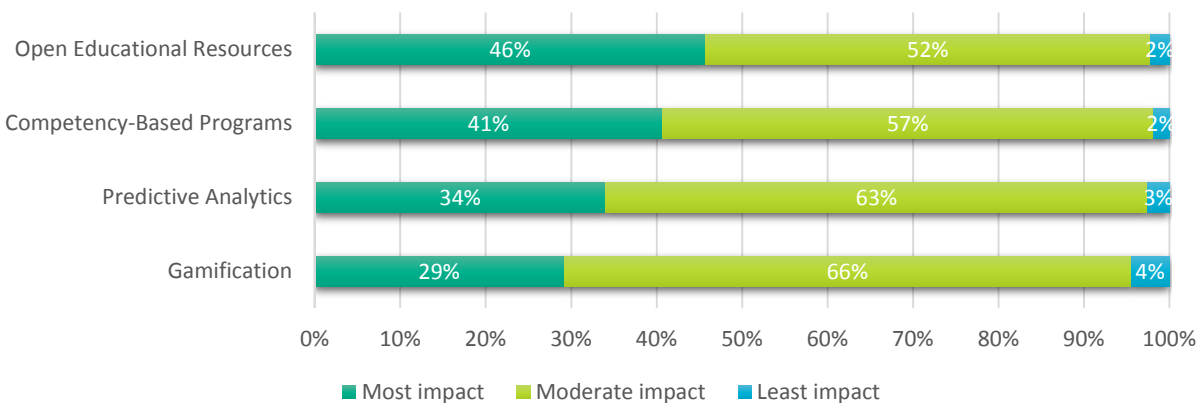
The most anticipated new development is graded quizzes inside videos, with 41% predicting the greatest impact for this technology. Video broadcast from mobile phones and videos that branch to other videos based on in-video actions are also predicted to be high impact.

How do you see the potential of the following to improve educational outcomes?



When asked about other video-related trends, the greatest interest is in Open Educational Resources, with 46% giving it the greatest potential impact on educational outcomes. Competency-based programs were nearly as popular.

How do you see the potential of the following to improve educational outcomes?



3.5.9 Vision for the role of video in education

Respondents see video becoming a standard tool in education, changing the way that students and teachers interact with the material.

In response to how they see the role of video in education in ten years, most survey respondents agree that its role will increase in importance and become more significant. Some of the most common words included “increasing,” “exponential,” “important,” “essential,” and “ubiquitous.” Here are some comments that are representative of the many, many respondents who see an increased role for video:

- *“The role of video in education is currently becoming more central to the education experience and will increasingly be used as a communication medium, instructional tool, teaching platform, and mode of student expression.” (Institutional Designer at a large North American higher education institution)*
- *“Use of video will continue to grow and become more important, both for financial reasons as well as pedagogical reasons.” (IT Staff at a large North American higher education institution)*
- *“Increasing in both prevalence and pedagogical quality as we are better able to collect, analyze, and visualize learning data.” (Administration at a large North American higher education institution)*
- *“I believe there will be a teacher shortage, so more video will be used.” (IT Staff at a small North American K-12 district)*

On the other hand, there is disagreement on what kind of role this expanded video presence will play.

- **Many believe video will be a standard part of education.**

- o *"It will become more the expected norm to have not just printed materials (textbooks, handouts, etc) but to also have video related to the curriculum." (Instructional designer at a small North American higher education institution)*
- **Others envision video supplanting in-person lectures and textbooks.**
 - o *"I think that video lecture will replace the traditional lecture in the auditorium." (Instructional Designer at a large European higher education institution)*
 - o *"[Video will be] replacing classroom teachers in small, rural schools." (Educator in small North American K-12 school)*
 - o *"I believe it will be part of the text book replacement. Textbooks are outdated before they hit the front doors, video will keep everything more timely and relevant." (Institute management at a large North American higher education institution)*
 - o *"There will be lectures provided by live stream only and education may take place like conversations in social media." (Strategy and planning specialist at a medium European higher education institution)*
 - o *"The brick and mortar is going to crumble." (Administration at medium North American higher education institution)*
- **Many predict changes to the teacher's role, with a growing use of flipped classrooms.**
 - o *"Video is likely to reduce the instructor's need to "teach by rote" as a lot of the same materials that are used repeatedly will be turned into video lessons that can be easily referenced, freeing the instructor to engage directly with the students and address friction points in the lessons." (Media team, large higher education institution)*
 - o *"Documentary style content not lectures. Short bursts of video for rich content and engagement interspersed with active learning and use of text for high density information." (Educator at a large European higher education institution)*
 - o *"It may take more than 10 years but soon "school" will look more like a TED talk than it does the traditional teacher/lecture model." (Educator at a small North American K-12 school)*
- **A "superstar effect" may emerge.**
 - o *"Video will have an enormous role in putting the best most respected teachers, researchers and authors conveniently in front of kids." (Educator at a small North American K-12 school)*
 - o *"I think video will allow for more cross cultural education opportunities. We can more easily share curriculum and lessons learned across borders that once divided our education institutions." (Administrator at small North American higher education institution)*
 - o *"Actors will deliver courses, even celebrities." (Video production staff at a large North American higher education institution)*
- **Even research may be affected.**

- o *"I believe we will see more of it in many situations. Video will be an accepted form to express scholarship." (Media team at a large North American higher education institution)*

Where will this video come from?

- **Some want to see more open education resources.**
 - o *"Hopefully there will be more open source educational videos available." (Educator at a medium North American higher education institution)*
 - o *"A national library of recorded content streamed to the student in a system moderated learning environment." (Instructional designer at a small North American higher education institution)*
- **Others want to make their own.**
 - o *"I will be creating & editing my own videos instead of trying to use someone else's OER videos." (Educator at a medium North American higher education institution)*
- **Still others predict more action from publishers.**
 - o *"I expect more video lectures from textbook companies." (Educator at a small North American higher education institution)*

Not everyone agrees this is a good thing. Some have concerns about the impact video might have on students and staff.

- **Reduced literacy**
 - o *"It can really go either way. The speed of learning and the ability to review is significant. However, I feel it has had a negative impact on literacy." (Library staff at a small North American higher education institution)*
- **Lack of human teachers**
 - o *"Video might take place of working teachers/professors and provide this world with robotic atmosphere." (Student at a medium North American higher education institution)*
- **Passivity**
 - o *"It takes far longer to consume a video than to read the same amount of info. As students become addicted to consuming more of their information passively watching/listening they will continue to lose cognitive skills." (Educator at a medium Central/South American higher education institution)*
 - o *"It could make it a lot worse because pre-packaged video can be very lazy, and because student-produced video content tends (strongly) towards a focus on method and humor rather than substance. I've seen way too many student videos that, while they get the students more INTERESTED in what they have produced, the students have*

actually LEARNED less relevant information.” (Educator at a large North American higher education institution)

- **Interpersonal skills**

- o *“Video’s role in education will continue to evolve and grow to allow for asynchronous learning that mimics the classroom. My concern is that as the current younger generation develops they lose interpersonal skillsets. However, I believe that by creative methods we can integrate video and interpersonal skills in a meaningful way”*
(Administration at a small North American higher education institution)

However, even as many of these concerns are brought up, other respondents suggest solutions. It’s widely assumed that students will benefit from more personalized education and assessment.

- **Education will become more personalized and self-paced.**

- o *“Video will help lead personalized instruction and when tied to formative assessment will allow for transformational changes in education.” (Instructional designer at a large North American K-12 district)*
- o *“There will be better integrated analytics to understand user perceptions at any given moment, and in real-time and will use AI to assist in personalized learning.” (IT staff at a medium North American higher education institution)*

- **Mobile will change the way students interact with material.**

- o *“Most people spend hours a day on their phone. If we can educate with videos that users can view at all times it would impact learning in a whole new way.” (IT staff at a large North American higher education institution)*
- o *“Students will record their answers via their phone or another device and “send” it to the class.” (LMS system admin/trainer at a medium North American higher education institution)*

- **Video student assignments and assessments will become far more common.**

- o *“I believe just like writing has been replaced with texting, so will doing assignments on paper be replaced with video explanations.” (IT staff at a large North American higher education institution)*
- o *“Video will be as integrated as textbooks. Assessments will be performance based and will include video presentations.” (Instructional designer at a small North American K-12 school)*
- o *“It allows students to self-analyze their performance.” (Administrator at a large North American K-12 district)*

One of the reasons video assignments are so critical is that the ability to communicate through video is increasingly considered an important skill.

- *“Hopefully a more rigorous pedagogy will have developed that treats video as a medium in the same way that the written word is currently treated—there will be courses devoted to the mechanics of creating video materials by faculty and students.” (Instructional designer/education at a large North American higher education institution)*

Greater interactivity through video will enable greater collaboration and communication.

- *“I see it as more interactive than just watching. The results of the interaction will lead the learner to the next step for him/her in what she/he needs to learn.” (Instructional designer at a large North American higher education institution)*
- *“Hopefully, 10 years from now students may have the opportunity to learn foreign languages by engaging with classes from their same grade level in other countries. I see collaboration being not just something down within the classroom or the school, but within the country and the world. I also see the ability for students to learn about and demonstrate solutions to some of the world’s problems like natural disasters or disease and use computer simulation to showcase what they’ve learned and what they think.” (Educator at a small North American K-12 school)*

The ability to access learning outside the classroom will have an enormous impact.

- **From online learning:**
 - o *“Video in education will make it easier to create online and distance learning courses which will grow student numbers and thus funding.” (IT staff at medium European higher education institution)*
 - o *“Students will be less likely to need to be on campus - real time and delayed video will be essential, and will need to be high-quality.” (Instructional designer at a large Australian higher education institution)*
 - o *“The quality of the online offerings will continue to improve (rigor, quality and assessment tools).” (Administration at a small North American K-12 district)*
- **From greater accessibility on multiple levels**
 - o *“More widespread and easier to make it accessible, make it more interactive, searchable, attach documents, etc.” (IT staff at a large North American higher education institution)*
 - o *“The possibility of multiple languages will be needed to bring the contents to the new generations, and make their education more experiential, adaptive and autonomous.” (Instructional designer at a Central or South American higher education institution)*
 - o *“Increased availability across all socioeconomic levels.” (Administration at a small North American K-12 school)*

Training is very much on respondents’ minds.

- **The need for training on how to use video, for both faculty and students:**
 - o *“If it is made very easy for faculty to create with tools that are intuitive and require little knowledge to use, as simple as creating a lecture or PowerPoint, with significant support or a team to help then younger faculty will take to it. It is very hard to train older faculty set in their ways. The institution must make a change pathway required and easy with training and a support team.” (Educator at a small North American higher education institution)*
 - o *“Students love video and but have no understanding how to use it to show learning. This will need to be taught.” (Educator at a small North American K-12 school)*
- **Using video for training:**
 - o *“My research indicates video-based teacher training can be delivered via mobile phones in the developing and developed worlds, so the use of video for professional development should not be ignored; too often the focus is on training educators to use video rather than training educators with video.” (Educator at a small North American K-12 school)*

Technological issues concern some, leading to an interest in unified solutions:

- *“The largest barrier is the difficulty for the lay-person to create, edit, transcode. All in one solutions are the future host/transcode/edit etc. all in one platform.” (Instructional designer at a medium North American higher education institution)*

Some of our respondents have exciting ideas about even more advanced video-related technology.

- *“There will be a rise in student and teacher generated video. The key will be building a proper taxonomy and metadata structures to organize student and teacher generated content. Once properly organized, video content becomes easily searchable. In ten years artificial intelligence will stitch together microvideos to form a custom lessons for students. In the meantime, Intelligence Amplified (IA), or social learning through peer groups, will continue to accelerate.” (Video production staff at an educational technology organization)*
- *“Audio-visual experience (mostly in the VR, AR or any other immersive form) will be an integral part of the learning process. Content recognition, both audible and visual, will facilitate quick access to relevant information.” (Instructional designer at a small Middle Eastern higher education institution)*

In conclusion,

- *“Colleges that are not strategizing now for how video should be used in the classroom of the future will be left out in the cold.” (IT staff at a large North American higher education institution)*

4 Summary – how does it all connect?

Video is used in a [wide and growing array](#) of areas in education, most notably in teaching and learning, but also across the campus for admissions, marketing, events, and more. Both [use of video as a teaching aid](#) by educators and the [active use of video by students](#) are continuing to gain traction in the classroom, but have yet to reach saturation. When compared [year-over-year](#), the majority of these trends are [consistent](#) and [strengthening](#).

Students are increasingly used to using video in every aspect of their lives, and digital literacy is [widely considered](#) a critical skill. However, as video technology continues to race ahead, students and teachers already feel less confident of their competence than even a year ago. Since the majority of institutions [use video for student assignments](#), and that number continues to grow, these skills are increasingly in demand.

Nearly everyone agrees that video is [immensely beneficial](#) for education. It increases [student satisfaction](#) and leads to [greater student achievements](#). It also aids in [professional development and increased job satisfaction](#) for educators. [Video makes communication and collaboration easier, helps make education more easily accessible and self-paced, increases interaction and engagement, and helps fuel some of the latest pedagogical developments like blended learning.](#) In terms of [what length of video is most effective](#), the general consensus is to prefer videos in the 5-10 minute range.

While many educators have access to [rudimentary video tools](#), there is tremendous need for tools at every stage of development, from basic video capture to [more advanced tools](#) like captioning and in-video quizzes. Many look forward to newer developments such as [more interactive video technologies](#) and [greater available video resources](#). At every level, more training for staff and students is necessary.

Video is expected to be a [mainstay of education in the future](#). It will help power trends such as [flipped classrooms](#) and [online learning](#). Students [increasingly expect video](#) as part of their learning experience and will only continue to [generate more video content](#) in the future. While the community [differs in their visions of the classroom of the future](#), nearly all agree that video will play a major role, especially as mobile makes learning available anywhere at any time. It may gradually replace textbooks, and the role of the teacher in the classroom will shift. Some predict even more exotic changes to take advantage of immersive environments, Augmented Reality, and machine learning.

However, as one instructional designer from a small higher education institution notes, *“Ten years is too far out and changes are happening too quickly to stay ahead anyway. The iPad isn't even ten years old. However, I see video for education in the next two years as moving to a more flexible modular design in which content can be moved, repurposed and updated quickly to maintain the relevance of course content and optimize the monetization of digital assets. I see a*

greater emphasis on producing quality content that can meet the aforementioned model and hopefully the end of recording hours and hours of less useful lecture capture and long-form instruction. There will always be mountains of useless and uncategorized content because that is the easy way to look busy. However, today's lecture based model is not sustainable as audiences have more online choices and are not as captive as they have been in the past."

5 Notes about methodology

This survey is our second survey on the topic, serving as an anonymous, statistically significant exploration of the usage, perception, and trends of video in education. Our intent is not to present a large-scale, longitudinal survey.

Clearly, respondents are self-selected and prone to a positive attitude towards video, choosing as they have, to participate in a survey named "The State of Video in Education". That said, the survey is designed to provide insights into the different uses of video in a comparative manner and explore the trends as seen by the education community.

The variance and multitude of institutional roles held by respondents presented a challenge when analyzing the data, considering that people of different roles have different priorities and perceptions of video on campus. However, we felt that including participants from the entire education community was important, with the topic being so fundamental to the future of education. We have tested the results against various different roles and groups of roles, which were large enough to be statistically significant and interesting to report, as described in section 2. Note that we did not report every single case of different results, since reporting this in an exhaustive manner is not practical and would impact the readability of the report. If you are interested in receiving information on anything specific that was not reported, please contact us at survey@kaltura.com.

About Kaltura

Kaltura's mission is to power any video experience. A recognized leader in the OTT TV (Over-the-top TV), OVP (Online Video Platform), EdVP (Education Video Platform), and EVP (Enterprise Video Platform) markets, Kaltura has emerged as the fastest growing video platform, and as the one with the widest use-case and appeal. Kaltura is deployed globally in thousands of enterprises, media companies, service providers, and educational institutions and engages hundreds of millions of viewers at home, at work, and at school. The company is committed to its core values of openness, flexibility, and collaboration, and is the initiator and backer of the world's leading open-source video-management project, which is home to more than 100,000 community members. For more information visit www.kaltura.com.

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