The State Of Video in Education 2014

A Kaltura Report

Kaltura
open source video

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1 Executive summary and key findings

Video is everywhere - transforming the way we learn, work, shop, communicate, collaborate and entertain. In education, video can be found at the very center of all the latest trends: Online and Hybrid Learning, MOOCs, and Flipped Classroom experiences. Educational institutions have adopted video across the board: for teaching and learning, research, marketing, admissions, public affairs and workforce training. Adopting and deploying best practices for video holds the potential for both short and long-term benefits: streamlined admissions, increased retention, and improved learning outcomes. **But what are the key driving forces propelling the use of video? How and why is video being used? What value does it actually create? How does it support the latest trends in education? And what are the best practices that could improve outcomes?**

To answer these important questions, Kaltura has launched the most comprehensive survey to date on the state of video in education. We received more than 500 responses, representing hundreds of institutions - primarily from higher ed, but also from numerous K12 schools. Respondents represent IT, instructional design, digital media, senior administration and faculty.

Video is a relatively new tool for many schools. We therefore found that there was more than one criterion for evaluating its impact. We also found that the adoption of video is in many cases a result of "bottom up" pressure. There is still a lot of room for growth in this market, with video not yet deployed in all courses, classes, or touch points of an institution. Through the survey it also became evident that respondents who had access to video tools felt that even basic video tools had a big impact.

According to respondents, students watch on average more than 10 videos per month, and in many schools where video has been expertly deployed, that number rises to more than 20 videos per month. Content varies widely, including free open online repositories which are often used in conjunction with lectures captured during class, and licensed content. Video is primarily used in the classroom, or alternatively to review classroom activity, for remote teaching and learning, student assignments, campus events and flipping classrooms.

With a 1/3 of US students already taking at least one class online, and a full 1/6 learning completely remotely, it's not surprising to see respondents firmly agree on the major role of video in education, and that students in the digital era expect video to be included in their curriculum. They also feel that two important video-based trends: distant & online learning, and flipping the classroom will not only increase in use, but are also likely to become the standard.

This survey is the first large scale study that confirms a unanimous positive attitude towards the impact of video on learning results, retention rates, alumni relations and fundraising campaigns, student satisfaction, faculty satisfaction, streamlining admissions, on-boarding of new students, and administration.

I am extremely thankful to all the participants in the survey for their contribution. Most respondents contributed additional qualitative information in the open-ended questions. I am

excited about the insights that we have learned from this survey, particularly around the positive ROI that video has for institutions. I look forward to repeating this survey next year, and encourage readers of the survey to provide feedback on points they would like to see explored in future research.

When more than 90% of respondents report that from their experience video improves learning outcomes, we know that there is a lot more to discover. As part of our commitment to open standards in education, Kaltura is collaborating with several leading universities and research centers on establishing a research program on video in education.

I also encourage readers to join us at Kaltura Connect, The Video Experience Conference - taking place in June 2014 in NYC - where many educators and technologists will share their video-related insights and best practices. Please do not hesitate to contact us at research@kaltura.com, if you wish to collaborate on this topic.

Sincerely,

Dr. Michal Tsur, President, Kaltura Inc.

2 Methodology and demographics

Running from January to March 2014, the survey had more than 550 respondents who agreed to share their knowledge and foresight. Questions had an average of more than 350 answers.

The respondents were from all sectors of the industry, from around the world, with a higher participation rate from higher education institutes in general, and especially from public universities:

Respondents' institution sector distribution

- Public University — 34.62%
- Private University — 18.94%
- Public 4-year college — 4.28%
- Private 4-year college — 9.78%
- Community college — 11.20%
- Educational Technology Organization — 7.33%
- Other (mostly K-12) — 13.85%
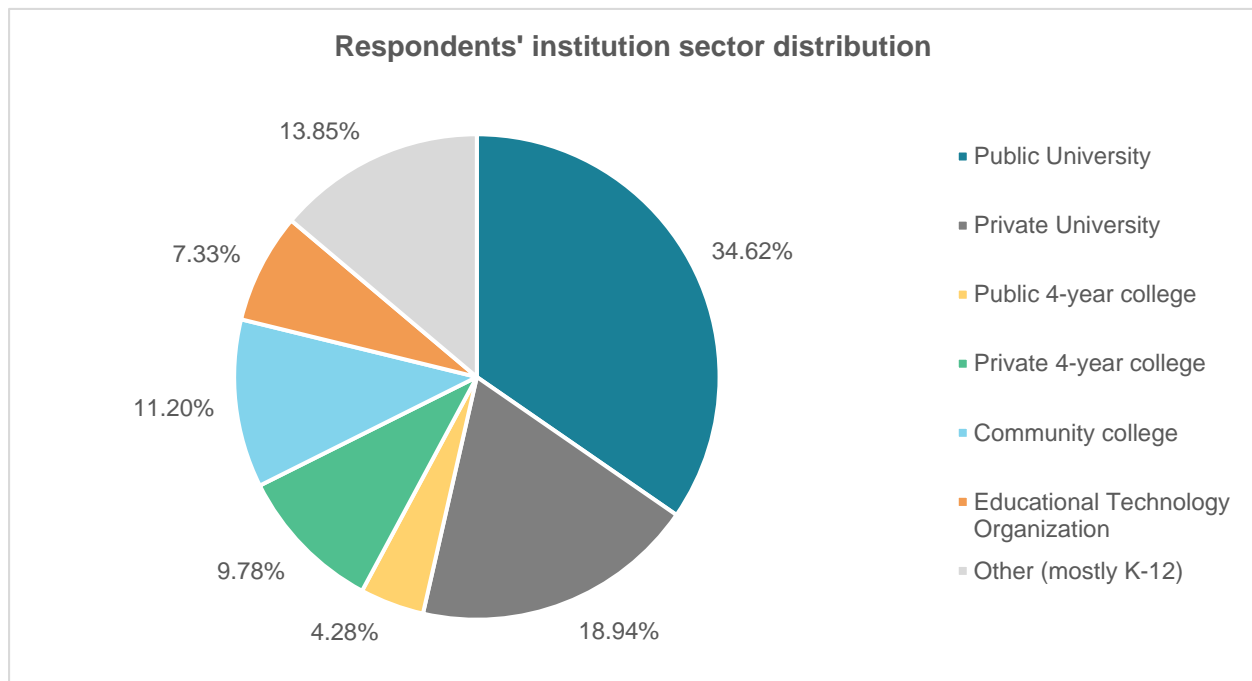
The respondents fulfill various roles[1] within the organization, most notably: IT team, media team, instructional design, faculty members and institution management.

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

Respondents' role distribution

Role	Count
IT	150
Instructional Design	133
Media team	114
Faculty	104
Institute management	70
Library Staff	26
Student	15
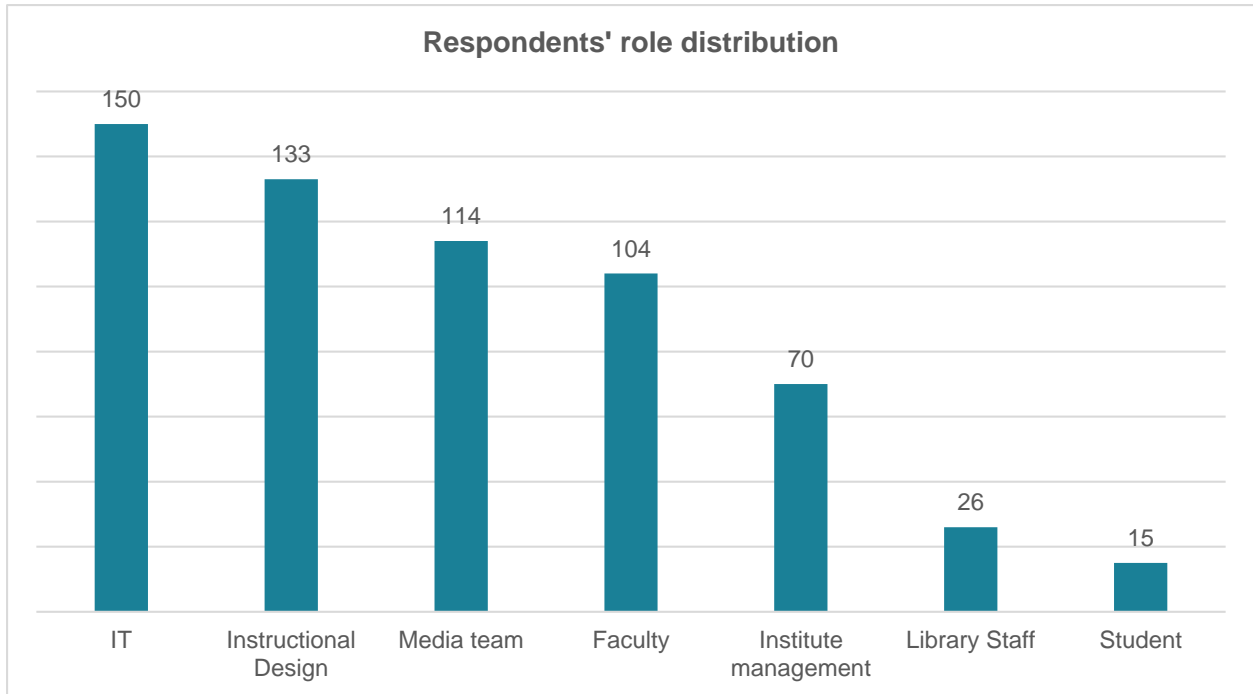
Some more notes about the methodology in chapter 9.

3 Video Usage

3.1 Use-cases

Video is becoming a key tool in teaching and learning: 74% of respondents use video in the classroom, 58% use video in student assignments and 48% use video for flipping the classroom in their institution
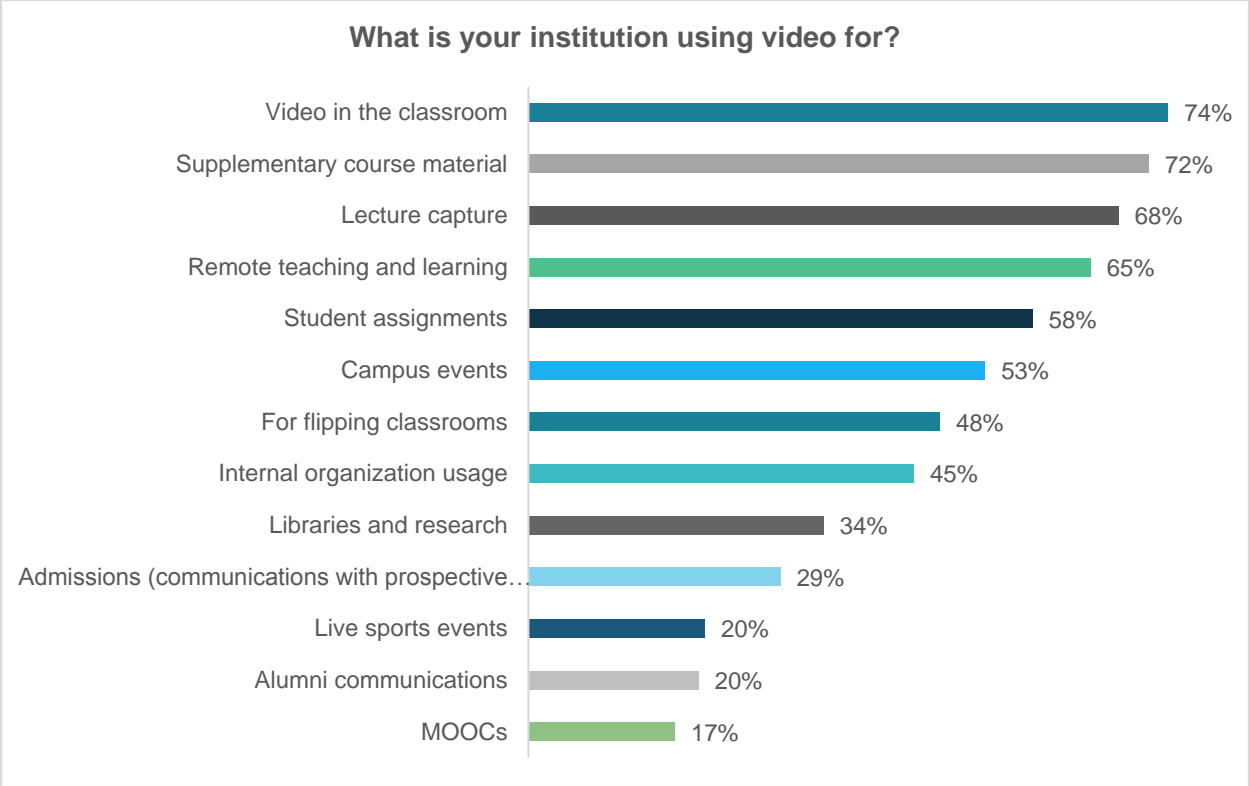
Video is used in a wide array of areas in the campus:

What is your institution using video for?

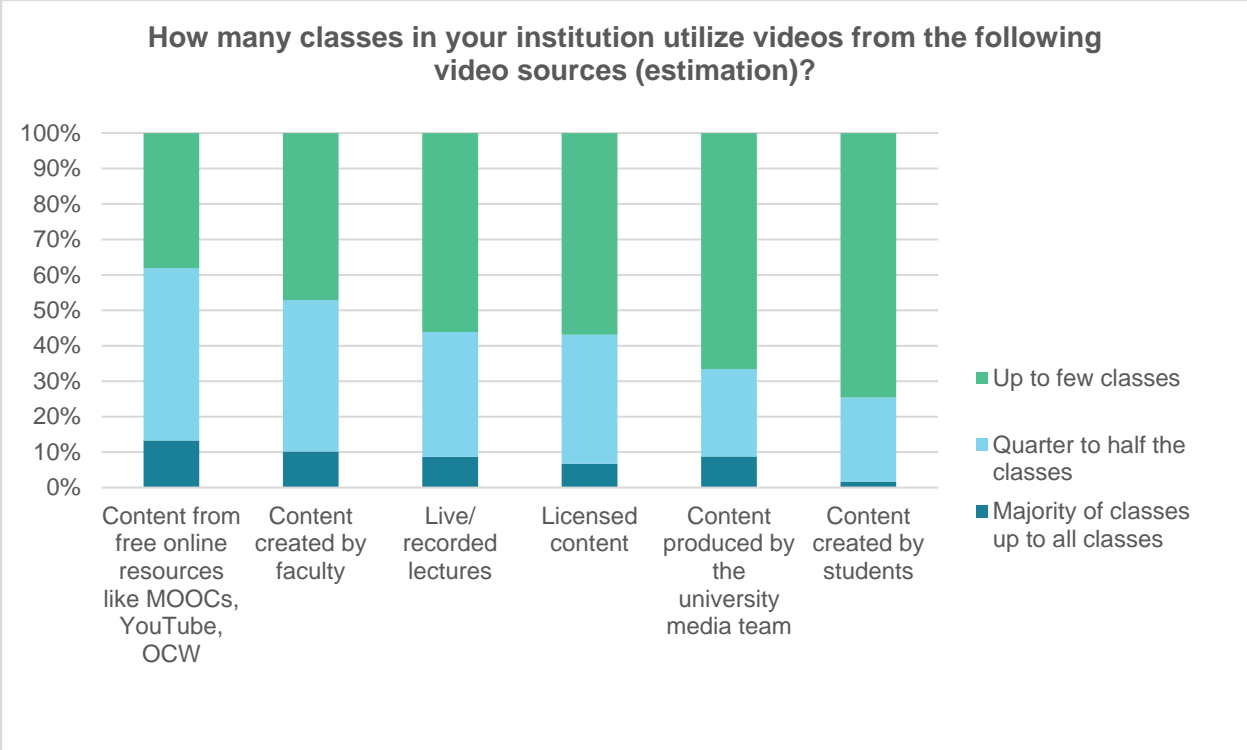| Category	Percentage
Video in the classroom	74%
Supplementary course material	72%
Lecture capture	68%
Remote teaching and learning	65%
Student assignments	58%
Campus events	53%
For flipping classrooms	48%
Internal organization usage	45%
Libraries and research	34%
Admissions (communications with prospective…	29%
Live sports events	20%
Alumni communications	20%
MOOCs	17%

Video is most widely used for teaching and learning. Within teaching and learning it is mostly used in the classroom (74% of survey respondents) and as supplementary material (72%). It is used for remote teaching and learning in about 65% of participant's institutions and for student assignments in about 58%. Flipped classroom methodology is becoming a widely used form of pedagogy with 48% saying they use video for that purpose and the MOOCs hype is marked by almost 17% of the survey respondents' institutes using videos for MOOCs.

Video is used less frequently outside of teaching and learning, with campus events at the top of the list with 53%, internal organization usage following with 45%, admissions (29%), live sports events (20%) and alumni communication (20%).

3.2 Distribution of video content sources used in teaching and learning

62% estimate Video from online resources is used at least in a quarter of the classes.

We saw that video is broadly used for teaching and learning among the participants' institutions. When looking at the number of classes in the institutes that use different types of videos, we can see that there is still a lot of room for growth in the adoption across campus:

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How many classes in your institution utilize videos from the following video sources (estimation)?

Legend:
- Up to few classes
- Quarter to half the classes
- Majority of classes up to all classes

The video source that is used the most is content from free online resources (e.g. YouTube, MOOCs, OCW): 13% of the respondents estimate that it is used by the majority of the classes or by all of the classes in their institution, and 49% of the respondents estimate that it is used by a quarter to a half of the classes – adding up to a total of 62%.

Content created by faculty is the second most widely used form of content, with 10% of the respondents estimating that it is used in the majority or all of the classes in their institution, and 47% estimating that it is used in a quarter to a half of their classes – for a total of 57%.
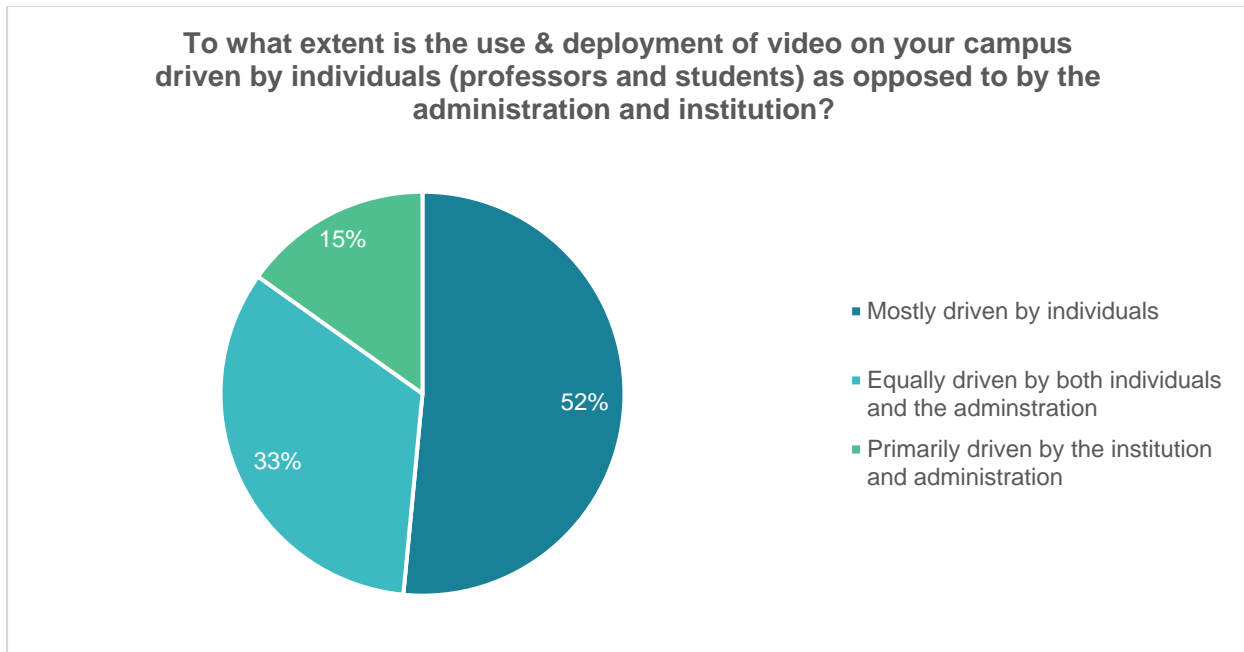
Institutions are using other video sources in significantly fewer classes - 75% of the respondents state that their institution uses content created by students for only a few classes or none. 67% of the respondents state that their institution uses content produced by the university media team for only a few classes or none (compared to 9% of the respondents stating that their institution uses it in the majority or all of their classes).

Live/recorded lectures and licensed content are nearly similar in adoption – with respectively 9% and 7% of the respondents stating that their institution uses the content in a majority or all of their classes, and 56% and 57% of the respondents stating that their institution uses the content in a few classes or none. These two forms of content have an important characteristic in common – they both require substantial payments to 3rd parties, which is probably related to their lower adoption level.

3.3 Top-down drive or bottom-up

Individuals drive usage of video in 52% of respondents' institutions rather than the administration

When asked about the extent that the use and deployment of video is driven by individuals (professors and students) as opposed to by the administration and institution in their campus, the answers show that video is still a 'bottom-up' demand in most cases:

To what extent is the use & deployment of video on your campus driven by individuals (professors and students) as opposed to by the administration and institution?

- ■ Mostly driven by individuals
- ■ Equally driven by both individuals and the adminstration
- ■ Primarily driven by the institution and administration

The following is a comment representing the general trend, made by an Instructional designer and a media team member of a private 4-year college: *"At this point, video content is very much driven by individual faculty and the media and [IT] team who work closely with them. Admin and institution have made statements about and are positive on the effects of multimedia, but have not put down policies or made it a priority."*

These findings resonate well with the content sources distribution, as the top two content sources (content from free online sources and content produced by faculty) are the content sources that require the least assistance from the administration.

Faculty and Instructional Designer Perspective

IT Stuff and Media Team Perspective
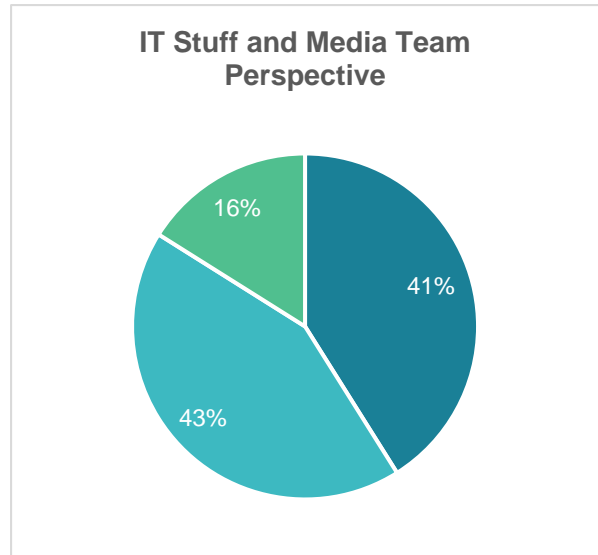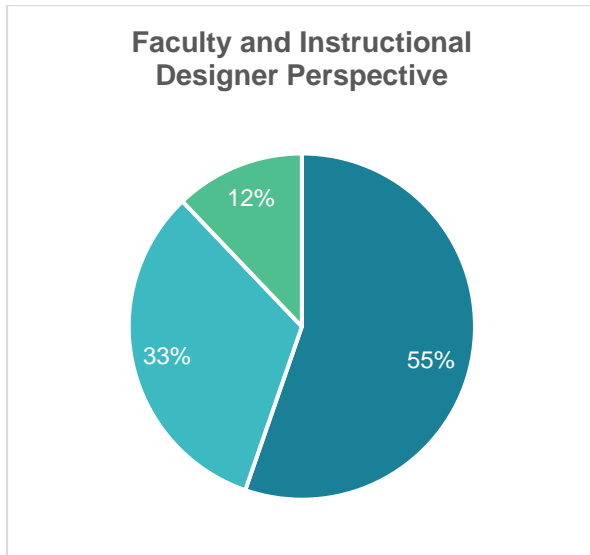
Not surprisingly, faculty and instructional designers attribute slightly more to video usage being driven by individuals and less to the administration, while IT staff and media team members attribute significantly more to it being equally driven by the institution and less for 'bottom-up' drive.

While these differences don't change the general picture, they may indicate that in some cases there is a disconnect between the administration and the faculty regarding the availability of video tools and openness to use them. On the other hand, the differences in results may be accredited to normal perspective differences.

3.4 How many monthly educational videos do students watch?

49% of respondents estimate that students watch 6-20 educational video each month

Most respondents believe that students watch 1-5 (34% of respondents) or 6-10 (32% of respondents) videos each month that contribute to their education. A rather naïve weighted average calculation implies that the typical student consumes around 10 videos per month for education.

How many videos that directly contribute to a student's education do you think a typical student watches on a monthly basis?

Legend:
- None
- 1-5
- 6-10
- 11-20
- 21-30
- 31-50
- More than 50

Values shown: 34%, 32%, 17%, 10%, 3%, 2%, 2%
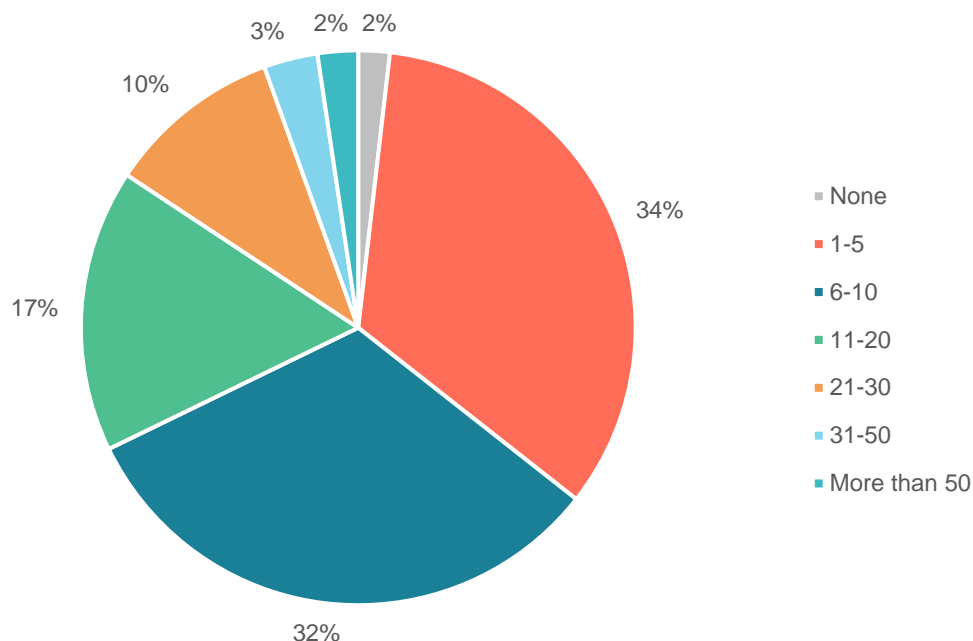
4 Video Tools

46% believe that there aren't sufficient video tools for educators. Topping the list of missing tools are easy to use lecture capture tools, a centralized video system and training and support.

About 54% of respondents feel that there are sufficient tools for the educators in their institution in order to utilize video[2] and about 46% feel the tools are not sufficient.

Those 46%, when asked which tools are missing, primarily mention 6 repeating themes:

- Easy to use tools for lecture capture (mentioned by 19.5%[3] of the 46% who feel that the tools are insufficient)
- A centralized system for video storage, streaming, management, etc. (18.8%)
- Training and support for using existing tools (17.4%)
- Infrastructure and equipment (11.4%) – mostly missing storage servers, streaming infrastructure, and cameras
- Editing tools (10.7%)
- Staff (3.4%)

The common thread among these missing tools is a persistent feeling among the education community that faculty and students need easier access to robust and easy to use tools that allow them to create and edit videos on their own. These tools should be centrally selected and

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[2] We have not examined this point directly in the survey, but we believe that a good portion of these have a centralized video system in place.
[3] Some participants mentioned more than one missing tools, and therefore are counted more than once.

deployed by the administration, which in turn should provide the users with training and support on the tools.
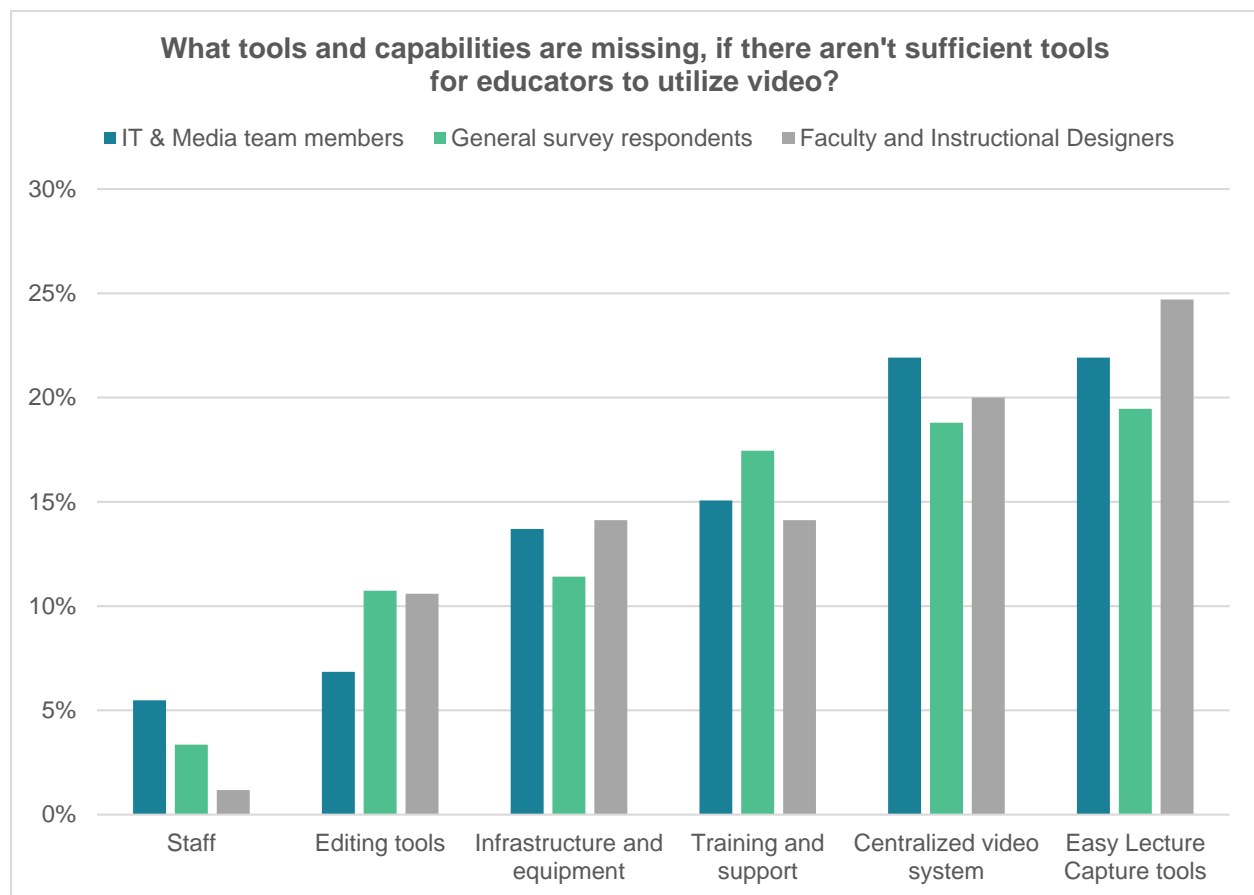
When filtering the results to those of faculty and instructional designers, the same themes are mentioned with a different emphasis and order:
Tools for lecture capture (25% of faculty and instructional designers that feel the tools aren't sufficient), Training and support (20%), Editing tools (14%), Centralized system (14%), infrastructure and equipment (11%)

When looking at the comments of IT and media teams, we have yet another emphasis and order:
Centralized system (22% of IT stuff and media team members that feel the tools aren't sufficient), Tools for lecture capture (22%), Training and support (15%), editing tools (14%), and infrastructure and equipment (7%)

We can clearly see that the people who deal directly with educational content would like more DIY tools, while those who support them put relatively more weight on the system behind it.

What tools and capabilities are missing, if there aren't sufficient tools for educators to utilize video?

■ IT & Media team members   ■ General survey respondents   ■ Faculty and Instructional Designers

5 Impact and ROI

5.1 General impact
90% of respondents believe that video improves the learning experience

When asked about the general impact of video on the learning experience, a whopping 90% replied that video improves the learning experience. 4% believe it has no impact on the learning experience and less than 1% believe it has a negative impact on the learning experience.

What is the general impact that video has on the learning experience in your opinion?

6% 1% 3%

- Negatively impacts the learning experience
- No impact on the learning experience
- Improves the learning experience
- Other

90%
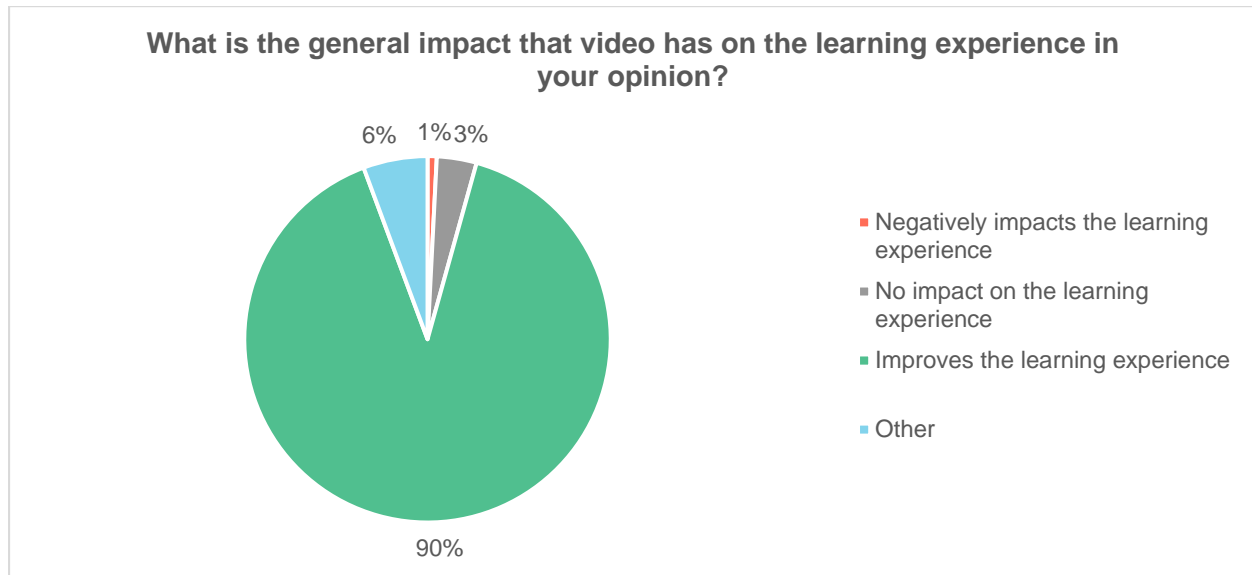
Those who believe that video has no or 'other' impact on the learning experience, mostly noted that the impact depends on the use of video and on the students: *"Video, like any other teaching tool, can aid or hinder a student's education. It's all about using it properly."* commented an instructional designer from a Private 4-year college)

Many of the other respondents commented on that as well. Other repeating comments (in essence):

- Video is effective for visual learners *"Since most people are visual learners, video helps in instruction."* (Faculty from a public university)
- Video allows users to re-watch until understanding: *"Video allows the end user to watch at his/her own pace and to repeat content as many times as necessary for review."* (Instructional Technology Facilitator from K-12 public schools)
- Video can be watched anytime, anywhere on any device *"…student can take advantage of different devices no matter the time… watching content wherever they are or whenever they want, taking advantage of the moment (wasting time in long waiting lines for example, traveling, etc)."* (IT staff from a private university)
- Video is engaging *"More and more, I think we're turning to video to create a more engaging educational experience. The audiovisual elements, when designed appropriately, seem to enhance educational activities and help students make multiple connects with course content and prior knowledge."* (Instructional designer from a public university)

- Video is more significant in online courses *"Video is especially important in fully online classes or flipped classrooms. Most all of our online and hybrid classes at our university use video. Quite a few of the on-campus classes also use video also but not as much."* (IT from a public 4-year college)
- Video is supplementary and not a replacement *"I work in the online sector of [university name omitted], so not sure what is going on in the physical classrooms. That said media enhances the student experience and the pedagogy of learning. It does not replace/replicate content but rather enhances."* (Media team member of a private university)
- Video can have a negative impact *"If used poorly it can waste students' time and negatively impact learning."* (Instructional designer and IT staff in a private 4-year college)

5.2 How is ROI on video measured
Almost 50% are not measuring ROI on video

While it is clear that the majority of institutions are incorporating video on some level, measuring ROI has yet to be further developed. According to the survey, 47% of respondents state that they are currently measuring the ROI in video using a variety of quantitative and qualitative mechanisms that can be linked, either directly or indirectly, to ROI.
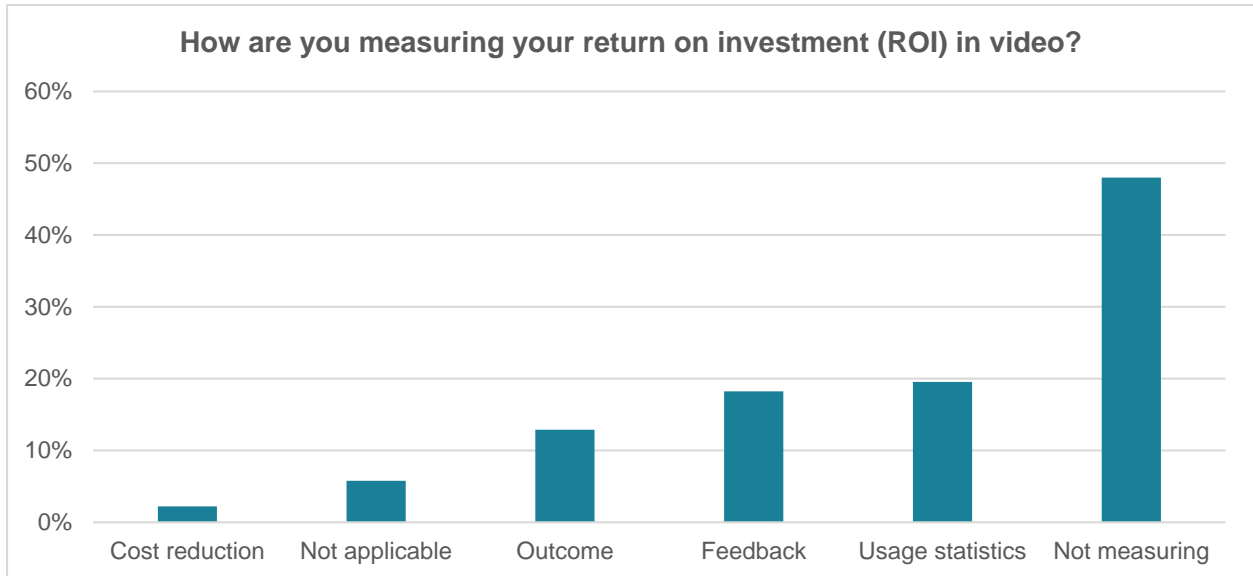
The survey included 2 questions related to ROI: an open question on how they are measuring ROI and a ranking question asking perception of impact of video in different desirable metrics.

Participants who answered the open question (excluding those who answered variations of "I don't know") had the following general answer distribution:

- 48% are not measuring ROI
- 19.5% are measuring ROI using different usage statistics, as these correlate to engagement and adoption and through that to satisfaction and other desirable metrics. Director in a private 4 year college wrote *"We measure academic usage, and estimate the impact of not being able to do it. It's kind of like ROI on an LMS. You can't really calculate it, but you know you can't not have it."*
- 18%[4] are measuring ROI via feedback from students and faculty, mostly using surveys. An instructional designer and faculty member of a community college wrote *"With course quizzes and assignments that measure course concept retention and summative (end of quarter) student review/feedback forms"*
- 12.5% are measuring ROI through desirable outcomes. The outcomes mentioned were mostly focused on student achievements and also included enrollment numbers, knowledge retention, student retention and job placement.
  A media team member of an educational technology organization wrote *"On redesigned courses, by the average grades on the particular modules where we added videos. Also conducting student surveys on the impacted ones."*
- Another 5% consider ROI a non-applicable metric.

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[4] Some participants are measuring ROI via several of the measurements methods, so the total percentage listed here can be higher than 100%.

- A small percentage (less than 3%) are measuring ROI mostly by cost reduction. An instructional designer of a private university wrote *"Using productivity index, mainly hours in teaching a theme in class VS practicing in class. Each hour implies a cost dedicated by teacher."*

How are you measuring your return on investment (ROI) in video?

Category	Value
Cost reduction	2%
Not applicable	6%
Outcome	13%
Feedback	18%
Usage statistics	19%
Not measuring	48%

The findings here present a broad educational challenge – measuring the effectiveness of anything done to support student outcomes improvement. While there is a massive effort underway in education institutions for defining, aligning, and reporting on student outcomes, the ability to connect down to individual learning objects or groups of objects still presents a challenge.
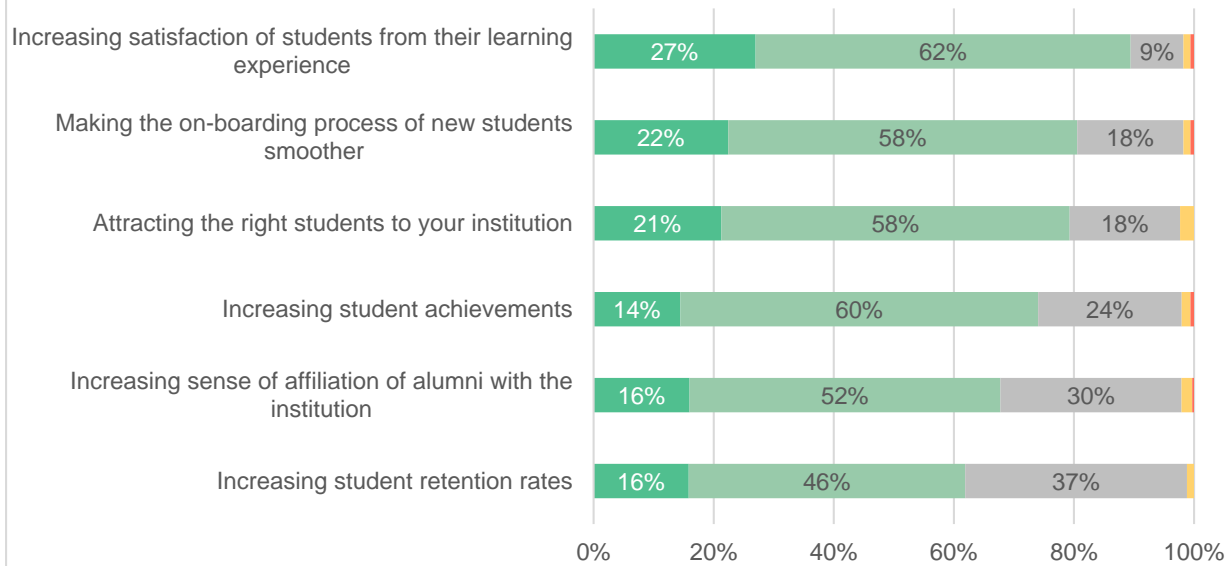
5.3 Video impact on institution goals

When asked about the effect using video has on various educational goals, there is a strong perception that video would have a positive impact on these goals. Between 60%-90% of respondents believe that video would either probably or definitely have positive impact on these goals, while between 1-5% believe it would probably/definitely have a negative impact.

5.3.1 Impact on student oriented goals

89% of respondents believe that video would have a positive impact on students' satisfaction from the learning experience

How would you rate the potential impact of video on the following goals (students)?

- Using video would definitely have a positive impact
- Using video would probably have a positive impact
- Using video will have no impact
- Using video would probably have a negative impact
- Using video would definitely have a negative impact

Goal	Definitely positive	Probably positive	No impact
Increasing satisfaction of students from their learning experience	27%	62%	9%
Making the on-boarding process of new students smoother	22%	58%	18%
Attracting the right students to your institution	21%	58%	18%
Increasing student achievements	14%	60%	24%
Increasing sense of affiliation of alumni with the institution	16%	52%	30%
Increasing student retention rates	16%	46%	37%

Video is strongly perceived to have positive impact on all student oriented goals, first among these is 'Increasing satisfaction of students from their learning experience', with almost 89% of all respondents believing video would have a positive impact, 27% of those are sure of this.
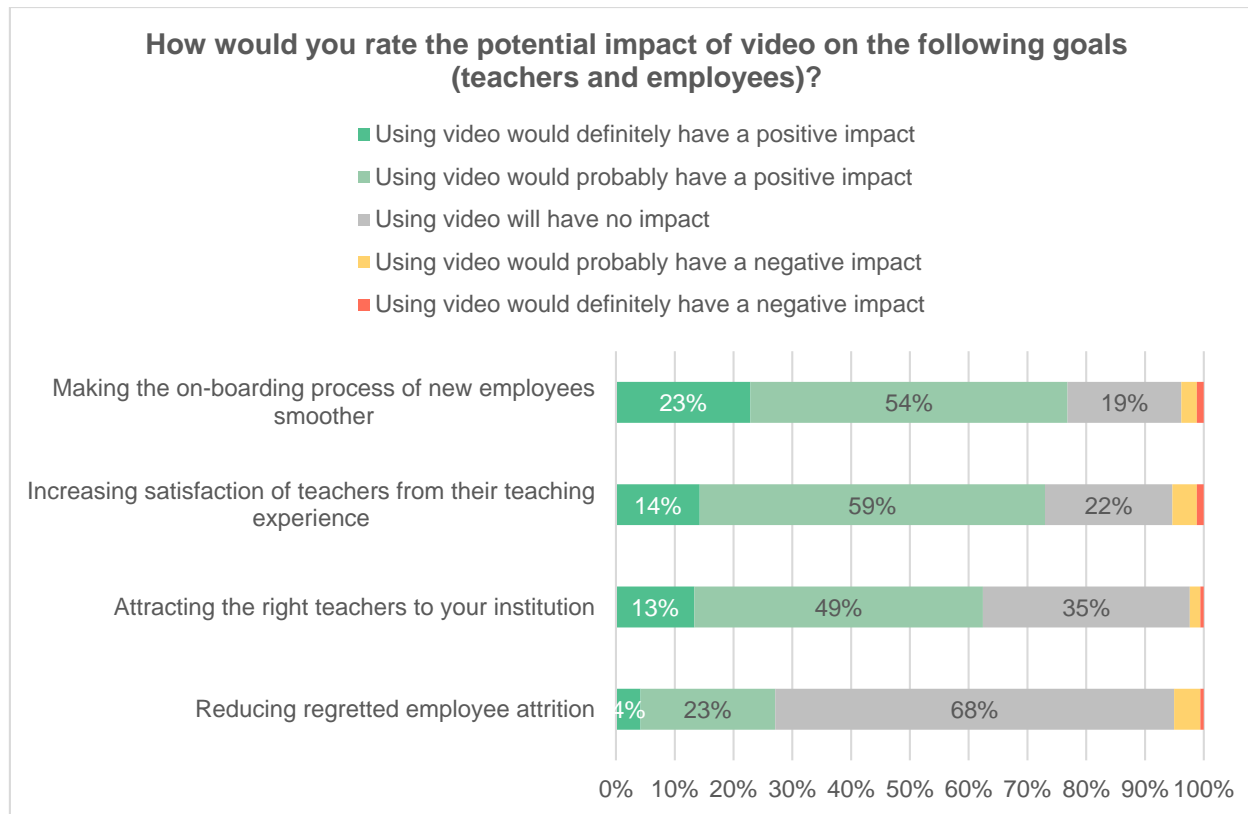
Following are 'Making the on-boarding process of new students smoother' and 'Attracting the right students to your institution', both goals are perceived by about 80% of respondents to be positively impacted by video.

The 'Increasing student achievements' and 'Increasing student retention rates' goals are closing the list on student related goals with 74% and 62% positive impact respectively.

Institutions aspire to maintain an active and involved relationship with students after they graduate. Video is also perceived to have a positive impact on 'Increasing sense of affiliation of alumni with the institution' by 68% of respondents.

5.3.2 Impact on teacher and employee oriented goals
73% believe that video increases satisfaction of teachers from their teaching experience

How would you rate the potential impact of video on the following goals (teachers and employees)?

- ■ Using video would definitely have a positive impact
- ■ Using video would probably have a positive impact
- ■ Using video will have no impact
- ■ Using video would probably have a negative impact
- ■ Using video would definitely have a negative impact

Goal	Definitely positive	Probably positive	No impact
Making the on-boarding process of new employees smoother	23%	54%	19%
Increasing satisfaction of teachers from their teaching experience	14%	59%	22%
Attracting the right teachers to your institution	13%	49%	35%
Reducing regretted employee attrition	4%	23%	68%

When it comes to teachers, the perception is positive but not as strong.

The effect of video on 'Increasing satisfaction of teachers from their teaching experience' is good, but relatively more controversial; While 73% believe video would have positive impact, 5% believe it would have negative impact.

Only 62% of participants believe that using video would have a positive impact on 'Attracting the right teachers to your institution'.

We believe that these results are due to teachers' varying ages, experience and methodology. Incorporating new technologies and techniques can be intimidating and time consuming to many of the more experienced teachers. (We haven't tested this hypothesis in this survey).

For employees, video is perceived to have a positive impact on new employee on-boarding (by 77%), but not to have any significant effect on employee attrition (68% believe video has no impact).

6 Looking forward

6.1 Online education
71% of respondents report that their institution is exploring the option of for-credit courses and degrees that are completely online

When asked whether their institution is exploring the option of for-credit courses and degrees that are delivered completely online, more than 70% reported that their institution is exploring it.

Is your institution exploring the option to offer for-credit courses and degrees that are delivered completely online?

No answer, 4.3%

No, 24.1%

Yes, 71.6%
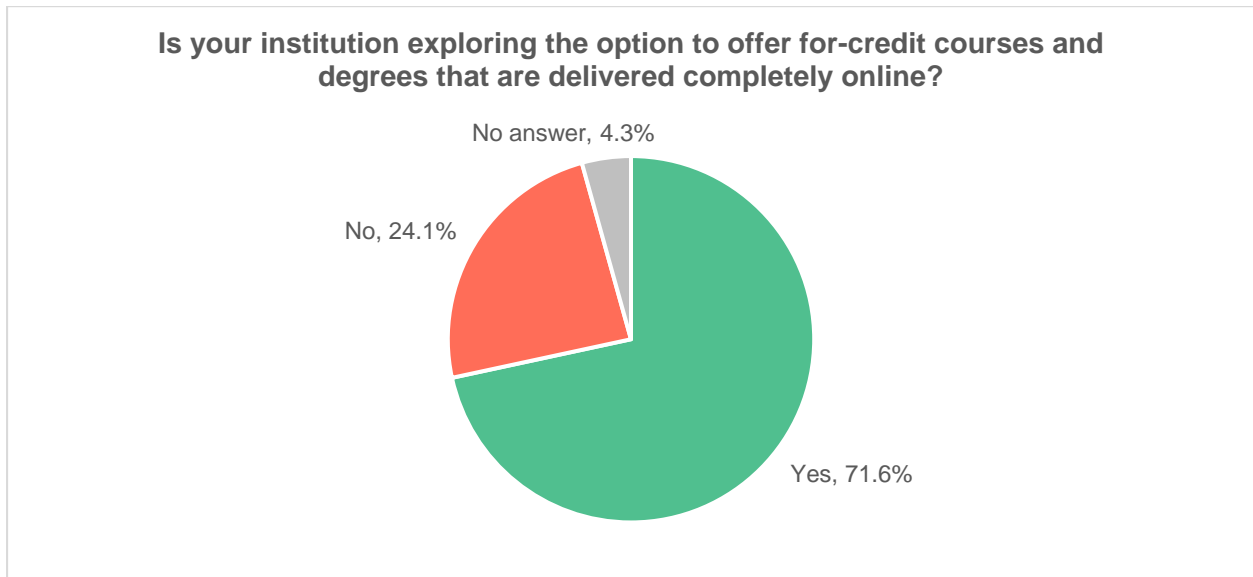
6.2 University 'Netflix'

64% believe their institution would be interested in a Netflix-like education video portal for self-enrichment

When asked whether their institution would be interested in a Netflix-like education video portal, to which anyone can subscribe (paid or unpaid subscription) for self-enrichment (i.e. no tests or credit), about 64% of respondents answered affirmatively.

Of those, most believe the content would be mixed free and paid-for, followed by only free content. Only a few believe that all of the content should be paid-for.

Would your institution be interested in a Netflix-like education video portal, to which anyone can subscribe for self enrichment (no tests or credit)?

No answer, 6.5%

No, 29.2%

Yes, 64.3%

Paid, 10.9%

Not paid, 32.8%

Mixed free and paid-for content, 56.3%
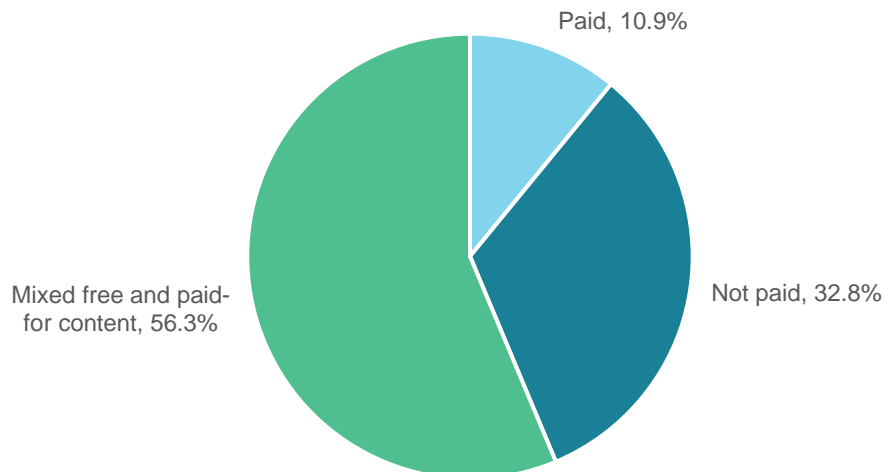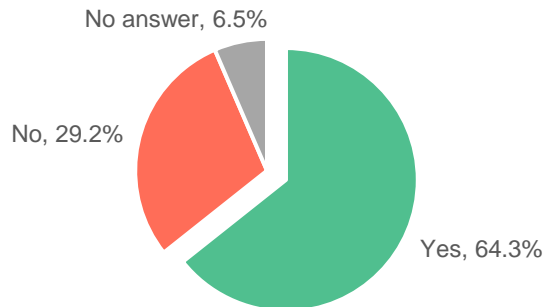
6.3 Sharing and collaborating

50% believe their institution would be open to sharing content with other institutions

When asked if they believe that their institution would be open to having content created at the institution searched and consumed by other institutions and vice-versa, the respondents are more evenly divided with 50% open to the idea and 42% not.

Would your institution be open to having content created at your institution searched and consumed by other institutions and vice-versa?

No answer, 8.1%

Yes, 50.0%

No, 41.9%
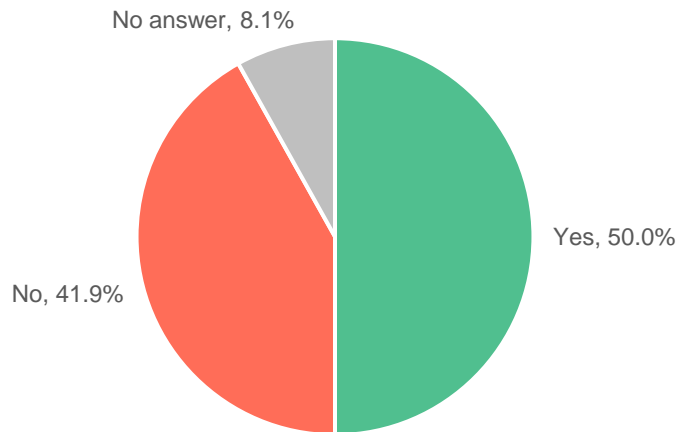
6.4 MOOCs

60% of respondents are not using video to deliver MOOCs and do not intend to

In response to whether their institution is using video in order to deliver MOOCs, about 20%[5] of survey respondents answered 'yes' and another 20% are not, but have plans to.
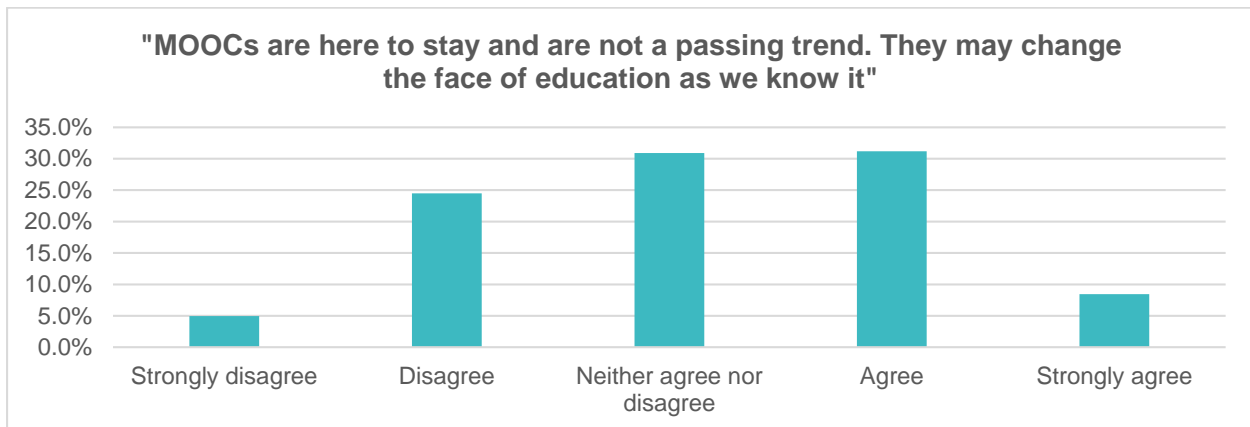
Is your institution using video in order to deliver MOOCs?

No, but have plans to, 20.4%

Yes, 19.8%

No, 59.8%
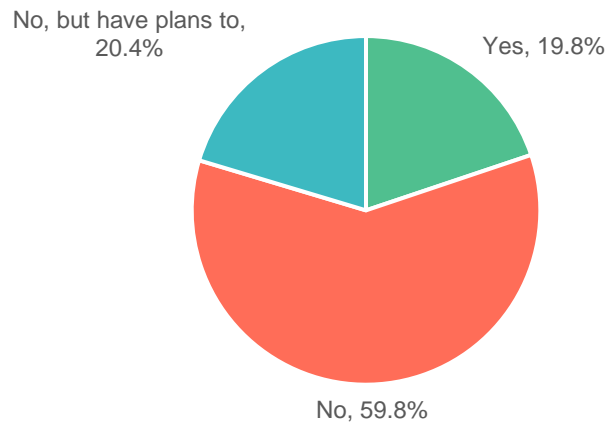
When asked about the future of MOOCs, the opinions are split, with a small tendency towards believing in MOOCs:

About 30% disagree and about 40% agree that 'MOOCs are here to stay and are not a passing trend. They may change the face of education as we know it'

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[5] This number varies from the percentage presented in question 3.1. The two questions where asked separately and the results presented here reflect the answers provided.
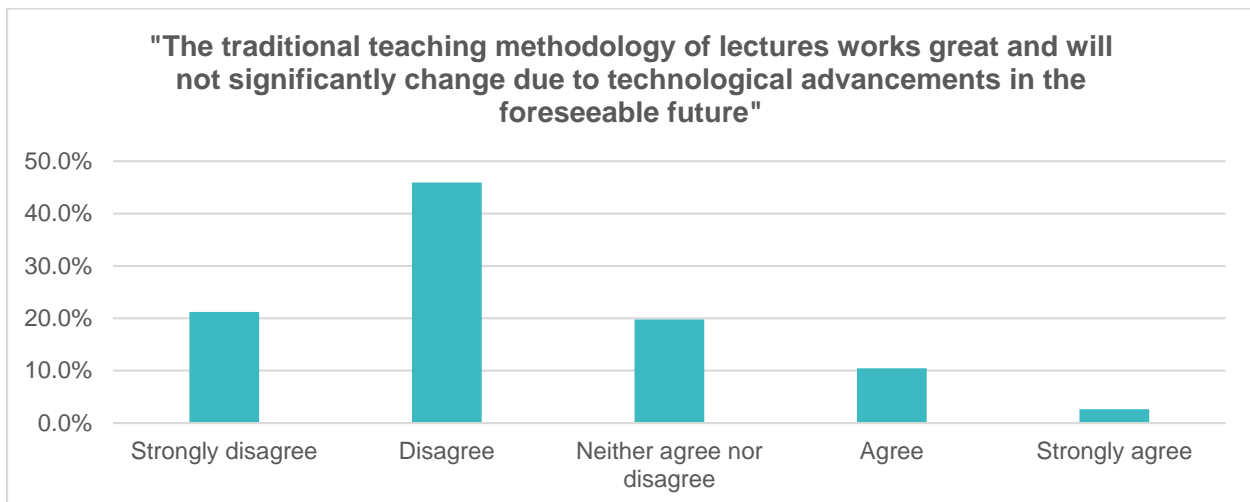
"MOOCs are here to stay and are not a passing trend. They may change the face of education as we know it"

A bar chart showing responses with a y-axis from 0.0% to 35.0%:
- Strongly disagree: ~5%
- Disagree: ~24.5%
- Neither agree nor disagree: ~31%
- Agree: ~31%
- Strongly agree: ~8.5%

6.5 Traditional lectures

67% believe the traditional teaching methodology will change as a result of technological advancements

Most survey participants believe that the teaching methodology will significantly change due to technological advancements.

Only 13% agree that 'The traditional teaching methodology of lectures works great and will not significantly change due to technological advancements in the foreseeable future', and more than 67% disagree with the statement.

"The traditional teaching methodology of lectures works great and will not significantly change due to technological advancements in the foreseeable future"

A bar chart showing responses with a y-axis from 0.0% to 50.0%:
- Strongly disagree: ~21%
- Disagree: ~46%
- Neither agree nor disagree: ~20%
- Agree: ~10.5%
- Strongly agree: ~2.5%

This disbelief is even stronger within faculty and instructional designers, where 74% don't agree with the statement and only 10% agree.

6.6 Flipped classrooms

57% believe in flipped classrooms acceptance

There is a general belief in 'flipped classroom' as a standard pedagogy method in the future.

Defining flipped classroom: "Flip teaching' or a flipped classroom is a form of blended learning in which students learn new content online by watching video lectures, usually at home, and what used to be homework (assigned problems) is now done in class with teachers offering more personalized guidance and interaction with students, instead of lecturing. This is also known as backwards classroom', flipped classroom, reverse teaching." (Source Wikipedia)

Less than 7% disagree and more than 57% agree that 'Flipped classrooms will become a standard teaching practice in higher-ed'

"Flipped classrooms will become a standard teaching practice in higher-ed"
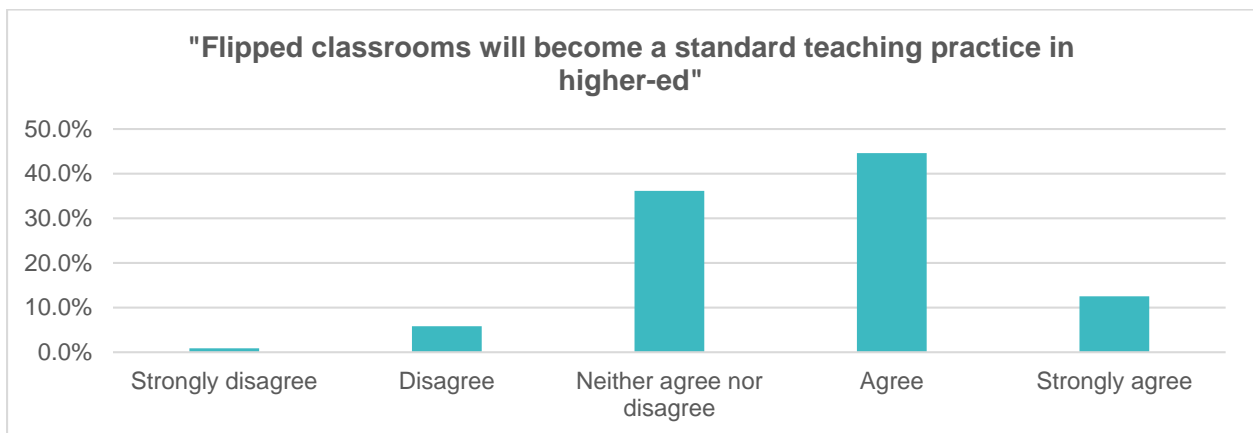
6.7 Online learning

81% believe in online learning growth and acceptance

An even stronger acceptance is shown for online learning.

Less than 5% disagree and more than 81% agree that 'Online learning will become more and more accepted and account for a large number of degrees'

"Online learning will become more and more accepted and account for a large number of degrees"
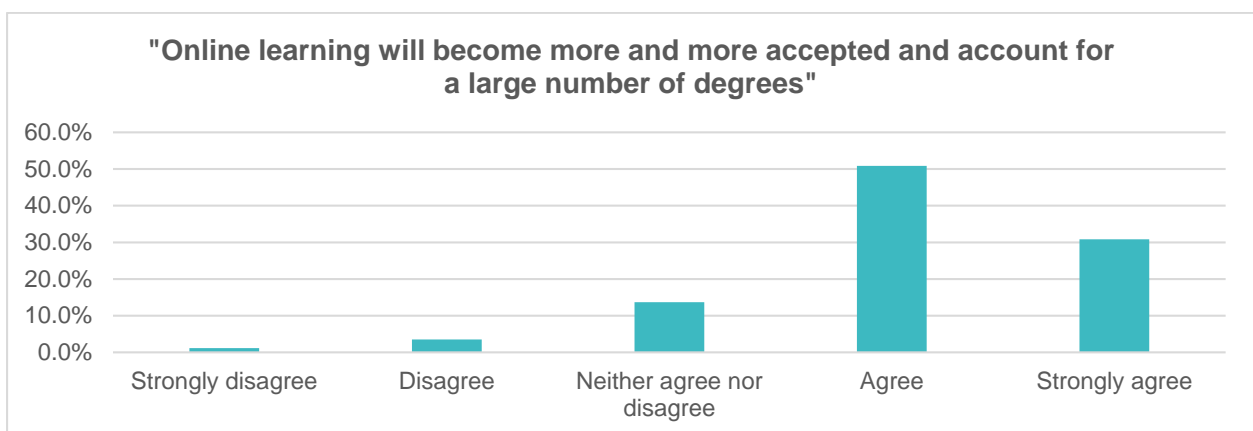
6.8 Video in education

88% agree that video improves the educational experience and will be a major part in education in the future

The most agreed upon statement is regarding the role of video in education.

About 88% agree that 'Video improves the educational experience and will be a major part of education in the future', while about 2.5% disagree.
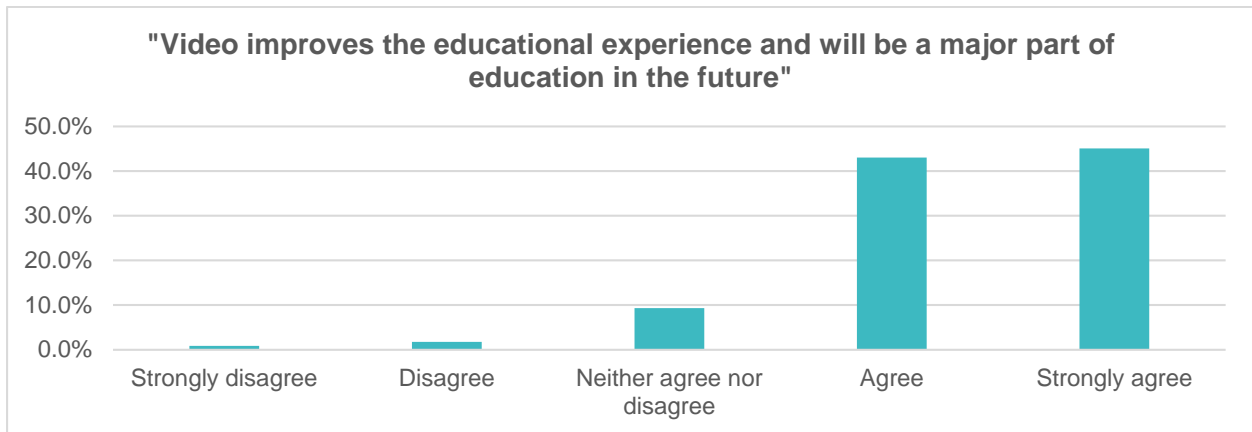
6.9 Online vs. frontal

Most people believe that in order to cater to the entire student population, both frontal and online lectures should co-exist

When confronted with the provocative question 'Given a choice between having the world's best educators provide video content for each of the courses at your school vs.
having frontal lectures by internal faculty… which do you think students would prefer?', the respondents are almost evenly divided – about 26% believe students would prefer the traditional lectures, 21% believe students would prefer video lectures and 53% believe the students would be split.
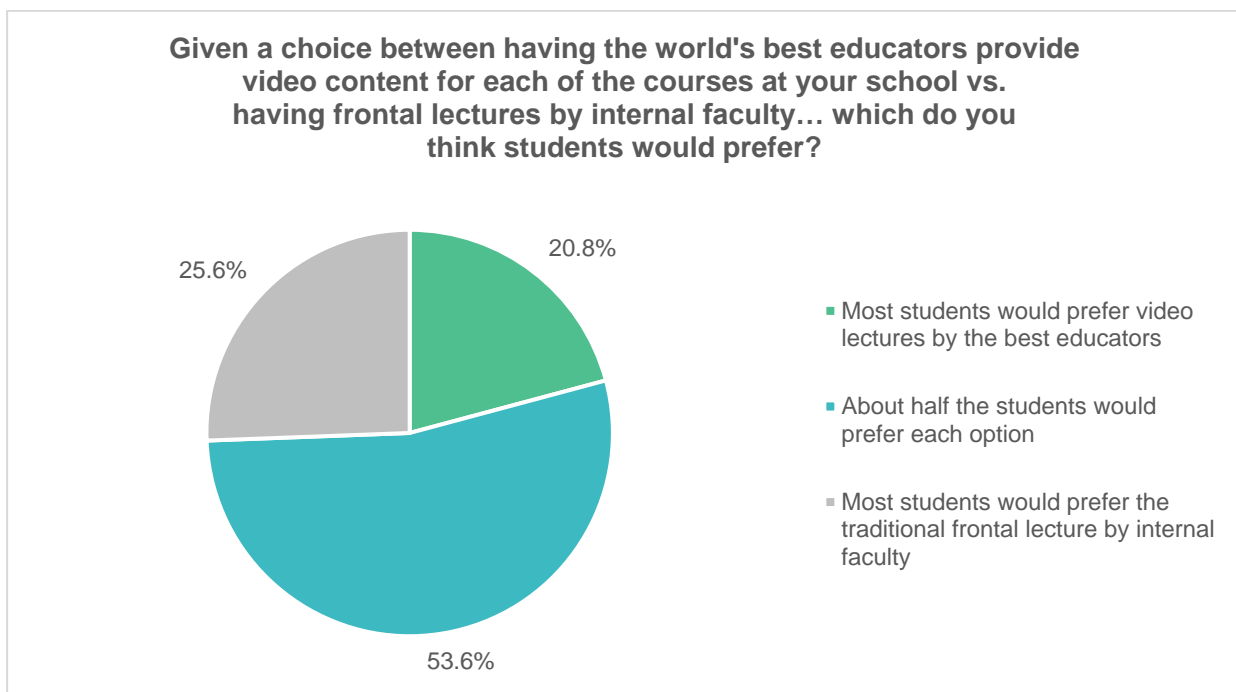
People who believe that students would prefer video lectures by the best educators, commented mostly that students are native to the digital world and that video has inherit advantages: watch when and where and as many times as you want. Another common comment is that watching a full lecture on video is not optimal and that a few short videos that cover the subject work much better.

People who believe that students would prefer frontal lectures by internal faculty stress the interactive and personal face-to-face aspects of it.
"It's all about the interaction - this isn't an opinion -our students have complained about the use of MIT Open Courseware in a flipped class when they were 'paying for a live instructor'"/ an institution management member for a public university

Many people of all groups commented that a mix of the two options is probably the best choice.
"A little bit of both environments is what students enjoy. Online videos will allow students to grasp the content on their time from any device, anywhere. Then back in the classroom, they can have their instructor clarify what they viewed and have students work on more problem-based learning." / Instructional designer in a private university

Another popular comment is that students are different in the way they learn, their skills and needs and therefore it depends on the students, where one choice can fit some students and another choice would fit others.
"I don't think there is a definitive answer to this. Some students like the face-to-face experience and bonding with the class and professor. Some also prefer face-to-face discussions. While video by the 'best' educators can be very efficient and offer good presentation of content, as well as more flexibility for viewing, some students will always prefer the more intimate atmosphere and face-to-face contact of a traditional classroom (if that's what you mean by 'frontal'). Some may also prefer the particular teaching style of particular internal faculty and the chance to ask questions in 'real time'. Conversely, there will be students who would rather focus on the content and would be fine with this provided by anyone who can present this via video and present it well. They may also prefer the option for more self-paced viewing." / Media team member in a private 4-year college

A couple of additional interesting comments on this subject:

"Students don't necessarily know who the best educators. Besides, the whole idea of higher education is not to give just one opinion on a subject, but to create a network of teachers who have differing opinions. We are trying to create free thinkers, not box in thinking/instruction to a only few 'good' professors. If we do that, where will the next generation of great minds come from?" wrote a media team member in a private university

An instructional designer, IT and media team member of a private 4-year college commented that *"The 'celebrity' teacher has been an interesting development."*

6.10 Vision for the role of video in education
Many respondents see video becoming a standard in education and seen everywhere

In response to how they see the role of video in education in 10 years, most survey respondents agree that the role will increase in importance and be more significant.

"Great advances have been made in the last ten years, such that video conferencing and pre-recorded video can be used quite easily. Mobility and ease of use has increased dramatically. In the next ten years faculty and students will likely become more comfortable and effective at using the tools that exist now and the tools that will exist then. Technology will improve, and so will the use of it by forward-thinking educators." / Institution management in a private university

A large number of participants see video as becoming a standard in education and seen everywhere.

"I think that in 10 years, video will be integrated into education so much that we will not even remember the days without it." / Trainer in a private university

Other repeating themes in this question:

- Flipped classroom and online learning becoming more common and video playing a big part in that. The video for these would be specifically produced and be comprised of small chunks instead of long captured lectures.
  "Most lectures will be delivered in recorded video morsels. Short 5-10 minute clips (i.e. flipped classrooms). Having the instructor deliver the same lecture, year after year seems inefficient. Video will change this." / IT and media team member of a private 4-year college
  "I see online education and degrees expanding and becoming dominant and video playing a large role in the success of that movement." / Academic Technology in a private university
- Video will take the place of textbooks or replace most of the text in textbooks. As such it will be essential supplementary material to education.
  "Major part of the learning process. Students don't buy texts any more, and if they do, they don't read them. Video is how they will absorb knowledge." / Faculty in a community college
- Video will be interactive and synchronous video will be widely used.
  "I see the role of video entirely replacing the traditional lectures. But with embedded blended technology. So the opportunity to ask questions (online), as you would in a traditional lecture. An enterprise system able to manage the video bandwidth would be pivotal to a successful program." / Instructional designer and IT stuff of a public university
- Students will produce videos for assignments frequently.
  "More students will be watching more videos for much content that is now experienced by reading. More students will be submitting video responses to assignments that are now submitted in writing." / Faculty Developer in a private 4-year college
- Some discussed the technological advancements in video – holograms, augmented reality, projections from mobile devices.

Here are some additional interesting quotes:

"I think ALL lecture content will be in the form of video 10 years from now. Video content will also completely replace most if not all textbook content. The current set of students is the YouTube generation. Their learning styles reflect this. In general they prefer to watch videos than read text books. 10 years from now, after the YouTube generation, video content will be a given." / Instructional designer, IT and media team member of a private 4-year college

"Synchronous and asynchronous video will be the norm in every course in all disciplines. Teachers will have to produce multimedia instructional content as the line between online and face-to-face becomes further blurred, and is eventually eliminated." / Faculty and a member of the media team in a public university

"I see video becoming an integral part of a very large majority of online, hybrid, and face-to-face classes. I believe that Walt Disney was correct when he predicted that all education would eventually be taught via television, except that he didn't understand where television itself would be in the future, in terms of on-demand always-on technology." / Instructional designer and media team member in a public university

7   Summary – how does it all connect?

Video is used in a wide array of areas in education, most notably in teaching and learning. Both usage and adoption, however, are still mostly limited to relatively few classes across campus. The scattered usage could be attributed to change-aversion by faculty, lack of centralized tools, lack of training and guidance from many administrations, or over-reliance on individual contributors without sufficient institutional follow through.

As a relatively new set of tools, many institutions lack the criteria that can help them evaluate video effectiveness and ROI. However, video is clearly perceived as a tool that brings positive impact in general, and is seen by many as favorably impacting education institutions' goals like student and teacher satisfaction and on-boarding of new students and employees.

The data in this survey firmly suggests that video technology is a major force in education. Not only do students of the digital era use and expect video, the two trends that rely on video - online learning and 'flipped classrooms' - are growing at a rapid pace and will potentially become industry standards. In fact, online learning is already being seriously explored and deployed across the globe. The traditional lecture format is expected to significantly change as result of technological advancements. It is important to note, however, that capturing traditional lectures is only one format for video, which is quickly being augmented by more participatory forms.

Clearly, the rich and personal aspects of educator-student interaction can never be completely replaced by technology. Video is likely to become a major supplemental tool for education, to be incorporated in all classes while slowly taking the place of textbooks. Interactive and synchronous video tools will be added to the arsenal of faculty tools and will be primarily used in online learning and added to on-campus education at a slower pace.

In the words of one respondent, an Instructional Designer and IT staff member from a Graduate School *"I think the institutions that invest in good video systems right now are the ones who will be in a better position in the few next years. Video will not be an option in the classroom, it will be a must."*

8 Conclusion and a few recommendations

Many thinkers believe that the educational world is facing reform. With issues such as access to quality education in many countries, rising student loan debt, and scrutiny from legislators and funding agencies, open education movements are front and center in leading educational reform. In an era where 78% of students who drop out cite a lack of flexibility by their institution as the key reason for their lack of success[6], alternative engagement and learning paths for students are a high priority for many institutions.

Analyzing the survey results and participant responses to the open-ended questions, it is clear that video is an important part of today's educational world and will become a crucial element in the years to come.

We at Kaltura are very pleased with the affirmation the survey brings to years of work in the education sector. We have seen how video in education moves from early-adopters to broad demand, and from homegrown systems to 3rd party enterprise-grade systems. Use-cases have greatly expanded from marketing or teaching and learning, to a wider spectrum including campus life, admissions, alumni relationships, libraries, and internal knowledge sharing and collaboration.

Implementing a successful video solution in your campus is not trivial. Based on our experience in the field and the quantitative and qualitative data collected in this survey, we can offer five recommendations to ease your path to success:

1. **Plan your video strategy** – Your starting point should always include a broad looks at how the entire organization, and its various departments, plan on using video - across different use-cases and at growing adoption rates. Try to make sure your support for the up-and-coming online learning and flipped classroom trends are aligned with your video strategy. If your department is in charge of a subset of the use cases, try to coordinate with other departments and raise awareness with higher level decision makers.
2. **Arm your faculty with easy-to-use video tools** – Without the right tools, faculty members often find themselves resorting to free tools or relying heavily on the help of media teams, both of which are not scalable. By selecting video creation, editing and publishing tools that are easy-to-use, and offering these tools to the faculty, you supply a demand, reduce technical support overhead and empower faculty to explore and be creative.
3. **Train and guide faculty and relevant employees on the available video capabilities and tools** – Even the greatest technology is not enough on its own. Provide faculty and other relevant users with the training they need to leverage the tools at hand. Consider creating user-groups to let faculty and others share dilemmas, challenges, success stories and best practices.
4. **Aim for digestible short video content** – Be it content produced by the media team, a recorded lecture, or content created by faculty or students, educational video is best served in small chunks. Whenever possible limit the length of videos to a few minutes each. Individual videos should cover a concept, while a playlist of videos covers an

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[6] Source: Johnson, Jean, et al. "With their whole lives ahead of them." New York, NY: Public Agenda (2009). http://www.publicagenda.org/files/theirwholelivesaheadofthem.pdf, page 20.

entire topic. Shorter videos keep students focused and engaged with the content and facilitate discovery and re-watching.

5. **Develop KPIs for measuring video success** – For each video use-case, define the goals you want to achieve, including measurable indicators for each video and for the videos combined.

The goals can be, for example:

- Attracting the right students - for videos used by the admissions office
- Increasing donations - for videos used by alumni relations
- Improving knowledge retention, grades or job placement - for videos used in teaching and learning.

Video usage data and quantified user feedback can also be useful KPIs.

Compare results to a similar case without video (e.g. same professor, same subject) to see the general impact of video, and compare results of individual videos to learn what works better and what can be improved.

9 Notes about methodology

This survey is a first attempt to perform 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 and not only admin and IT staff 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 in most cases, did not find any meaningful difference between the assorted roles. We therefore chose not to report on them separately.

About Kaltura