Educational Institutions: The Opportunity and the Challenge of an Online Video Strategy

A Guide by Kaltura, with an overview by Kenneth C. Green of The Campus Computing Project
Introduction

Like many technologies, rich media – video – presents both great opportunities and is also accompanied by many planning and implementation challenges. The opportunities and benefits are often clear; the challenges sometimes less so.

Addressing the range of planning and policy challenges involved in managing and leveraging media is not a small task. As you navigate your way in the complex world of online video, we at Kaltura hope this Guide will be a useful tool. We believe that learning from others who have already taken a big step towards establishing a central media solution in their institutions is an important way to figure out what approach can work for you.

This Guide provides an introduction to the world of Cloud-based media management and delivery for colleges and universities.

The introduction, by Kenneth C. Green of The Campus Computing Project, reviews the growing use of rich media on campus and then takes a look at the way CIOs and senior campus IT officers are shaping their strategy to handle it, as well as some of the key obstacles they confront.

Next, the Guide features an interview with Eric Denna, vice president at the University of Utah and CIO for the 10-campus Utah System of Higher Education. The interview offers thoughtful perspective on the importance of managing and leveraging media resources across a large and complex multi-campus system.

Following the interview, the Guide provides a few profiles of Kaltura clients that highlight the planning and deployment efforts of several colleges and universities that have turned to Kaltura’s Open-Source Cloud-based Media Management solution to support and to leverage video resources in instruction and in other institutional contexts. The profiles covered include the University System of New Hampshire, the University of Michigan, Oregon State University, Cornell University, Columbus State Community College and Manchester Metropolitan University.

Finally, the Guide concludes with a glossary of terms that are useful for institutions navigating the complex world of online media on campus.

We encourage you to investigate how Kaltura’s solutions can address your campus’ rich media needs.

For more information about Kaltura, please go to www.kaltura.com.

Dr. Michal Tsur. President, Kaltura

Educational Institutions: The Opportunity and the Challenge of an Online Video Strategy

Kenneth C. Green*, The Campus Computing Project

Every minute of every day tens of thousands of people across the globe upload the equivalent of 100 hours of new video to YouTube™. The daily tsunami of newly posted YouTube content ranges from cat videos to college lectures, and covers many (indeed thousands) of points in between, both high and low. In contrast, the carefully curated TED (Technology, Entertainment, Design) web site maintains an online video library of some 1500 short (15-18 minute) presentations on a wide range of science, technology, design, education, lifestyle, and entertainment topics.

With regard to the size, range, and scope of campus video content, most colleges and universities are someplace between TED and YouTube. Every week dozens, possibly even hundreds of hours of video content - course lectures, campus events, student presentations, campus appearances by notable visitors, promotional videos, training videos, and more - are loaded onto departmental and institutional web sites.

* Kenneth C. Green, Ph.D., is the founding director of The Campus Computing Project (campuscomputing.net), the largest continuing study of the role of eLearning and information technology in American higher education. Launched in 1990, Campus Computing is widely cited by university officials and also by corporate executives in the information technology and college publishing industries as a definitive source for data, information, and insight about IT planning and policy issues that U.S. colleges and universities.
Why Video? Why Now? And why is a Central Strategy So Important?

Over the past decade, digital video has gone from the unique to ubiquitous. This revolution in digital video is driven in part by the dramatic changes in the enabling technology: from tape to digital, from large cameras to small, from complex to easily operated equipment. It is also driven by consumer technology and the easy access and wide use of social networks and sites like YouTube to share rich media.

Further fuel for the move to video and rich media comes as institutions are either already engaged in or looking to expand into blended learning, remote learning, on-demand personalized learning, MOOCs, flipped classrooms and social learning. Video also enables educational institutions to power more effective public communications, recruitment, alumni relations and broadcasting of both live events and video on-demand (VOD) content.

Students, teachers, instructional support personnel, alumni, and the communities in and around colleges and universities are increasingly technology savvy. These groups and others have rising expectations regarding the technology resources and services from their educational institutions. Consequently, colleges and universities need to provide an environment (and a supporting IT/media ecosystem) that enables the different groups to create, connect, share, and communicate.

Although it is common to think of the video or media as an institutional resource, all too often individual academic departments and campus operating units have their own policies and procedures regarding the creation and archiving of media content. At a single campus and also across various institutional programs and units, there may be a wide range of media resources and solutions – accompanied by little institutional planning or coordination as to how best to acquire and leverage these resources, or how to train various groups to use the resources effectively.

As a result, a growing number of campus officials – some with IT responsibilities, others with academic or operational titles - now recognize that their institutions can benefit from a central media repository to avoid the silo implementations of media platforms. A central media strategy and repository are also an effective way to leverage institutional investments in media resources.

How are CIOs and Senior IT Officials Addressing the Need?

Despite a clear need, planning for and developing policies about creating and managing media assets are too often subject to a “reactive adhocery” - an often “after the fact” response as opposed to an “ahead of the curve” strategy. For example, only 29% of the CIO’s and senior campus IT officers representing some 540-plus U.S. colleges and universities surveyed by Campus Computing in fall 2012 said their institution had “a strategic plan for content management.” Moreover, despite the dramatic improvements and the declining costs of video capture technologies, the percentage of campuses reporting policies to address the ownership of web-based curricular resources has surprisingly changed very little over the past decade, from 59 percent posted in the 2005 Campus Computing Survey compared to 60 percent in fall 2012.

In addition to the challenges inherent in the planning and deployment of a campus-wide media management platform, there is another issue that looms large over the campus discussions about media management strategies: higher education’s reticence about Cloud/SaaS-based enterprise applications. Compared to other sectors with equally-complex enterprise needs and applications, higher education has been less likely and less willing to move to Cloud/SaaS solutions for a number of high value enterprise-level services.

Data from the 2012 Campus Computing Survey documents the slow movement to Cloud Computing. Although some 60-70 percent of CIOs and senior IT officers believe that Cloud Computing will play an important role in their institution’s IT strategy, less than a fourth of the survey participants anticipated moving to a Cloud-based Content Management System within five years. (Figure 1).
In the context of content and media management, the comparatively low number (23%) of CIOs and senior IT officers who anticipate moving to a Cloud-based CMS application may reflect some additional factors: absence of a perceived need for a campus-wide media management strategy or lack of familiarity with current options and the experience of peer institutions that have already developed (or are developing) a campus-wide media management strategy and that have also migrated to a media management platform.

Admittedly, implementing a central media strategy and solution may seem like a herculean effort, one that must address not only the selection of an enabling technology but also critical planning, policy, and at times even political and campus cultural issues. On the technology side, many campus units and educational institutions have already invested substantial time and resources to develop or procure technologies to manage their users’ content, capture lectures, stream live events, manage courses (LMS), access drop folders, publish content, and serve off-campus audiences and clientele. Consequently, one obvious concern about moving to a central media solution is that the selected technology and an accompanying campus plan would have to recognize and integrate the systems, policies and procedures, and resources already in place. The movement to a central media solution must also recognize that the training costs involved in switching technology – both the financial costs and the time of faculty and other campus personnel – can be significant.

Moreover, because educational institutions recognize the need to provide a high quality video experience across all devices and platforms – from notebook computers to tablets to smartphones -- homegrown applications or a consumer based video hosting strategy may not provide a viable, long-term solution. Rather, an effective long-term strategy is to move toward a professional video hosting service, with effective transcoding solutions, using a first tier Content Delivery Network (CDN), to assure that the most effective video formats provide the best user experience across all platforms

Beyond the quality of the video content, another planning issue involves how the college or university has provided for access to the content: will it be hosted on the college or university’s website, embedded within the LMS, or maintained by the Library or a campus IT or media unit? Some institutions are exploring access and hosting options with a CampusTube, a YouTube-like video portal for the campus.

Also important in the planning process is to recognize that campus users want more than just an upload option: they are also looking for simple ways to create videos (e.g. webcam recordings, screen recordings), edit and clip videos, create engagement around the videos in the form of in-video quizzes, comments, and rating, grade video assignments, and more. Consequently, campus support for User Generated Content via a range of video authoring tools becomes a key requirement.

From a policy perspective, copyright is understandably a major issue. Assuring compliance with digital rights via Digital Rights Management (DRM) as well as enforcing terms of use and limiting access to authorized audiences adds another dimension to campus planning and education efforts.
Learning from Leaders: Kaltura Talks with Eric Denna, CIO at the University OF Utah

Eric Denna, the CIO at the University of Utah, was a keynote speaker at the 2013 Kaltura CONNECT conference in New York City on September 30th. Following his keynote presentation, Kaltura asked Casey Green, founding director of The Campus Computing Project, to talk with Eric about the role, promise, and potential of video for higher education, and also the challenge of managing campus media resources.

CASEY GREEN: Let’s begin with the obvious question: why should CIOs as well as non-technical senior campus officials such as provosts, deans, and department chairs care about media management?

ERIC DENNA: Campus officials should care about media management because video is quickly becoming a critical part of the learning experience for all our students, regardless of age, type of institution, or field of study. In my CONNECT keynote I talked about the “buttons” – fast-forward, pause, stop, rewind – that are really part of the experience and expectations of our students today. Students want, indeed expect to be able to reengage in that learning experience – the lecture, the classroom demonstration, and the simulation. And when those learning resources are captured and become easily searchable, students can find those resources and go back through that learning experience, whether they participated in it themselves or they are doing it by proxy through the video. Moreover, faculty can use media resources, from their own classrooms or those of their colleagues, to supplement their syllabi and to enhance their course materials. Either way, whether added by faculty or found by students, video can help to enrich many aspects of the learning experience.

But effective media management is not just about capturing a classroom lecture or other kinds of video content produced on campus. It is also requires good postproduction work, and tagging the metadata so that the content is truly searchable.

Let’s put this in context: in the past we could talk about curriculum management as the activities of an individual professor talking about a particular course. Going forward, curriculum management is really about teams of people, not just faculty but also instructional designers and curriculum specialists, working around a particular course or an entire academic or training program.

There is the old joke that definition of University is that it is a loose confederation of highly educated independent contractors held together by a common compliant about parking. Well, those days are going, quickly. Ultimately, the conversation about leveraging and managing media resources to support instruction comes back to the three basic phases of instruction: the design of the instructional experience; the delivery of the instructional experience; and the assessment of the instructional experience.

When you have good data about these three key elements it causes you to go back to ask: was the design right? Was the delivery effective? What did students learn from this instructional experience? And what could we, as faculty, do better to enhance and enrich the experience for students? Bringing these kinds of enhanced resources and a new commitment to design into the instructional ecosystem can be really exciting. It’s why many of us got into education in the first place, because we care about effective learning.

I should add that video, especially good video, is not cheap to produce. Yes, we can give anyone a camera or post the video shot with a smart phone on a campus web site. But creating good video involves more than moving files from a camera to the web. It often takes a significant amount of time to plan what you are going to capture, even in a traditional classroom setting. The more you redo rather than reuse, the more expensive it becomes. So to enhance the reusability you have to manage it, and you have to have good information about it. You have to be able to make that information searchable in a way that professors and students can easily find and access it. Again, good video is expensive to produce, expensive to store, and expensive to move. So we should leverage it and to re-use it much more than we now do on campus.

Eric Denna is vice president at the University of Utah and CIO for the 10-campus Utah System of Higher Education – an educational enterprise that includes two major research/teaching universities, two metropolitan/regional universities, two state colleges, three community colleges, and a college of applied technology.
GREEN: What about planning for content and media management? This seems like an area where higher education can, indeed must, do better. For example, just 29 percent of the 543 campuses that participated in the 2012 Campus Computing Survey report a strategic plan for content management. Is a strategic plan important? And if so, what are the elements of a good plan for content or media management?

DENNA: What we've learned over the years from non-educational organizations is that there are strategic plans and then there are plans that are truly strategic. But what's often more useful, and often more common outside of education, is a focus on the business model. I am a big fan of the work by Alex Osterwalder. As we understand the basics of how the current business model works, we can understand how it is changing and what we can do to remain viable as the change unfolds. The heart of strategy is improving an organization’s business model.

I know that talking about business models will annoy to some of my academic colleagues, so another way to say this is what is the architecture of how the college or university works:

1. Whom do institutions serve and what do they want/need/have to do?
2. What unique academic, research, and related services do institutions provide so those they serve can do what they want/need/have to do?
3. How are an institution's academic, research, and related services generally made available to student consumers and consumers within the larger community?
4. What is the nature of the relationship between an institution and those being served?
5. How do an institution's academic, research, and related services translate into revenue?
6. What key activities are required to provide the services institutions provide?
7. What key resources do are required to provide the services institutions provide?
8. Who are our partners in this effort?
9. How do the key activities, resources, and partners translate into costs?

Like others, I too I have seen strategic plans, and even helped to draft some. But too often these plans reside in a binder on someone’s shelf and that has rarely been reviewed at the retreat when they were first put together or presented. That’s why I believe that what really matters is helping the leadership understand the essence of the business model and how an effective business model can be transforming. During periods of disruption it is all about the nature of the business model.

One key element of a business model focuses on the basic value proposition that you are offering the students. What are they trying to do? What are the pains and gains they associate with what they are trying to do? How do we help students reduce the pains and realize the desired gains from doing what they are trying to do?

Another important issue involves key resources. For universities, learning resources are very much a key resource and video is becoming among the most important of the key resources. We are learning that video, pictures, animations and the like are tremendous resources to support learning experiences. Whether it is a lecture in the classroom, a case summary using video, or animations about the way a heart pumps, in the end it is all rich media, and it can be really important for supporting the learning experience.

Technology is actually the easy part of the business model. The real challenges are the people and process issues.

GREEN: You serve as the CIO of both the University of Utah, a large, complex research university and also the as CIO of the complex, multicampus Utah System of Higher Education which includes four-year institutions and also community colleges. From a system perspective, it looks as if Utah as opted to “go large” with an expansive approach to media management that includes these very different types of institutions. Are the media management issues different across these types of campuses?
DENNA: Great question. When you're talking about the use of media for teaching and learning, I would argue that there's a lot more similarities than differences across all these different kinds of two- and four-year colleges and universities. Yes, there are some infrastructure issues that involve bandwidth and support services that differentiate some of our campuses from one another, especially rural or smaller institutions. But there is much more similarity than there are differences across these campuses, especially if you focus on the fundamentals of instructional design, delivery, and assessment. The core principles of great instructional design, delivery, and assessment are the same whether you’re teaching remedial math or an advanced seminar in genomics.

And the media management task includes capture, post-production, cataloging and curating, access and distribution, plus an ongoing assessment of what we are doing well and what we should be doing better. For example, people often view media, especially lecture capture for courses, as “one and done:” – captured, cataloged, and then posted to a server for later use.

Yet for media to really live within the education environment and be an effective part of the learning experience, those resources have to be much more alive and accessible – available for use, reuse, and customized applications. Consider the role of the college or university library: we used to view books from a kind of “print, bind, and shelve” perspective. Yet both books and media resources become much more live when we make aggressive use of it, and when specialists, such as reference librarians, can help us find and leverage it.

So thoughtful media management really argues for a role for the Library. At Utah, I view the library as a key partner in our media management efforts. We have a teaching and learning technology group that reports to both me as the CIO and also to the Dean of Undergraduate Studies. We wanted both the academic and support organizations working together on this. Yes, it's housed physically in the library and that's intentional, as we view the library as a key partner because their expertise in terms of cataloging and curation which are essential for the management of these campus media assets. Also, libraries are typically more accessible to students than are campus IT centers.

GREEN: Although many seem to think of lecture capture as a kind of “turn-key” process – walk into your classroom, turn on the capture technology, and then post it a server at the end of the lecture - you seem to advocating, strongly, for the post-production work. Why?

DENNA: Lecturing live in front of a class can very different than preparing a lecture that will be captured, curated, and archived. Let's go back to what I said in my keynote presentation at CONNECT. We used to equate subject matter expertise with expertise in instructional design, delivery, and evaluation. If you knew the material well, it was generally assumed that you could do all these other things, and do them well. But that’s no longer the case: subject matter expertise does not equal design, distribution, and evaluation expertise. These forms of expertise are getting unbundled. Moreover, video highlights these issues: mediocre design and delivery can easily overshadow superior content.

Video – media – can also alter the culture of peer review. It’s a window for my colleagues to see into my classroom. And that experience can be very interesting for all involved. Ironically, from our earliest days in academia aspiring scholars are taught to subject our thinking and research to our peers. We have a very involved and well-designed process that enhances our scholarship as a result of peer review. But when we step in the classroom there is almost no peer review. We often make assumptions and inferences about the teaching skills of our colleagues based on student comments, on a review of a colleague’s syllabi during the review and promotion process, and when a colleague’s students come to my class and I wondered if they were well-prepared based on previous courses in the sequence.

So why should we now talk about the peer review of teaching? Well, it's about learning, an expansive definition scholarship, and a new role for peer review – an effort that should focus on helping our colleagues do better, to provide feedback on what they do well and what they can do better.
GREEN: While there has been a lot of talk about the impending arrival of Cloud Computing in both the corporate and campus sectors, higher ed has been slow to migrate to the Cloud for some core ERP/administrative functions. Why?

DENNA: One key issue, at least for big ERP applications, is that the providers have been slow to bring Cloud-based ERP applications – general ledger and finance, development, HR, and student information systems - to the higher education market. These applications are coming, but few of the core ERP applications are here and readily available today.

But on the instructional side, probably the most mission-critical application that we at Utah use is Canvas, our Cloud-based learning management system. And we are now integrating Canvas with a Cloud-based version of Kaltura.

I view the move to the Cloud very much like the move from mainframes to client/server. It is the kind of the shift where you are disrupting both jobs and workflow within the IT organization. That can provide short-term discomfort, but it should lead to better outcomes. My experience with my CIO peers is that most of them view the Cloud as inevitable but they are also being appropriately cautious about how they access Cloud applications and then they might adopt them for their campuses.
Learning from Leaders: Campus Use Case Profiles

The University System of New Hampshire (USNH)

The University System of New Hampshire (USNH), established in 1963, is responsible for overseeing the University of New Hampshire, Plymouth State University, Keene State College, and Granite State College. The University System is the largest provider of post-secondary education in New Hampshire. USNH has implemented Kaltura across its four institutions, each with its own independent implementation:

The University of New Hampshire (UNH) is the flagship university in the USNH. It is a public university. With over 15,000 students, UNH is the largest university in the state. UNH is leveraging the Kaltura Video Building Block within its Blackboard Learn environment, where both faculty and students are now using video for active and creative learning. One of the factors driving the success of this project in UNH is its annual Faculty Instruction Technology Summer Institute (FITSI) – a workshop that exposes its faculty members to the new and exciting ways to use technology in their teaching, providing both training and exposure to peers that are already leveraging it. In addition to teaching and learning, UNH also uses the Kaltura player in public facing sites, such as their Alumni association site, their video production site, their engagement and outreach site, the presidents’ commission on the Status of People with Disabilities, and more.

Learn more about UNH and Kaltura:
Video case study: http://videos.kaltura.com/unh_case_study/
UNH’s information technology website: http://infotech.unh.edu/unh-sites-using-kaltura

While all part of the same university system, each of the other institutions chose a different model of introducing video into teaching and learning: at Keene State College, a liberal arts college with around 5,400 students, Kaltura is also powering video within Blackboard Learn; however Keene state chose to focus mostly on faculty generated content. Plymouth State University, a coeducational, residential university with enrollment of approximately 4,200 undergraduate students and 2,500 graduate students, uses Moodle as their LMS, and Kaltura is powering video there using the Kaltura Video Package for Moodle. In Plymouth State University most of the media is uploaded centrally by rich media administrators. Finally, Granite State College chose to promote mostly student generated video content within their Moodle environment. This suits the college’s primary mission of being the system’s statewide college for adults and college-age students, providing them with access to advanced, localized, and online education.

The University of Michigan

The University of Michigan is a public research university located in Ann Arbor, Michigan. It is the state’s oldest university, with about 44,000 students. When the University of Michigan approached Kaltura, it had already formed an organized committee of multiple stakeholders that were interested in implementing a rich media management solution. Michigan’s preference was to choose one vendor and manage the entire implementation centrally, providing each internal customer/department with the capabilities they require. Michigan created a massive Request for Proposal process and evaluated several vendors and picked Kaltura to run a 2-year long pilot project, with participating units delivering a broad, representative variety and volume of content. For example:

The Language Resource Center (LRC) in LSA - represented the teaching and learning use cases. With a large collection of language immersion videos, the LRC used the Kaltura integration into their learning management system (Based on Sakai). As part of the pilot the center also enabled students to create and upload their own videos into the LMS.

Office of the Vice President for Global Communications (OVPGC) - University of Michigan News Service – represented the marketing use case. With a large collection of public facing content this group focused on testing cross device playback, SEO, distribution streamlining, multiple language captions, related files, support, and more. This group utilized Kaltura’s Management Console (KMC) as well as Kaltura’s CampusTube video portal – MediaSpace.
Institute for Social Research (ISR) and the School of Education – represented a research use case. As part of the Gates Foundation Measures for Effective Teaching Project around forty thousand assets were created to benefit educators as well as researchers. This data will become a shared repository available to research partners at universities, public agencies, and private foundations. The videos will soon become a part of the Brandon Center Digital Archive.

The University’s Health System - represented a training use case, focused on training its employees to use the MyChart system – an electronic medical record system by Epic. 26,000 end users need to be trained within a few weeks and videos are a crucial part of the training strategy as well as the ongoing support. At the moment the training videos are posted on the University’s health system website, however they will soon be migrated to the Kaltura MediaSpace video portal.

At the end of the successful pilot, Michigan selected Kaltura as its central rich media management solution. Michigan now has over thirty different departments and units using Kaltura, and in addition also introduced a cross campus media portal. While Michigan is using many of Kaltura’s out-of-the-box offerings, it also leveraged Kaltura’s APIs with various customizations and developments, including a custom billing system for its departments, custom metadata schemas, integration with various authentication systems, and more.

Learn more about Michigan’s Video Content Management Project here: http://its.umich.edu/projects/vcm/index.php
Read a review of the pilot project here: http://its.umich.edu/projects/vcm/apr2013-task-force-update.php
View a presentation about the implementation of Kaltura cross campus: http://www.eduvideo.org/media/Building+a+Foundation+for+Video+Management/0_nf66yq3j

Oregon State University

Oregon State University (OSU) is a coeducational, public research university located in Oregon. It has a student body of 26,000. OSU began experimenting with lecture capture in 2008, when they equipped two classrooms with the leading systems offered at that time. They soon realized that they could design a system of their own and reach a much better economy of scale, and as they equipped more classrooms with their own custom capture solution, they needed a reliable way to publish and deliver these videos. In 2010 OSU began using Kaltura’s video portal, MediaSpace, for publishing and delivering all captured content. In 2012 OSU began a pilot project with Crestron Capture HD, and selected this system over their home-grown solution. Once selected, OSU worked with Kaltura to fully automate the capture process so that videos captured via Crestron HD become automatically available within MediaSpace. The process is quite simple and involves the use of a dropbox folder.

While OSU is using Blackboard Learn as their LMS, at the moment OSU is not leveraging the Kaltura Video Building Block for Blackboard and instead its users are generating a link to the media entry in MediaSpace and then pasting it into Blackboard, or alternatively using MediaSpace itself to publish teaching and learning content. OSU’s MediaSpace is mostly public and open, and can be viewed at: http://media.oregonstate.edu, it features content ranging from athletics, research projects, to specific courses. Access to the private sections of the portal requires authentication.

Learn more about OSU’s capture automation:
http://www.avnetwork.com/av-technology/0002/professors-embrace-lecture-capture/89354

Cornell University

Cornell University is a co-educational, American private Ivy League research university located in New York. It has a student body of over 21,000 students. Before Kaltura, Cornell was operating in a “Do it Yourself” model, however as demand increased, this model no longer scaled, and it was obvious they needed to find a more robust solution.
Cornell’s implementation focused on four founding departments:

**Cornell University Library Collections** – With thousands of a/v items within CUL’s institutional repository, eCommons (http://ecommons.library.cornell.edu/), it was important to enable streaming capabilities (previously available only through download). Cornell is midway through migrating existing content to a streaming format, and is developing ways to automate the sync between Kaltura and eCommons for newly added material. Currently in beta, CUL MediaSpace will aggregate all a/v content across the Library system to allow for a single point of access to important library collections. Library staff will also be able to load their own video content “on demand,” without having to go through the sometimes lengthy process of working with IT.

Visit CUL MediaSpace at https://media.library.cornell.edu/

**Cornell’s video on demand service** – enables any university faculty or staff member to upload and store a small number of videos, and provides embed codes for streaming of the videos to a web venue of their choice. This centrally-provided service is meant for short-term, occasional use.

**Academic technologies** – Leveraging Kaltura’s video building block for Blackboard, Cornell’s Academic technologies power faculty and students to create, publish and share video directly within the LMS.

**University communications** – this group is tasked with featuring public, marketing oriented content spanning people, events and research in Cornell. The content is now featured on CornellCast (http://www.cornell.edu/video/), which is based on Kaltura’s technoloy. The group also encourages submissions of user-generated content, which may be published in the portal, postmoderation. University communications also use Kaltura’s syndication capabilities to YouTube and other destinations.

Additional departments and use cases are being added gradually. On the technical level, Cornell chose a hybrid approach using Kaltura’s SaaS solution but leveraging its own CDN, with whom Cornell had an existing relationship.

Learn more about the Kaltura implementation project at Cornell: http://www.eduvideo.org/media/The+Multi-tenant+Video+PlatformA+Cross-Campus%2C+Above-Campus/0_lvg2vmw5

Overview of the integration into Blackboard:
http://www.eduvideo.org/media/Integrating+Kaltura+Video+into+Blackboard+at+Cornell+University/1_17yjh5uy

**Columbus State Community College**

Columbus State Community College (CSCC) is a community college in Columbus, Ohio, with over 30,000 students attending two campuses, nine regional learning centers and online courses. CSCC has implemented a campus-wide initiative to unify and automate its lecture capture and streaming video delivery processes. In 2009 CSCC started utilizing the Camtasia Relay suite of desktop recording tools. As time passed, there was tremendous growth in lecture capture usage across the college, complicated by mounting challenges in storing and presenting faculty recordings from Camtasia Relay. This led CSCC to seek out a better alternative for video content delivery. CSCC facilitated an alliance between TechSmith and Kaltura to jointly develop an end-to-end solution that makes it simple for faculty to produce their own recordings -- from capturing lectures in a traditional classroom environment to creating original supplemental videos in a production environment- and then seamlessly and transparently making these recordings available in the college’s Blackboard LMS.

For administrative and marketing content captured via Camtasia Relay, CSCC is leveraging Kaltura’s MediaSpace video portal. As in the case of the integration with Blackboard, the recordings are made available automatically in MediaSpace based on the user’s profile. CSCC is also leveraging Kaltura’s distribution connectors and is pushing videos into iTunesU.

While captured content was the original use case for implementing Kaltura, CSCC faculty and students now leverage the Kaltura video building block to enhance distance learning in many other ways: Faculty members upload relevant videos to the course gallery, use video to deliver feedback, include videos in their assignments and more. MediaSpace is naturally also used to feature videos generated outside of the Camtasia Relay workflow.
Manchester Metropolitan University

Manchester Metropolitan University is located in Manchester, England, and is the largest campus-based undergraduate university in the UK with over 36,000 students in 7 sites. Manchester Metropolitan University is constantly looking for ways to improve student satisfaction, retention and success. A couple of years ago as MMU was looking at the national students’ survey, it became apparent they were underperforming in a few areas, and they found that students wanted more engaging, well-organized courses, with tutors that really were familiar with them. They came up with four major areas of improvement — simplifying curriculum, introduce great online experience, great learning spaces and great teaching. With these in mind, MMU implemented a central Learning Management System (Moodle), which became an instant success on campus with more than 450,000 hits daily. The growing use of online tools, coupled with a surge in demand for rich-media content and social video functionalities, led MMU to seek a solution that would help them bring video into Moodle and beyond. They were looking for a cloud based solution, with a built-in integration for Moodle, and powerful APIs that could help extend the solution in the future. They also were interested in creating an MMU Tube — a video portal for both external and internal purposes. Having a local team in the UK was also an advantage.

In Q3 of 2013 they began a vendor evaluation project and selected Kaltura. In Q4 of 2012 the system was customized, configured and tested, for a launch in Q1 of 2013. In addition to using Kaltura’s video package for Moodle, MMU launched a video portal based on Kaltura’s MediaSpace (http://mmutube.mmu.ac.uk/), implemented an iTunes subscription tool, and developed automated tagging upon upload into Kaltura using Kaltura’s flexible APIs.

Learn more about MMU’s implementation of Kaltura:
http://www.eduvideo.org/media/Enhancing+the+Student+Learning+Experience+with+Kaltura/0_4y9hcla5
Glossary of Terms

**Blended learning** – a program in which a student learns at least in part through online delivery of content and instruction, with some element of student control over time, place, path, and/or pace while still attending a “brick-and-mortar” school structure. Face-to-face classroom methods are combined with computer-mediated activities.

**CampusTube** – a YouTube like video portal for use on campus. The portal can serve both external and internal audiences. [Click here to learn more and get a free trial.](#)

**CDN** - Content Delivery Network
System of computers networked across the internet for the purpose of delivering content to end users.

**Central Media Repository** – a central media repository supports multiple types of input and output. In an educational institution, inputs include recorded classes, student projects, informational content, lectures, events, videos for admissions, alumni and athletics sites, library collections, student life/community, and more. Such media could be uploaded manually, in batch or via an API. An effective central media repository should support all rich media files, including videos, images and audio and make the content available for viewing and searching from within different learning and social applications.

**CMS** - Content Management System – a system responsible for the creation of a site's framework including image media, audio files, web content, skins, and more.

**DRM** - Digital Rights Management - the technology employed to control user access to licensed media assets.

**Flipped Classroom** – a model in which students are required to view the lecture before class, and then use the class for interactive discussion and collaboration.

**In-video Quiz** – a short quiz that pops up at a specific cue point within the video. The quiz may be configured to be mandatory so that it would not be possible to continue without answering correctly.

**Lecture Capture** – the process of recording a lecture and then making it available for viewing later on.

**Live Streaming** – streaming (see definition) of a live event in real time.

**LMS video integration** – embedding video within the Learning Management System (e.g. Blackboard, Canvas, Desire2Learn, Moodle, and Sakai). Capabilities may include the option to upload video, record screen images, record using a webcam, a personal media folder, joint media galleries (e.g. for courses), embedding video within specific elements such as assignments, blog posts, discussions, and more; video editing, social interaction around the videos (comments/rating), and more.

**Media Management Platform** - a system used to upload, create, edit, organize, host, play, publish, stream and distribute online rich media. A media management platform may be hosted/cloud based, or local/on premise.

**Mobile Devices** - pocket-size computer devices typically having a touch screen or miniature keyboard. Cell phones, iPods, PDAs, are all mobile devices.

**Playback** – viewing a video. Can be done on desktops, laptops, mobile devices, and more.

**MOOC** – Massive Online Open Course - is an online course aimed at large-scale interactive participation and open access via the web.

**Online Streaming** – the process in which a video is being constantly received and displayed to the end user, while being delivered by the provider (unlike having to download a file and watching it offline). See also live streaming.
Online Video Publishing – the process of sharing a video on a website

Personalized Learning - the tailoring of pedagogy, curriculum and learning environments to meet the needs and aspirations of individual learners. Typically technology is used to facilitate personalized learning environments.

Remote Learning - a mode of delivering education and instruction, often on an individual basis, to students who are not physically present in a traditional setting such as a classroom.

Screen Capture - a video recording of your screen, taken from within your computer. It can include audio and a webcam overlay.

Social Learning - learning that takes place at a wider scale than individual learning, through social interaction between peers. With the growing use of social media, social learning is also more and more interpreted as learning with social media. Social Learning through open platforms like Facebook or closed platforms like Corporate Social Learning Network is growing up rapidly. Social Media can be used by students to contribute, store, discover, search, learn and relearn, action, and review knowledge and skills.

Social Networks - an online community of user generated content such as Facebook. Social Media such as web video can easily be shared through Social Networks and reach a vast audience.

Transcoding - changing data from one format to another so the output will be displayed in an appropriate manner for the device. This is usually done in cases where a target device (or workflow) does not support the format or has limited storage capacity that mandates a reduced file size.

User Generated Content - media content submitted by end users that may then become available to the public or a specific group of end users within the institution

Video Authoring Tools – tools that allow the end user to create videos – these may include recording a webcam video, recording your screen, synchronizing a presentation with a video, and more.

Video Hosting – a service that allows upload and storage of video content

Video Player - media player used for the playback of digital videos.