

**LILY BOND:** Welcome everyone, and thank you for joining this webinar entitled Empowering YouTube for Higher Education. I'm Lily Bond from 3Play Media, and I'll be moderating today. I'm lucky today to be joined by Justin McCutcheon, the co-founder of Cattura. We have about 20 to 30 minutes for his presentation followed by 15 minutes for Q&A. And with that, I will hand it off to Justin, who has a great presentation prepared for you today.

**JUSTIN MCCUTCHEON:** All right. Wonderful. Thank you, Lily, for the introduction. And we are very excited today to be talking about YouTube in higher education. My name is Justin McCutcheon, and some of you might be familiar with our company. We've been in the industry for a good seven years, focusing on lecture capture, primarily from a hardware perspective. So some of you out there might know us from the hardware space for our multi-source recording appliance.

But today we're going to be talking a little bit about YouTube and some of the things that we've been seeing as trends and needs in higher education around YouTube. And we're going to talk a little bit about a solution that we created that will help bridge a lot of those needs to bring YouTube as a really good resource into higher education.

So let me go ahead and just start off and talk a little bit about the current landscape of YouTube for educators. We've been, as a capturing company, posting to YouTube and Vimeo for quite a few clients for many years. And they've always had different needs and uses around it. But really the main reason behind YouTube is it's free and it's unlimited for educators.

So for schools that really have issues with budgets and difficulty rolling out video solutions within your school, YouTube is a great first start option. It's simple to use. Students and teachers just get it. So it's very quick to get off the ground, and you don't have the burden of dealing with IT and other complexities to get a video solution directly into students' hands.

YouTube also has a whole series of great tools to use-- video editing, annotating tools, quality refining tools for mobile captures. They do automatic closed captionings and provide a manual editor to do those things. Everyone's familiar with Google Analytics. YouTube has recently done a great job of integrating better video-type analytics into the whole Google Analytics Suite. And there's a tremendous amount of third-party add-ons, such as Zaption and a couple of other great companies out there that really make YouTube go above and beyond what they

do today.

And another thing that we hear is YouTube also has a tremendous amount of content out there that they could easily share with students. So whether it's a TEDx or a documentary, YouTube has those sources for you to easily share and embed those.

But what we saw as a lecture capture company coming in the higher ed space is YouTube really wasn't good enough. And over the years we asked this question over and over, what would make it good enough? And the biggest thing was to centralize YouTube videos inside of an LMS, whether that be Blackboard, Canvas, Moodle, and really enable teachers to have full end-to-end control of creating content, managing content, enriching that content with metadata, and easily sharing it with students. And that became kind of the pinnacle reason why a lot of schools out there chose not to use YouTube as a default platform for lecture capture and flip videos for their teachers.

Another big problem with YouTube is YouTube is a big distraction. There's a lot of clutter, ads, unrelated videos, and things to really keep students off course. So it was very difficult to say, here's a link to a YouTube page. Go look at these videos. Chances are they're going to get off target. Really to get around that, teachers began just embedding that content as single embeds, at times creating a sophisticated playlist and embedding that playlist in-- whether it's a blog for the teacher or somehow getting it back into the LMS system in a very manual way.

And there wasn't really a good way to group, organize, and control YouTube. YouTube acts as a single independent video share. While they have tools such as playlists to kind of group and organize things, it really wasn't what we call a teacher's YouTube. They needed a full video experience behind managing that media.

And for some schools it was a way to bring YouTube back within their schools. The solution that we're going to share with you really spans from K through 12 to community colleges to very large universities. They all have their different needs. But in certain cases, YouTube is blocked within their organization. So that basically disables YouTube from even being used by teachers and students. So there needed to be a way to still provide a video experience that still utilized YouTube but in a very safe way.

Some other things that we heard was it really wasn't-- they didn't really have a good series of tools and integrated tools around uploading existing video, importing video, and creating new video, but having that all done within the learning management system. So bringing it into the

learning management system, organizing the content, grouping it, indexing it is definitely a big thing. But what do they do to create new video, whether that's a software- or hardware-based solution?

How do I easily import existing YouTube videos in there? How do I upload existing lectures that are recorded maybe a year ago? So there really wasn't a good series of tools and well-integrated services to bring that into one seamless experience for the teacher.

And the last thing that we heard, and we all know this, is most video playback is a linear experience. You're dealt with a timeline and a scrub bar. And if you look at most analytics out there, even if it's an hour-long video you're probably only getting 15% to 20% of the video viewed. Chances are students are treating it like they do any other piece of content. They come into it, they look for what they want by scrubbing back and forth, finding that piece of information, and backing out.

So YouTube didn't really have a good way of searching in line to the video and providing a way for students to really discover their learning gaps using search terms as opposed to manually scrubbing by video frames using the scrubber bar in the video player. So that was a big thing that we noticed out there, was the playback experience was exactly that. It played the video back and nothing else.

We work with Vimeo Pro. We've been working with them for a few years. And I found it interesting why schools chose Vimeo Pro over YouTube. Both of them are kind of coined in this open video platform market. They both offer free services. They both offer amazing hosting and delivery across multiple devices, whether it's HD or SD. You could set it up in minutes and share it, just like YouTube.

They did come up with a little bit more of an advantage than YouTube out of the box with portfolios and albums. And we noticed a lot of teachers using that as kind of their classroom YouTube, because it was a way at least for them to organize and construct their own media library that was geared towards students.

More importantly, schools were able to do domain-level embedding lockdown. And basically what that means is within YouTube you have the choice of posting a video in the unlisted state, which means it's not found on YouTube, but you obviously have the link or embed to it. You could take that up a notch with YouTube and actually privatize the video and apply a number of people that can have access to it.

But with Vimeo you were able to actually kind of bypass a lot of that and at least offer domain-level protection to ensure that only the videos that are stored in Vimeo Pro are viewed by your organization, and nowhere else. So if someone happens to come across the link or get that embed somehow, they're still not able to view the video. And that became kind of a very big feature, or need, I should say, for educators that we worked with that were using Vimeo Pro, especially if they had policies in their network to keep the videos secure.

And also with Vimeo you get really great enhanced analytics, closed captioning integration, third-party add-ons, pretty much the core things you might be in an enterprise set-up. But the same needs in Vimeo are the same ones that I just mentioned that apply to YouTube-- the centralizing of the media, the capturing tools, and the whole plethora of other services that really make this a well-integrated video portal that teachers have great control over.

So what we did as a company, we've developed a solution over the years that addressed the needs for schools that were kind of in the middle. We work with a lot of clients that are deep on the enterprise. We have some great even technology partners through our hardware such as Kaltura, MediaCore, and we've always worked with YouTube and Vimeo. And seeing this dichotomy we kind of broke things down of why people are really seeking one solution than the other.

On the enterprise side you've got very deep video authentication. So if your needs are to really lock down your video and provide deep user authentication, enterprise systems definitely offer that. There's many third-party options, great analytics, basically everything you would get from any other type of enterprise package.

Really the downside that we saw and that we've heard on the field over the years was obviously these systems are very costly. A lot of them look at limits on usage, the number of users and kind of billing [INAUDIBLE]. All right.

So what we're looking at is basically a solution that bridged Google accounts-- if your school's using Google Apps for Education, it's a native integration. If you're not using Google Apps for Education, it obviously works on individual Google accounts. But we wanted to bridge all the great things that Google is offering as free technology to educators, bind that into YouTube, and offer Vimeo as an additional plug-in when YouTube doesn't quite fit the mold in certain situations, and really create a new generation of a video platform for schools, again, taking a

bit from the enterprise world and utilizing some of the great services that Google, YouTube, and Vimeo offer.

All right, so what we've done-- and I'm going to go through these really quick, and I want to dive into the actual technology, because pictures are worth a thousand words at times. But I want to give you a high-level overview of what we've done to bring YouTube into the classroom. So we've developed a platform at the beginning, basically centralizes and manages all of your YouTube and Vimeo content into one centralized portal that lives directly within your LMS. So it acts as a course video library that you're able to actually control and manage all your media together.

Actually, give me on second there. I lost my train. All right. So the students at the end of the day feel a very complete integrated experience. They're not going out to YouTube. They're not looking at an embed. They're not looking at a link. The end product feels and looks like YouTube, but without all the distraction and clutter that YouTube.com gets from a public standpoint.

We did a great seamless integration with Google. So if your school's currently using Google Apps for Education or your teacher has a Google account, it becomes very integrated from setup and usage. To set up the platform only takes a few minutes from an LTI configuration, and we'll touch base on that in a minute. But all of the authentication is done through Google. So if your school's currently using Google, accessing this application becomes extremely seamless.

And we created an environment where we really stripped out a lot of the clutter that you get from YouTube. And you guys will see that and the user experience that we've put together. And we've also developed a series of tools. As I said, we've been in the industry for years for our hardware HD multi-prospective recorder that we have. But we've also developed a free Google Chrome app that lives in browser, which is a really great companion for capturing screen and webcam content directly into the LMS. Being that the LMS is browser-based, having a browser-based screen app definitely makes the experience feel unified.

And we have an inline management process for easily managing the video, adding rich metadata, linking into the other YouTube service, really in a simple one-screen type control to manage all that data. The application itself, we understood that, as I mentioned earlier, one of the biggest setbacks is IT setup and administration. From an enterprise side, that could take a

few weeks to a few months, because of the complexity.

And we created a way to actually embed our application natively across about 40-plus learning management systems now, using a technology called Learning Tools Interoperability. And if you hadn't heard of that initiative, I would definitely encourage you to reach out to it. Because there's a tremendous amount of tools out there that you're able to enable directly within your LMS course that really helps enhance teaching, whether it's an application such as ours with video or a simple grading system.

But we went with the LTI spec, which is supported across the industry. And that basically gives the IT administration a very simple process to set it up, in most cases under five minutes. And the entire platform is enabled and ready for teachers to use.

And lastly, one of the things that we cared about was the student. We understand that managing the media and fighting all the different policies internally to bring a video platform into your organization, at the end of the day the system is built for students. And I mentioned the linear playback experience of not only YouTube but a lot of other video platforms out there. We wanted to build a really nice universal video search, not only across the entire video library, but within videos themselves, so students could identify important segments of the [INAUDIBLE].

And we did this by enhancing the video with notes, chapters, captions, key words, and things to really help them navigate, search, and drill down to anywhere within the video. And we've also enabled transcriptions to derive smart search and captioning services and have a really nice, streamlined way of integrating professional captioning services into the platform.

So let's jump into the demo. Before we get started, I just kind of want to cover a few things. I'm going to be demonstrating our platform today inside one of our partners, called Canvas. They've been a great partner of ours for the past six months. And we're becoming a great video solution for them, for schools that are really seeking something quick, easy, and that's well-integrated.

The account that I'm going to be using today is my own personal Google account. Obviously if your school has Google Apps for Education enabled, obviously teachers already have that account. They're probably already logged into it before they hit our app. So the integration will feel very seamless.

And on the back end, basically you make a choice as a school of where you want your video hosted, either on YouTube or Vimeo. You could actually use a hybrid of both, meaning let's keep portions of our video on YouTube and an open format, and let's keep another portion of our videos on Vimeo, but locked down. But the student experience is the same. They won't notice the difference between the two. So we're going to be demonstrating those two pieces as well.

Give me a second here. Let me close this out. All righty. So I currently have Canvas open. This is the LMS of choice that I chose today to do the demonstration. But under each course, whether it's Moodle, Blackboard, doesn't really matter what it is, you have a course navigation. And that's where our app initially is installed. It could be installed as basically per-course or across the entire campus. It's basically a button in the navigation of that course.

So right now I have mine called Learning Engine. Obviously could be labeled My Videos. So as the student comes in, they're going to be able to see that tab and quickly click on that and pull up the experience that we see on the screen here. Give me one moment.

So what we're looking at is basically the teacher's YouTube. Everything that I mentioned before, the mash-up of different services through Google, Google single sign-on, Drive, YouTube, and other different Google services that we pulled together to create this seamless, private YouTube experience just for this particular course. Being that it's living directly within this course, obviously students are authenticated before they even get to this app and have directly access to it. So it's a way for them to control just the videos that those students need to be viewing for that course.

So the very first thing that we're looking at, it kind of looks like a typical YouTube video portal. But the first thing that you notice is we strip out all of the clutter. So it's a very clean user experience, which is very important for people that are using YouTube or wanting to move to YouTube as a platform for education, is we don't see the distractions. So no popups. We're not going to get unrelated videos at the end. Everything that's in here are only the videos that the teacher wants the students to see. And again, you could mix a hybrid of YouTube videos with Vimeo videos to have kind of a mash-up of secure, open, semi-secure, and completely locked down content, depending on your strategy.

But this acts as a gallery that could easily be searched for. So let me start to drill down. Just like any other nicely written website, it has a smart search for you to constantly drill down to

the videos. So whether you have five videos in here or 5,000-- there's no limit to what you could have-- providing a really smart search allows the students to really navigate and drill down.

We do provide a feature called Collections. And it's a way to group YouTube content or Vimeo content together. So whether it's a certain topic, or maybe it's a concept where students might have a difficult time searching for, you could actually create a new collection and start to associate different videos. So on this one I just have two TEDx videos that I might want to share with my students.

So one of the very first questions we always get asked is, great, I see these videos in here, but how do I get the content in there? And that's actually one of the strong specialty areas that we have. And we provide a couple of mechanisms to make that happen.

We have a free Chrome app. And if you go to the Google Chrome store, you could actually just type the word "CaptureCast" and download this free app. It acts as a screen and webcam recording tool. Let's go in here. Let's go ahead and do the entire screen. Do a quick little recording here. I can pause it, resume it, stop it. And at that point I have tools to automatically upload this to YouTube or Vimeo. If I wanted to browse for a local file on my computer and upload it, an existing file, I could do that. And basically it acts as a content creation tool.

But one of the great things about this is, one, it is browser-based. So you're not launching a desktop application or going to a third-party service to initiate it. It's all in line with your learning management system. So while I'm in Canvas, and I am in my video portal, I simply have a little button in the toolbar that allows me to run a quick capture and get it uploaded to the back-end system to easily import. So that's a quick way to grab, get new content.

We also have a hardware-based appliance. It acts, actually, as a dedicated [? room ?] recording. So for certain environments where mission-critical recording of back-to-back, multiple sources, no-room-for-failure type situations, we do have a hardware-based appliance as well that's compatible with this platform. And the same process-- you initiate a recording, and we have templates to automatically upload it to the LMS course and the proper hosting system, whether it's YouTube or Vimeo.

The other way that we worked with content is actually-- [INAUDIBLE]. Let me go in here. Actually, I'm going to cancel that out. So as a teacher, one of the things that you could do is actually, if you're already a YouTube user, there's a very good chance that you've already

surfing YouTube and liking videos, maybe have uploaded videos. And so what we've done is create a tool for you to actually go out and quickly import existing YouTube content into your portal.

So you're not downloading the content and uploading it to YouTube again. You're basically referencing it. So there could be some great TEDx out there that you want to share with your students. Maybe a mobile upload you did, something in your history or Watch Later that you want to share. And basically it becomes a very simple tool for you to get content into your platform.

We've recently worked with some schools that have never recorded any video. And this was a really good way for them to at least build out a library with some videos in it to share with students. And it's a great way to encourage them to start a flipped classroom movement with their students.

So those are a couple of ways that we actually focus on getting content into the platform. Once it's in the platform, obviously we're able to search. We could filter through collections. But let's actually go into the playback experience. And I go back to the keyword that I searched for earlier, which was "atoms." So as I go through here, I could actually start to search for content based on my learning app. So I knew the teacher had something. It was a science video. I think it was Einstein, and they were talking about atoms. So I start typing and it found the video that I was seeking. Give it a second while it loads up here.

So the very first thing that we notice, the video pulls up. We notice that this one is a particular YouTube video. But we have an interactive card that's next to the video player that acts as a search and discovery tool for students. So they're able to search for various aspects based on the timeline.

So one of the things that I did is I searched "atom" and found the video. But you notice that "atom" is not in the title here. However, it is mentioned at 2 minutes and 11 seconds, 2 minutes and 17 seconds, 2 minutes 43. The teacher made a note about it. So it actually will do a deep dive into the video. And any data that's associated to the timeline now becomes discoverable.

So as a student I know I'm searching for atoms, but typically they do what most students do, they start to scrub through the video, hoping that they find that one particular point. So with this technology we hope that we actually break-- let me mute that-- we break that barrier by

providing a very smart search tool for them to discover those learning gaps and get them quickly to the content that they want so they can back out and start onto the next task they have at hand.

So a little bit about this data. Let me start with transcripts here. Let me switch over. So we do run transcripts with the platform. So if you're not familiar with YouTube, they do automatic transcription. It's completely variable. For those that have used it, it could be sometimes 60% on target, sometimes 5% on target. It depends on the complexity of the words that you're using, the subject matter, dialect, and there's so many complexities to that. But YouTube offers a way to at least translate that audio file.

And we do that by picking up that transcript natively, whether you create your own video and upload it to YouTube or you import it in here. If there's existing captions on the YouTube file, we'll pick them up. Professional transcription's already done on this video, so they're perfect. But we also have tools for you to process that through captioning companies such as 3Play. So the transcript becomes very helpful because the search capability and the end user to be able to search for any word spoken within the video.

We also have an interactive card that we call the Notepad. And we wanted to wait for teachers to actually tag and annotate the timeline with text that would really drive search. And we saw that as a very important feature. So two things that you could do with your video content. You could actually break it up into concepts. We call it chunking the video up. But you could easily break this down into concepts and topics that really act as a navigational guide within the YouTube video itself. So think of it as breaking down topics and having those students consume those topics with really easy search navigation.

You can add timeline-based notes as well. So I knew speed of light was very confusing for all my students, so I created a note. When they click on that it takes you to that point in the time of the video. And there's a little bit of notes that I can read. More importantly, all of the text is indexed and searchable through the main search engine. And that becomes a very powerful feature for teachers and students.

And as I mentioned, outside of the inline video search all of the timeline-based video indexes are also available on the universal search. So even if you have a library of hundreds of videos and maybe six of them were on speed of light, typing the words "speeds of light" not only would pull up those videos, but you could start to search inline to those video with the words

"speed of light."

All right, we're kind of coming to the end here. And one of the things that we've focused on, we understand the complexity of video. There's a big dichotomy between the free stuff that maybe a middle school uses to a very well-integrated system in a large higher ed institute. And we developed this for the teacher and for the student. And so we wanted to make the tools extremely easy to use.

So as you can see, everything that we've put together is a really clean, nice experience. But the question comes, how easy is it to manage? So you can share your videos with other courses in the LMS. You could come in and manage. But I wanted to show the timeline editor. Whoops, running out of battery juice here. Give me one second while I fire that up.

So what we're looking at is basically a simplified timeline editor for you to add metadata to any point in time in the video. So we made the tools very simple to use. We wanted teachers to be encouraged to come in here and add more data. Because again, video is linear in YouTube. And we want to break that barrier. We see the impact and the responses from teachers and students since we've launched that. The more that you add to the timeline, the more interactive the content could be.

So really great for long content that might be 20 minutes, 30 minutes, maybe an hour. Breaking up that information and creating data that's associated to that timeline ensures that every student, no matter what their learning gap is and what they need help with, they're able to quickly search and discover and find that point inside your lecture. So for lectures in flipped content, with a lot of direction it becomes a very useful tool.

I'll kind of mention a few other things in here. If you're using YouTube, we do direct links over into a lot of the free YouTube tools. They have an amazing video editor. A lot of people don't know that you could actually remix content, which is actually a really great educational feature of maybe taking two lectures or multiple lectures and creating the-best-of for a final review. So YouTube offers really great tools to edit, clip, trim, blank out the screen, and even remixing multiple videos together.

I mentioned they do have a caption editor. It's a manual editor that you have to go in and type to fix your captions. Tedious, but it is there for you. Annotations as well-- we thought that would be a very important feature for teachers. There are a lot of third-party tools out there that allow you to do overlays and highlighting certain portions of the screen, adding links. But

the YouTube annotator's really great for adding a good image overlay interactivity to your videos. And obviously any annotations that you do, our system picks them up natively and you're able to have that richer experience.

You could link directly to the analytics to this video. So if you have Google Analytics installed and your YouTube channel's tied to it, there's a lot of good data in there that you could grab outside of figuring out what browser they're coming from. The YouTube Analytics give you some interesting new tools. One of them is actually audience retention. And you can watch the video in real time and actually see where people spike and drop off. So it's a really great tool within Google Analytics to actually gauge what part of the video are they interested in, and where are they just completely falling off?

And the last thing I'll mention is enhancements. YouTube offers a really great tool if you're using mobile for capturing content. If you're like me, no matter how hard you try, your hand shakes a little bit. Sometimes lighting is not perfect. And if you're doing any what we call field recording, whether it's an activity outside or some type of experiment, if you're using a mobile device, even an iPad, they have a great app called YouTube Capture. But capturing that on your phone and getting it into YouTube, I definitely would recommend the enhancements tool. Because they have a motion stabilizer and light correction. So you could actually ensure that the content that you recorded looks good for students to play back.

I also want to mention captioning. Captioning is very big for us. We have a lot of customers that have to have captioning services within their school. And then with our really enriched search and interactivity around the captions themselves, it becomes a very important feature for a lot of our customers.

But we've done a direct integration through 3Play. So if you're using the 3Play services, every media that you have in here, whether it's YouTube or Vimeo, you could come in here, once you plug in your 3Play API, and each teacher would be given the ability to actually process their media directly to 3Play. And it's all done on the back end. Our system talks to theirs. We negotiate. They do the captions based on the SLA you selected. And they post it back to us and we process it. So the interface will always tell you the state of that. And once it's available, not only do you get the captions and the playback, you actually have a much richer search capability for that video.

So that's kind of a quick overview of the management piece to this. I know we're right at time. I

think I'm one minute, two minutes now past the presentation. So at this point in time I'll be more than happy to field any questions that are out there.

**LILY BOND:** Great. Thank you so much, Justin, for that great presentation. As he said, we're ready to go into Q&A. While we compile the questions-- and feel free to keep asking them-- I wanted to mention a few more upcoming webinars that we have-- on DIY Workflows for Captioning, Quick Start to Captioning, and HTML5 and Video Accessibility. You can register for those on our website.

So Justin, we have a question here for you. If you do not own the YouTube video, can you edit or replace the captions in Cattura?

**JUSTIN MCCUTCHEON:** Great question. You could actually process that video for captions, but it won't post back to YouTube if you don't own that video.

**LILY BOND:** Great. And can you modify the transcript, or do you have to go outside to fix or upload the transcripts?

**JUSTIN MCCUTCHEON:** We do it with the third party. So in this particular case they would log into 3Play and do any edits. If they're just using the plain old generic captioning service with YouTube, they would directly go into that caption editor and do that. And we would resync that information back into our platform.

**LILY BOND:** Great. Another question. Can a teacher create a controlled space that students can upload videos to for sharing projects or additional related videos?

**JUSTIN MCCUTCHEON:** Really great question, something that's been on our mind a lot the past six months, because we're working on the next version, which is extremely student-focused, with a lot of student-integration integration pieces with it. The answer to that today is we don't offer, say, a space for that. What we've been doing is a lot of schools have been using our Chromecast app as kind of a capturing tool that they deliver to students.

Part of that is also for the Google Apps for Education schools, you're able to install that app at an administrator level. So every student would automatically have it in their browser. But what we're doing is basically encouraging them to do their own recordings, upload it to their own YouTube accounts, keep it private, and just share that directly with the teacher.

However, I could say that it's very much on our roadmap and in active development to bring a

stronger student portfolio experience as well as a stronger student interaction with the videos that the teachers create.

**LILY BOND:** Great. Thank you. Another question here is, what LMS platforms does the platform work with, and/or do you need to use an LMS?

**JUSTIN** Another great question. At the moment we work with pretty much any LTI compliant platform.

**MCCUTCHEON:** And what that means is basically we do work with about 40 LMS platforms, Blackboard, Moodle, Sakai, Canvas, [INAUDIBLE], Haiku. Pretty much every major LMS system out there supports LTI. So we're kind of a native component when it comes to integration.

There are some CMS systems, such as WordPress-- I know there's a Drupal project with LTI as well-- where the same experience can be brought in to a CMS system. But at the moment there kind of needs to be a parent platform that we plug our app in. And that parent platform has to be LTI compatible.

We could definitely send a link out afterwards, a link from the IMS group which is the consortium for LTI. And they have a great listing of all the different platforms out there. I mentioned we're compatible with 40, but there's truly about 60 or 70 platforms and more joining all the time that are supporting that standard. So we see ourselves growing into even more systems as they adopt to it. But for right now we pretty much cover almost all of the LMS space.

And in the CMS world, WordPress has done a good job on making that integration happen. So that brings it into that world as well.

**LILY BOND:** Great. I'm sure people would appreciate that list if we can send it along after the webinar.

**JUSTIN** Yeah, perfect.

**MCCUTCHEON:**

**LILY BOND:** Yeah, definitely. I think we probably have time for one or two more questions here. There's a question, can I use the platform even if my school blocks YouTube?

**JUSTIN** Yeah, absolutely a great question. Comes across quite often, actually, in the K through 12

**MCCUTCHEON:** space. Yes you can. Basically it's a combination of using a proxy in your firewall. And the way our app is, truly, it's like an app that lives inside your LMS system. That makes it much easier from a proxy and firewall level to enable our application to be viewed within the LMS, but yet

still blocking.

So we do have documentation and direction around that, but most schools already have some-- all of them have a firewall in place. Most of them have a decent proxy in place to where they could just set those rules and basically allow students to view our platform inside the LMS but yet still block YouTube.com from general usage.

**LILY BOND:** Great. And one more question, somewhat along the same lines. How do I make my videos secure and locked down to my school?

**JUSTIN MCCUTCHEON:** Actually it's almost the same answer. But I'm glad it got asked twice, because I forgot to mention in the first one, that's why we use Vimeo Pro. There are organizations that it's just so secure and so locked down where Vimeo becomes a political battle internally. And Vimeo's a lighter touch. Whenever we mentioned that, saying, well, could Vimeo be an option, there's less resistance. But when I mention that Vimeo does domain-level lockdown and other forms of security, it actually will secure that embed, even though it's on the cloud, just to be associated to your school's domain. So if the proxy and the firewall stuff cannot be done within YouTube, we definitely recommend Vimeo Pro as your alternative to lock that down.

**LILY BOND:** Great. I think that's really helpful to add. Well, Justin, thank you so much for your presentation. It was very much appreciated by everyone. And thank you everyone for joining us. And I hope everyone has a great rest of the day.

**JUSTIN MCCUTCHEON:** Thank you, appreciate it. Have a great one.

**MCCUTCHEON:**

**LILY BOND:** You too.