

### PANELISTS

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### HOWTO ESTABLISH UNIVERSAL DESIGN IN HIGHER EDUCATION

In July 2016, cielo24 and Mediasite were joined by Jessica Phillips, Sr. Instructional Designer and Strategic Initiatives Coordinator in the Office of Distance Education and eLearning at The Ohio State University, to talk about how to identify and build the right accessible technology program in higher education institutions.

#### The Online Learning Environment: What Do We Know?

First, we know that roughly 20% of the population has a disability and when it comes to students, usually only one in five ever tell their instructor that they have a disability. This means that you've probably taught, been taught by, or interacted with people with disabilities and you didn't even realize it.

Second, we know that online learning attracts a wide variety of learners. There are learners who may have attempted a campus classroom and encountered difficulties because it simply didn't match their learning needs or communication styles. There may also be learners who speak English as a second language and benefit from visual reinforcement.

Third, accessibility is required as a very basic civil right. The ADA and section 504 and 508 of the Rehabilitation Act have guaranteed that for people. But what is most important of all is that accessibility, also referred to as universal design, improves the experience for everyone.



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recording here.

*"Using the term universal design rather than accessibility is really important. Accessibility often creates sort of a knee-jerk negative reaction, where people think, gosh, well I've had maybe one or two students with a disability in my experience teaching—why do I need to do all of this work for a couple of people?"*

*- Jessica Phillips, The Ohio State University*

The truth of the matter is that you may have interacted with many people who you didn't realize had a disability. Designing in an inclusive way not only helps those with disabilities, but improves the experience for every student.

There has been proven success in driving this initiative forward when speaking in terms of universal design instead of accessibility. Part of this stems from how we think about accessibility in terms of something to be done at the end of a project, rather than throughout the design of a project. Waiting until the very end does indeed create a lot more work.

### Three-Pronged Approach to Universal Design

#### 1. Infrastructure

There must be systems in place to support the acquisition and sharing of new resources. This involves having a one-stop shop for people to go to for help articles and step-by-step instructions for making their courses accessible.

To begin building your infrastructure, ask faculty the following questions:

1. Who are your students?
2. Are a lot of them are going to be English as a second language learners?
3. What will the percentage of students with disabilities be?
4. Are you going to have students who have limited access to Wi-Fi or a solid Internet connection?
5. Do you have students who are working adults and have a lot of different priorities?

All of these things play into how you would design the course to be inclusive and responsive to your students' needs.

Two major ways to design courses inclusively are to present information in multiple ways and give students multiple ways to show what they've learned.

These are both pillars of Universal Design for Learning (UDL) that allow students to tap into their own strengths, communication preferences, and attention preferences. These also minimize any accessibility challenges that students with vision or hearing disabilities may encounter.

So when it comes to course development, asking these questions during the process helps avoid getting to the end of course development and realizing that there are significant issues that will not only be issues for students with disabilities, but will minimize the creativity and the potential for a positive experience for everyone.

## 2. Outreach

You need to establish open lines of communication and a streamlined way to answer questions so that faculty don't feel lost when trying to make their courses accessible.

First, ensure direct communications with faculty about course design. A key way to do this is to create "essential questions" that are always addressed during conversations with faculty about course design.

Another way is to weave yourself into conversations that are already happening. This is much easier and more successful than trying to create new conversations around universal design. For example, when creating quality assurance standards for courses, accessibility and universal design can be woven into those checkpoints.

Second, create a strategy for budget talks. Budget is a huge roadblock for many universities' accessibility initiatives. The best strategy to use when entering into budget talks is to explain the benefits of universal design for all students and most importantly, highlight its ability to mitigate financial risk in the future.

Retroactively fixing courses and materials for accessibility can be a very costly endeavor, especially compared to the cost of incorporating universal design from the beginning.

Furthermore, the DOJ is cracking down on accessibility more than ever, with numerous schools, [such as Berkeley, most recently](#), being served with hefty lawsuits.

Lastly, always address accessibility when doing RFPs, RFIs, and new vendor acquisition. There are a lot of third party companies that offer great solutions for more engaging online classes, but not all of those companies are considering accessibility—because no one is asking them to.

It is critical to start having conversations with vendors about accessibility and to educate them about what's required by law before signing any contracts.

### 3. Empowerment

Universal design initiatives should not be led by one person, rather everyone should take some ownership over accessibility. The best way to encourage this is to use a marketing strategy where you showcase the champions who are doing good.

This can involve creating a task force of people willing to help drive the initiative forward and marketing their stories. Another tactic is to add these stories to the conversations that are already happening across your institution.

Think about which stories will inspire action; is it the the ones about mitigating risk, the ones about real students who have disabilities, or the stories about universal design being successful?

Inspiring a call to action university wide, not just with one person or department is a key point. As is leveraging the champions, so that the people who are doing things right have a platform to talk more about their successes.

### Summary

If you are looking to make your institution's courses accessible, using the three-pronged approach can help you successfully initiate a universal design program.

Remember that the online learning environment is home to a variety of students who may have disabilities, different learning styles, and different levels of English acquisition.

Accessibility is a necessary part of designing courses, but it is often overlooked. Presenting accessibility in terms of universal design speaks to its ability to help everyone, not just students with disabilities, and relays that it is an ongoing design process from the beginning, rather than an afterthought.

Using the three-pronged approach, comprised of Infrastructure, Outreach, and Empowerment, has been successful at universities such as The Ohio State University.

### Q & A

**Q: What definition of disability is used when referencing that 20% of the U.S. population has a disability?**

A: This statistic is referring to a broad definition that includes all disabilities. You can take this statistic and break it into the percentages of people with vision disabilities or hearing disabilities, for example.

This is an important question, because when you consider the line that divides a disability and just a difference in how someone takes in and shares information, it can be a fuzzy boundary.

That's why captioning and other ways of making material accessible really is important. While a doctor may determine that someone has a disability, there are plenty of people who do not have a diagnosis, but still have differing needs and learning styles that should be taken into consideration.

In terms of the ADA, an individual with a disability is defined as a person who has a physical or mental impairment that substantially limits one or more major life activities, a person who has a history or record of such an impairment, or a person who is perceived by others as having such an impairment. The ADA does not specifically name all of the impairments that are covered.

*"We have the privilege of working with a brilliant hard of hearing intern from UCLA. And he had a really interesting perspective on this question; he said, 'I'm not disabled, I'm differently-abled.' And it was like a light bulb moment. He can accomplish the same things as everyone else, he just does them in a different way."*

- Nicole Flynn, cielo24

### Q: Does cielo24 integrate with LMS platforms like Blackboard and Moodle?

A: We do not natively integrate with LMS like Blackboard or Moodle. But our captions integrate with video platforms like Mediasite and those most likely have an integration with the LMS.

### Q: What LMS platform is used at The Ohio State University? What is the relationship between captions and lecture capture platforms like Mediasite.

A: The Ohio State University just moved to Canvas as its LMS. We use Mediasite for our videos, screencast recordings, slideshow recordings with narration, etc. So the integration between cielo24 and Mediasite makes captioning a really seamless process. We simply take the embedded captioned videos in Mediasite and put them into our LMS.

*"At cielo24 we partner with various video platforms, such as Mediasite, and our captions are automatically delivered back to the videos on those platforms. For each university we work with, we create a custom, centralized page that tells instructors how to request captions within their integration."*

-Nicole Flynn, cielo24

**Q: If you are using Mediasite for live lecture capture, do you hold everyone's access to the recordings until they are captioned? If so, what is the typical turnaround time that you allow for a 50-minute lecture?**

A: This where the prioritization of your videos comes in. The answer depends first on if that live video lecture is occurring in a closed classroom environment or if it is going to be made public.

Second, you have to consider the type and uses of the lecture material. Is the video going to be reused over and over again? Or is this faculty member going to rerecord this lecture next semester and each semester after that?

In the case of a lecture that is going to be made public, we would hold that and not make it live until the captions were there. Because that's what is required by the law. People with a hearing disability should not have to wait days to be able to see that video that other people are able to see right away; that is not equal access.

So according to how fast you need the video captioned and how much you want to spend, captioning can take between a few days and a few hours.

Currently, federally funded educational and government institutions are required by law (Title II and II of the ADA, Section 504, etc.) to comply with accessibility regulations and guidelines. In these cases, compliance with the law means 99% accurate captions for all multimedia.

### Q: How do captioning vendors ensure high accuracy for complex or technical content?

A: cielo24 has complex system of checks and balances in our process that guarantees that the captions we send back are within the accuracy threshold.

For high level, technical courses, our transcribers are very used to looking up words that they don't know. We also encourage the lecturer or instructional design team to provide course glossaries for difficult or technical material that will help our transcriptionists' level of accuracy.

There is also a lot of help in the videos themselves, as there are often visual aides such as PowerPoint slides or whiteboard notes. These help the students watching the videos as well as our transcriptionists.

Lastly, we must note that captions are generated by humans, so there's always the possibility of making an error. cielo24 accounts for this by providing clients with editing tools so they can tweak words and phrases if they are inaccurate. Additionally, our team is always on standby to help correct the issue and prevent it in the future.

*"At The Ohio State University, we developed a captioning process that includes identifying a highly technical course, such as a science or math course, early on, so that we can give cielo24 a glossary of the terms ahead of time.*

*Also, if necessary, we will have the instructor take a look at the captions within the cielo24 platform to see if anything needs to be tweaked here and there. So we take a couple extra steps on our end to help improve the accuracy of the captions."*

*- Jessica Philllips, The Ohio State University*



Click to watch the webinar.



**Q: Is there any particular audio visual considerations, relative to microphones, mixers, other quality issues that allow for more or less accurate captioning?**

A: The clearer the audio quality the better, but you do not need to do anything above making the audio good enough for your students to hear.

An iPhone placed properly could do the trick. Microphones are not usually an issue and you don't have to spend money on any expensive technology. The best thing to do is be aware of where the microphone is placed and minimize background noise.

There was a time back in the day where the ability to get legible sound was difficult. But today, if it's audible to viewers, then cielo24 can get you a closed caption accuracy just fine.

**Q: What is the most important factor to consider when dealing with accessibility? What is the most important thing a school can do to make sure there are no barriers to learning?**

A: On my end, what I always tell people is that there are a lot of resources that are already out there. You don't have to recreate the wheel. But it's really only optimal if the very last thing in that checklist is how will this work for someone with differences in communication needs or attention needs? And I think, without putting on that hat and learning about the experience of people with differing needs, those checklists don't work.

Because you can mark everything off on a checklist and still have something not be accessible or not be inclusive. It really requires stepping back and looking at it as a whole.

If I were ever to go back and start this process again, what I would do first is meet right away with students, people, teachers, anyone on campus who has a disability or just differences in the way they like to take in information.

I'd talk to them and learn more about their experiences, and share those with the people who can authorize budget allocation for accessibility.

I have a student who I've been working with recently who has cerebral palsy. She just recently started having seizures where she loses her vision for a few days and then it comes back, or she loses her hearing for a few days after a seizure and then it comes back, or she loses the use of her arms for a week and then it comes back.

So she's a really interesting case because people might say well, how can someone with a vision disability be a doctor, how can they work in the sciences? But here's an individual who absolutely can because these things are intermittent. But not only that, technology has opened up so many doors for people that anything is possible.

And we don't wanna be the people that stand in the way and say, sorry, we didn't really think you could do this, so we didn't weave you into our considerations.

**Q: This is a wealth of information, would I be able to share the PowerPoint presentation with our accessibility team leader?**

A: [Yes. This live webcast is available on demand](#) and you're welcome to share it with anyone. Second, everyone on here has shared their intellectual property here today with you and you can download it from the information icon.

### CONTACT THE TEAM:

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