

# Focus on Three Things

How USC Upstate Simplified Universal Design for Learning (UDL)



## The challenge

A comprehensive institution in the University of South Carolina system, USC Upstate felt the increasing need to provide accessible course materials for its roughly 6,000 students, and the resources to create them for their 246 full-time and 205 adjunct faculty.

## The value of prevention

With the receipt of a 'Dear Colleague' letter coupled with their already growing intent toward accessibility, the current chancellor formed the Universal Design Committee - a broadly-representative group with a goal to ensure the creation of compliant media and other course materials across campus. While observing legal cases being brought to other universities, administrators at USC Upstate aimed to get ahead of accessibility compliance and prevent issues from the start.

*'Dear Colleague' letters were sent by the U.S. Department of Education and the U.S. Department of Justice to public and private educational institutions in 2010 and 2011. These letters stated the interpretations of language and accessibility rules around online courses. The latter included a list of frequently asked questions that clarified many of the details, such as "Do all the videos in an online course need to be accessible?" Yes. "Does all the media need to be accessible, too?" Yes.*

The Committee looks at, assesses, and supports universal design on campus in it's largest sense - what goes on in physical classrooms, as well as digital instructional materials. Cindy Jennings, Director of Learning Technologies, explains how it has evolved over time. "It grew into something that's really important on our campus." With folks from facilities, the bookstore, faculty, human resources, and website managers, the committee's welcoming mindset embodies the inclusive spirit that it advocates. "We've tried to include the voice and perspective of as many groups on campus as possible, including students," said Cindy.





## The road to compliance - keeping it simple

To begin the process of building a culture of compliance, the committee held sessions around campus to raise awareness about the importance of accessibility. More significantly, they also asked faculty to be hands-on and personally review their own instructional materials for compliance. “Our committee put a lot of effort into figuring out what are the most important things,” explained Cindy. “Then we tried to simplify the instructions to faculty as much as possible.” Given the legalese and technical details involved, it wasn’t an easy task. Administrators also needed to find ways to help address compliance challenges, and, most importantly - give faculty simple ways to make their instructional materials more accessible. “It had to be easy to understand what to look for,” said Cindy, “and that’s when we came up with our three priorities.”

### Administrators asked faculty to focus on three things:

- **Accessible documents:** Review their documents using Microsoft Office accessibility checkers, to make sure all PDFs and other documents are OCR compatible. This applies to all their instructional materials - PowerPoints, syllabi, Excel sheets, etc.
- **Alt-Text:** Add alt -text or long descriptions to images they use in their instructional materials.
- **Captioning:** Caption all course videos.



## The ‘what’ and ‘why’ of OCR

Optical Character Recognition (OCR) lets text in your documents be “read” by your computer, so it’s no longer just a combination of pixels but verifiable letters and characters that make up words. Once the text is recognized, it opens up all kinds of opportunities that make it more usable, including dynamic searching, copying, reading aloud by screen reader technology, and sometimes even editing.

### Text needs to be legible in order for OCR to read it properly. Avoid:

- poorly copied handouts or askew scanned worksheets
- fuzzy or smeared letters
- hastily handwritten notes, especially cursive
- text that has poor contrast compared to the background (too light in color, often from being photocopied multiple times)

Most documents created digitally can be read by OCR, including PDF files, word documents, and even images captured from your screen or a digital camera.

With regards to accessibility, OCR helps students with hearing challenges learn the material, as well students who learn more effectively when they can simultaneously read and hear words spoken. Having searchable text makes it easier for all students to find concepts they need to read again to clarify their understanding, and to study for exams.

The committee realized that this was a big “ask.” Not only did they guide faculty to make current instructional materials accessible, but they also asked each department to create a five-year timeline to review **every** course in their curriculum for accessibility.

## Getting on board with accessible docs and alt-text

At the same time they were doing the awareness sessions, they knew it was critical to provide developmental support to everyone to make these changes, and give them the tools they needed to make it work. Faculty needed to know what to do, and where to start. “If we had asked them to make all their materials accessible but didn’t come alongside them to help them understand what they needed to do to make their courses successful, that would not have been a very good way to accomplish it,” said Cindy. “We were also very sensitive to and aware of the needs of our adjunct faculty in terms of training and preparation for creating accessible instructional materials, and how that filters down to them.”

As the initiative progressed, they realized that each department has its own accessibility challenges. For example, one department in the science fields was finding it difficult to add alt-text and long descriptions to some of the detailed, scientific images they used on a regular basis. In response, the committee provided them additional development, preparation, and instructional sessions on how to do what they needed.

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## Focus on the human factor

As the committee continued to spearhead the shift toward compliance, they purposefully focused on the student benefits, as opposed to the legal reasons. “We tried really hard not to hit people over the head with the ADA-hammer a whole lot,” said Cindy. “We rarely talk about the legal aspects of what we’re asking.” Although, Cindy admits, it occasionally comes up. “Sometimes they say ‘Why do I have to do this,’ or ‘I don’t want to do this.’” Other times, people have already heard what has gone on at other institutions with accessibility, and realize the importance.

The emphasis on the overarching goal of accessibility spanned even to the name of the committee itself. “One of the reasons we chose the name ‘Universal Design Committee’ is to help faculty learn how students learn,” explained Cindy. The goal is to show them how universal design principles help meet the needs of all learners in their classroom, not just the ones who might need a special accommodation, like captioning.

“When faculty hear it framed in that way, they tend to be more open to suggestions and more amenable to the ‘social justice’ aspects of the conversation,” said Cindy. “They want to do the right thing, and understand it will take time.” Administrators were glad to hear faculty’s response to getting course

feedback. “They’ve been saying, ‘Wow, I have a lot of work to do!’”, explained Cindy. “It hasn’t been ‘I can’t believe you’ve put this complicated thing in here and I don’t know what to do with it.’ Faculty have been using that feedback in a positive way.”

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## Tough to caption without the right tools

While the committee saw success with the accessible documents and alt-text portions of the initiative, they struggled with getting faculty to caption videos. The reason was humbling - they didn’t have the right captioning tools. Administrators saw this need and were actively looking for a comprehensive video platform that would include robust captioning options - but it wasn’t in place yet.

Cindy described the impact this had on encouraging accessibility awareness, which involves not only convincing faculty to put extra effort around instructional materials, but also to do so with lackluster captioning tools. “On the one hand, faculty want to do the right thing. But on the other hand, when you’re a faculty member who has been regularly including different kinds of media in your teaching and suddenly somebody says ‘Woah, you need to back up and do something different with that media’, that’s frustrating. And it was frustrating for us to say ‘Here’s what we want you to do, but we don’t yet have the right tools in place.’ We said ‘Please be patient, we’re working on it, it’s coming.’ For a long time, we just had to keep promising and promising faculty that we were working on finding the right solution, at the same time we were asking them to be mindful of the accessibility of their instructional materials.”

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— **Cindy Jennings**, Director of Learning Technologies

It was a challenging time period, yet everybody was optimistic the committee would come up with something.





## The solution - accessibility with ease of use in mind

At the urgency of keeping momentum in their accessibility initiative, the committee had found an acceptable server-side captioning solution. While they were optimistic, it would have required a lot of human resource support to manage, monitor, troubleshoot, and triage, plus it would not have been integrated into faculty processes and workflows. They could have figured out how to make that work, but it would have been personnel-intensive and required a lot of technical expertise.

They were almost ready to purchase when they discovered TechSmith Relay™. Its video creation, sharing and hosting offered the easy, automated, integrated captioning, accessibility, and overall ease of use that they wanted. Relay provided workflows that aligned with faculty's existing processes, required minimal technical expertise, and offered the best kind of reliable customer support - availability when there is a technical issue, and partnering to make sure everything is going smoothly in the first place.

Most importantly of all, Relay finally provided the infrastructure necessary to deliver the fully-accessible instructional materials they were asking faculty to create.

## Captioning 101

Administrators surveyed faculty to try to understand their true captioning needs. Based on those results and other research, they created a captioning prioritization guide that helped folks triage what they were recording. They sent out this captioning guide during the Relay rollout to help faculty identify the highest-priority items, and decide where they were in their process of captioning.

Within the confines of this guide, the committee asked faculty in face-to-face courses to caption all **new** materials going forward. All materials in online courses needed to be accessible, in priority order from new to older. That was the general guideline, although there were some variants and exceptions. All of the detailed guidelines were shared at the time they rolled out Relay last year.

### It's okay (actually, it's essential) to prioritize

Regardless of budget, all instructional materials (new and older) can't be captioned all at once. There has to be a logical order and system to begin making materials accessible. As part of their five-year accessibility timelines, administrators at USC Upstate encouraged faculty to triage which materials were the most crucial to be captioned right away, and identify materials that could wait.

The committee also created a guide to help faculty understand how to create the best audio track on their recordings, so that the first pass of captions would be as accurate as possible.

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### Getting faculty on board

Due in part to widespread anticipation of a better video platform along with the committee's accessibility awareness initiative, USC Upstate saw faculty embrace their new video platform across campus. "We have excellent adoption of Relay, better than we ever dreamed, of the solution itself."

In everything tech-related, there are pockets of faculty around campus who are early adopters and do well. In this case, everyone is seeing the value. Even reluctant faculty have seen the results of Relay and have come on board. "We're very pleased with Relay, very pleased with how easy it is for faculty to use," said



Cindy. “Even a couple of faculty who used other tools in the past who wanted more robust editing functionality have started to use Relay. And we’ve been absolutely thrilled with customer service from TechSmith.”

Faculty are finding new ways to use video in their courses, explains Cindy. “Now we’re beginning to have faculty request how they can utilize the recorder for students to record and do multimedia projects in the system,” which opens up new opportunities for student-centered learning and multimedia expression.

To promote the accessibility features of Relay, the committee works with the Office of Distance Education since that office clearly sees the need for the video solution along with the ability to caption recordings. “The way the caption editing works and the incorporation of the ADA-checker is really good,” said Cindy. Showing faculty how to use it is a much easier process than it ever was in the past, and much better than the alternative system they had been considering. With new faculty joining USC Upstate, the committee will do refresher sessions about Relay and accessibility, and continue to encourage more growth among existing faculty.

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## Advocates for change

In addition to the accessibility awareness sessions and the prioritizing/captioning guide, the committee has each department and academic area identify a faculty member volunteer to be a Universal Design Advocate. Advocates agree to participate in a little bit more training and development, so they can be a resource for colleagues in their department about accessibility questions. If they don’t know how to do something, they’re a communication channel to find answers to the questions that their colleagues need to create instructional materials that are accessible.




Advocates are also usually the first to know new information - they're how the committee directly communicates with folks in other departments about Relay and captioning. For example, advocates recently had sessions where they learned that there are now accessible materials in the library, that people didn't know about before.

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## Offering captioning support

Editing captions in recordings is probably not the best use of faculty expertise and time. "Some of them are doing it, and we appreciate that they are," said Cindy. "Even though we try to explain that there's never going to be a tool that's going to do it 100% accurately the first time, we hope to be able to offer more support."



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— **Cindy Jennings**, Director of Learning Technologies

Directly related to feedback from advocates, administrators are doing a trial to delegate some captioning in-house to a part-time work-study student. The workflow is already built-in to Relay. As part of this process, the group will try to figure out how long will this take, how many more students they will need, required turnaround time, and how to prioritize who can submit recordings for caption editing. "I'm hoping to be able to offer that to some of the faculty teaching online courses this spring," said Cindy. "Just the ability to delegate to another person to edit the captions was awesome, that was an excellent development for us."

## Benefits of shorter lecture videos

While making videos accessible, faculty soon learned that bigger isn't always better. Shorter lecture videos are easier to caption and check for ADA compliance. "When they get to be over an hour long, they take forever to finish, which becomes a teachable moment," describes Cindy. "Maybe your students would be more likely to watch this separated out into shorter segments than keeping this thing 75 minutes long?"

Dr. David Wallace, Associate Professor in the Department of Fine Arts and Communication Studies, started making his videos shorter, which is easy to do in Relay. "Instead of posting a 45-minute video, I divide it up into topical 8-10 minute videos, which the students like," said Dr. Wallace. "They like discussion where I'm talking about the concepts, like I do when we're in class. Especially good is the opportunity to simplify concepts through the video instead of just doing the reading, I think the students appreciate that."

**Shorter lecture videos are easier to caption and check for ADA compliance.**

Based on feedback from student evaluations, Dr. Wallace knows shorter videos are resonating: "There are four videos per chapter usually, so at least 50 videos of actual lecture-type content, plus 10 more that are going through assignments or talking through quiz answers. Students don't have to sit down and commit to 45 minutes. They can watch a lesson in 10 minutes, by topic, and each video is about something just a little bit different."

As an added benefit, Relay videos let Dr. Wallace keep his course on schedule even if there's bad weather. To gauge effectiveness, he looks at analytics in Relay, not only to see who's watching the videos, but to make sure his videos are teaching the concepts the way he intends. "The flip side is to know which students tend to understand the assignments better, and see if they are the ones who are watching the videos and tutorials. That's how I know it's working. When students watch everything and still aren't excelling, then I know I need to change what I'm doing and how I get the information to the students."



He builds video viewing into his course, granting points to those who watch the videos. “I let students know that I can tell how much of the video they’ve watched,” said Dr. Wallace. “That’s supposed to scare them into watching all the videos. There’s usually just one or two students who watch only a little. Most of them watch the majority of the videos because it’s going to be on the exam and they won’t get the content anywhere else.”

## Quizzing for quality

Knowing the increased student engagement rates when quiz questions are integrated into course videos, the Office of Distance Education promotes Relay’s quizzing and the value of metrics around how long students spend in a video, also known as the ‘view time’. Dr. Wallace knows the value of how quizzing makes online lessons interactive, similar to a face-to-face course. “I want the online experience to be as close as possible to the in-class experience, to hear me talk about things and have discussions, to engage with me and go through the same process. Even though the time is shorter, the quizzes keep them involved as the videos progress.”

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Dr. Wallace typically asks open-ended discussion questions, since he wants to see that students can show him examples of a specific concept or issue, similarly to a discussion question he would ask in an in-person class. “It’s for engagement and for their grade,” he explains. “The quizzing in the videos themselves is also motivation for them to watch the lectures. They’re more engaged with the videos themselves. That’s been a positive thing.”

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## Next steps - mobile teaching and learning

One of the things administrators want to promote more is mobile teaching and learning with the Fuse app. They see tremendous potential for ways it can be used by faculty and students. “Fuse could be great for those who do field work,” said Cindy. “I think of our Biology professors who have students doing regular inquiry-based activities with field notes and observations. There’s a huge potential for them to document that with narration and video that they haven’t explored at all. Those are the kinds of things I’m hoping we’ll do more of.”

The ability to directly publish remote/mobile recordings into their Relay space is huge. “They don’t have to do any other wrangling of the recording other than to point it to their account,” explained Cindy. “That has a lot of potential to streamline some of the kinds of things they might be able to do.”

### Videos are in-the-moment content

For some faculty it’s a leap of faith when they do any recording. They want their recording area to be “showroom ready” and their narration close to perfect when they publish it. That takes a lot of extra effort that isn’t necessary, and they don’t need a studio. Instead, the goal is to encourage faculty to be more conversational, the way they teach when in front of their face-to-face classroom.

Some still see recording as a permanent thing. It doesn’t have to be. Encourage faculty to think about videos as a consumable in their course. They don’t have to create something that will last forever.

## Measuring what matters

In addition to continuing to raise awareness about accessibility, USC Upstate is now in the process of developing metrics and scorecards around a new strategic plan on campus. Metrics related to captioning and other universal design and accessibility elements are being developed to monitor and improve success rates year over year, as well as set goals for the future.

“Student success and engagement is the ultimate high-level goal,” said Cindy. “We’re looking at larger academic affairs umbrella-metrics and how those trickle down into our areas. We’re assessing how we’re documenting our effectiveness, and how those things roll up into those larger scorecards. That affects everything down to how we measure our success with Relay. It’s a good thing to measure.”

Specifically, they’ll be looking at metrics on what student engagement looks like, including - but definitely not limited to - how much time students spend engaging with and viewing videos. How many ‘clicks’ isn’t always the best measure, although it’s still important. They’ll be looking at the larger picture of how video is shaping the student experience, such as how many students utilize Relay to create their own content and how many instructors harness video to create intentional digital learning experiences.

As part of their recent Digital Literacy Building Initiative for their Southern Association of Colleges and Schools (SACS) re-accreditation process, administrators asked faculty to think about how a technology-intensive experience could be woven into something else. “In the past instructors might assign a research paper, now it’s a multimedia artifact that a student creates,” said Cindy. “It was very interesting to see how it worked across disciplines, and the multiple forms that took from the sciences to literature courses.”







## Moving forward

In addition to finding out the best ways to measure the online student experience, USC Upstate has a grant-funded Active Learning Initiative to figure out how to understand the student experience with various digital tools on campus (such as Blackboard and Relay) as well as physical classrooms that serve as active learning spaces. Surveys are the logical choice to gather data, but not always the best, so they are experimenting with using QR codes to gather feedback. “We hear that a new informal active learning space is heavily used,” said Cindy. “But how do I get those users to tell me about their experience? How do we know, besides how many times someone has clicked on something? ‘How many’ doesn’t always translate into engagement, but it is one measure.”

Analytics in Relay greatly help measure online engagement, and they’ll continue to promote it as a tool both for accessibility assurance and online learning overall. “In all of the goals that we had set for our own adoption, Relay has met and exceeded all of our expectations in terms of our priority of integrated, automated captioning that’s easy to use, that’s built into the system, including the ability to edit those captions,” said Cindy. “I can’t image there would be a better solution out there. I would challenge any others to use Relay as a standard.”

# 10x

Adoption rate of TechSmith Relay, compared to Odessa College's previous video platform

# 1/3

How much TechSmith Relay costs, compared to Odessa College's previous video platform



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– Leif Nelson,

**Director of Learning Tech Solutions, Boise State University**



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