

What's That You Say? Capturing Class Content through Captioning

Laurel Smith Stvan

University of Texas at Arlington

An accessibility-oriented course overhaul can be daunting if a person attempts to cover all possible ways in one redesign: color, sound, choice of language, screen readers for PDFs and web pages, and alt text for images. Keeping content accessible can also mean not triggering or tripping up students with anxiety, time management difficulties, dyslexia, PTSD, or autism. In addition, there are those with additional needs for asynchronous materials or extra time to process. In short, it can be overwhelming to try to bring everything up to speed at once. So, each semester I have tried to choose one aspect to improve, to make a few more students more enabled with each fix. In the past, I'd worked on visual color coding for the syllabus schedule, more readable colors for the slides, and more accessible text formatting for Word docs. I felt I was getting the visibility aspect under control. Most recently, in the Spring 2023 semester, my focus was on auditory accessibility, for which I incorporated a combination of running captions in PowerPoint and using a clip-on mic, in addition to incorporating a requested ASL interpreter.

My goal was to add options for people for whom English was not their home language, as well as those with hearing loss or auditory processing disorders. Class members with a variety of home languages are already a given in my department, in both our undergrad ethnic diversity and our range of international graduate students. As a result, teaching has involved attention to language code, as well as issues of hidden academic curriculum for first generation students. Mixed in with that, this last semester I worked on dealing with the language code in a new way, to make the course content better accessible to students who were deaf or hard of hearing. Like

most issues of accessibility, this had the potential to benefit hearing students, since they could also make use of accommodations such as captioning.

I felt the need for attending to hearing was exacerbated by my own ongoing use of a mask in class. In short, how could I keep us all virus free, but also able to hear each other? As I have continued to be masked in the classroom, I've found that I need to also use a portable mic to help me project my voice. My hope was that some combination of the assistive techniques would assist folks who didn't realize how much they relied on seeing lips during oral communication. Nevertheless, these considerations didn't always work.

So, what was added? In my spring graduate writing seminar, one student had already requested ASL interpreters for class. This did not involve work on my part, beyond making sure that the interpreters had a seat in which they could be visible. On top of that, I already do a focused clean-up of captions for any video recordings that I create for asynchronous class viewing. I've found that auto captioning is a great first step, but I also work on post-editing them to enable the materials to actually convey the correct names of people and concepts that we're talking about, as well as providing punctuation to help guide viewers' reading.

The new element that I tried out in the spring was live captioning during class lectures. While sharing my PowerPoint slides during class through the classroom projector, I clicked the "Always use Subtitles" option in the top bar on PowerPoint. This allowed the software to capture my microphone-speech during the lectures, making it visible below the slides on screen. I feel that this is key because the bulk of the course information is conveyed informally, in speech that extends beyond what is captured in the bullets of the slides. Once this is turned on, the subtitles also captured other audible talk in the classroom, such as the question-asking and clarifications from students during class. In order for the other voices to show up in the subtitles, I found I needed to repeat questions from students before answering, to make sure it was fully picked up by the mic. While this speech-to-text process has many of the same faults as the auto captioning for videos, it nonetheless provided an extra level of real-time access, at the point where students could ask for further clarification.

I don't fully know how this subtitling technique went over with the students. The topic of the captioning was not mentioned by my students in our student feedback surveys for that class, so I don't have a sense of how this mode affected the majority of the class, who were hearing students. Now that streaming makes up such a big part of contemporary viewing, perhaps captions are no longer remarkable. I am currently debating whether to keep this up in classes where no accommodations for hearing have been requested, but this next semester I'll still be masked and using a microphone. My plan, therefore, was to demonstrate the subtitles during the first class and then create an "exit ticket" question asking whether students find the captioning to be distracting or helpful.

Happily, for both of my fall classes, the majority of students found this modality change either neutral or helpful. The format is a real-time alternative, just like having an ASL interpreter. So, since these face-to-face classes are not recorded, a full transcript is not capturable. While the conversations are going on, however, sometimes the students or I will notice the captions in action. For the students it can be an occasion for longer visual attention to the slides, and sometimes--when there are miscaptured words--for extra smiles. For me, seeing my impromptu words causes me to slow down to make sure my terms are captured correctly. That seems like a benefit for us all right there.