Using Online Instruction To Teach Podcasting

I developed online modules to take technical podcast training out of the classroom and into the university's learning management system (LMS). Outcomes using the online method were nearly the same as the in-class method. While there was a slight decrease in performance for the online method, the online method allowed students to learn at their own pace and increased time available in class for critical thinking and other activities.

In the past, I've dedicated time in class to technical training that teaches students how to create podcasts. This involves recording audio, editing in Adobe Audition, and publishing through Wordpress. The baseline understanding of each of these areas varies widely among students. Some already know how to record audio or edit in Audition, and for others, this will be their first time. This results in challenges keeping advanced students engaged during workshop time as I am focused on others who need more attention. In-class media training also takes away class time that could otherwise be spent on critical thinking and analysis.

To solve these issues, I attempted to shift the podcast learning sequence online to be completed outside of class. The goals of this effort were to give students access to specific resources they need to complete the project and reduce the use of class time for technical training. Students who already have some proficiency in certain areas would be able to skim over those elements and spend more time on areas that are new to them. Assigning it outside of class nearly eliminates the need for in-class training, which would allow more time for other learning.

To begin, I created step-by-step instructions using screenshots and video screencasts. The result was a series of three online modules: "Recording Audio In Studio," "Mixing Music and Voices in Adobe Audition," and "Publishing a Podcast Online." Each of the modules included three sections: resources, an assignment and a quiz. I was fortunate to be able to spend time developing these materials after being awarded a university grant to experiment with teaching methodologies.

For Module 1 "Recording Audio In Studio," students were given an orientation to university resources which includes a room in the library where audio can be recorded. The resources for this module also included photos for each step of configuring physical equipment and screenshots for software steps to get the best quality recording. The assignment was to record their voice, export it and submit it to the LMS. To reinforce what they'd learned, I created a quiz to recap what they'd done in this module. Each quiz was designed more as a learning tool than an assessment; it could be taken multiple times. The online system wouldn't let them proceed to the next module until all answers were correct.

For Module 2 "Mixing Music and Voices in Adobe Audition," students were provided screencasts with my voice showing them how to use Audition. Seven videos averaging 3.5 minutes each introduced them to the software interface, multitrack editing, adjusting volume, nondestructive editing, podcast template, Essential Sound Panel and mixing music under voices. I recorded

using a Blue Yeti USB microphone and Quicktime's Movie Recording feature. The assignment was to record their first episode, including music, and submit it through the LMS.

For Module 3 "Publishing a Podcast Online," students were introduced to RSS feeds, Wordpress plugins and podcast aggregators such as Apple Podcasts. All students on campus are provided with an individual Wordpress site hosted by the university. This allowed me to bypass much of the manual labor dealing with domain names, hosting services and installing Wordpress. Three videos screencasts averaging three minutes each walked them through the steps. Their assignment was to configure their podcast and submit a link to their feed through the LMS.

After students completed the modules, I was pleasantly surprised how well they were able to record and edit audio by following the resources I had provided. Students did raise a few issues that needed to be addressed such as an echo in their headphones or other technical problems stemming from public resources that aren't always left the way my instructions expected. I was able to update the instructions to avoid issues for future classes. Module 1 and 2 were resounding successes, as nearly all were able to meet my expectations. Results from Module 3 were mixed. Only about half were able to correctly identify their podcast feed and submit it correctly. Nearly all were able to correctly publish their audio in Wordpress, but many were still unclear on what the feed is and how it works.

To assess how the online method compared to the in-class method, I used a standardized rubric to evaluate the results. I compared the results of this podcast project to the results of other courses I've taught using in-class methods. The results did show a small reduction in performance using the online method, but none of the elements dropped more than 9% compared to in-class methods. Two of the seven elements in the rubric were within 1% of the average results. Two of the elements were 4-5% lower. Three elements were 6-9% lower. While the online modules did not perform equally or better than in-class instruction, it is encouraging how close the results were.

Students responded well to the online training, commenting, "I liked it," and "Step-by-step instructions were simple." When prompted in class about the difference between tutorials using screenshots vs screencasts, results were split. Half preferred videos and half preferred screenshots. I think this is a testament to the idea that everyone learns differently and it's useful to include both methods rather than limit it to one technique. Students also commented that it was a positive experience to learn on their own outside of class and then bring in their project for feedback.

I recommend the online method for technical media training because it allows learning at an individual pace. It also increases class time dedicated to critical thinking and discussion.