

Teaching & Technology in Media Studies

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As Assistant Professor of Film and Digital Media Production at the University of Notre Dame, my pedagogical mission is two-fold: to teach my students the practical skills they need for placement into graduate schools and industry jobs; to teach them how to think critically about film, animation, and video game aesthetics and production techniques. My students must learn *how* to create high-quality and technically proficient digital art, as well as gain a broader understanding of *why* they are doing it – the larger artistic and cultural perspectives. This response will focus on the “how” – my approach to using video technology to teach complex content creation software applications.

Students seeking careers in media production industries must be proficient in several complex software applications such as Autodesk Maya and Mudbox, Adobe Premiere, Photoshop, After Effects, and Audition. Students spend significant amounts of time learning these tools outside of class in a lab setting. This requires focus, discipline, patience, and a strong work ethic. To help my students master these programs, I have abandoned traditional reading materials such as software manuals and written tutorials and embraced custom-created video tutorials as my primary teaching tool.

In my first year of teaching at Notre Dame, my students worked from printed tutorial books. As the year progressed, I became frustrated with these books for several reasons. The authors came from a variety of professional backgrounds, so their instructional techniques were not always optimally suited for creating art content for film and games. The written material sometimes contained grammatical and technical errors which caused confusion. It became difficult and time consuming to assist students with these issues. The authors often lacked first-hand, specific knowledge of how “production-ready” professional art is created for actual commercial studio projects. The authors would occasionally make assumptions about the experience level of the students using the book, and omit entire steps in a technical process that seemed too “basic.” As a result, students would get lost, and I needed to backtrack with them in the lesson to troubleshoot the issue. Finally, the books used screenshots from the applications that were far too small or in black and white, when a larger, higher resolution color image would have been much more effective in communicating the desired technique.

In preparation for my second year at Notre Dame, I began creating custom video tutorials as my primary instructional tool for lab. After reflecting on my first year, and carefully reading my students’ course evaluation feedback, I concluded that a more visual, interactive, and engaging method was what they needed. Equally important, they needed to learn tools and processes from an industry professional with extensive experience in different art creation techniques. Through video tutorials, I would “virtually guide” my students, allowing them to learn experientially. Two key purchases were made to create the videos – Mirillis Action screen recording software (\$30), and a Blue Snowball USB microphone (\$60). For under \$100, I was equipped and ready to begin recording.

I currently record the video tutorials in high definition 1080p resolution with 48K, 16-bit stereo sound. The instructional content is organized and presented in a professional, fun, and engaging manner. I want my personality and sense of humor to come through in the videos, which helps my students stay relaxed and engaged with the content. Lessons build from one week to the next – the students work sequentially through the art creation “pipeline” just as a professional would at a commercial studio. A student begins the process with no knowledge of the application, and fourteen weeks later, has the skills necessary to create a short film, an animatic, a high-quality 3d model or animation, a soundtrack to a short film sequence, or a variety of other final projects. The lessons are split out into manageable files that students can work through in several hours during their work week. Instead of delivering the weekly tutorial as a daunting, single three-hour file, I split the tutorials into a series of ten-minute video files. Students gain a sense of accomplishment as they begin, and complete, each individual video. They can replay sections of a video if they need to brush up on a particular process. Since I personally author the content in the tutorial videos, I can more effectively and efficiently assist my students with any problems they encounter while working through the lessons. I can easily correct any content-related mistakes within the tutorials by editing the source project in Premiere Pro, re-exporting the files, and re-uploading them to the online class server for the students to download. Most importantly, my students are learning the proper methods to create digital art for the entertainment industry from an experienced professional working in the field. Feedback from students regarding these video tutorials has been overwhelmingly positive. They feel as though I am present with them, leading them along the way as they learn how to create awesome, creative digital content.

While the video tutorials have been successful on all fronts, the process has presented me with a few challenges. There is a significant cost of time and effort up front when planning, recording, and editing the video files. On average, I spent four months building tutorials for each of my four production classes. Each class required the creation of approximately 30-45 hours of finished, professional-quality video content. The other major challenge is staying abreast of the annual cycle of software updates and refreshes. I spend a great deal of time and effort each summer learning new tools and processes, and incorporating these into the existing video tutorials. Overall, the system I have built has been the best overall way to teach the students what they need to learn as well as prepare them for the modern work environment.