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Lights, Camera, Research: The Interdisciplinary Design of Digital Storytelling

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LIGHTS, CAMERA, RESEARCH: THE INTERDISCIPLINARY DESIGN OF DIGITAL STORYTELLING

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The Pennsylvania State University is a statewide higher education system comprised of twenty-four campuses, which includes its most recognized location, the centrally located University Park campus. Penn State Scranton, in the northeastern region of the state, offers thirteen baccalaureate programs, along with four associate degrees, as well as many other avenues to begin one of over 440 academic programs available throughout the university. The modest size of the Penn State Scranton campus, with approximately 1,000 students, creates an atmosphere imbued with interdepartmental collaboration and robust student engagement. Smaller class sizes foster an active instructional environment for undergraduates that organically lends itself to experiential learning projects. It is within this context that the interdisciplinary instructional design for a digital storytelling project began.

In Fall 2018, a communication arts professor elicited the help of a history professor, a media commons consultant, and a reference and instruction librarian to design the capstone project for the CAS 100A Effective Speech course. Each collaborator contributed their expertise to create a digital storytelling assignment that students work on throughout the semester. The assignment encompasses both academic and experiential learning while requiring students to accomplish a variety of tasks such as choosing a historical topic, researching primary and secondary sources, developing a script and storyboard, and editing video. While these tasks were created to align with the learning outcomes of the project and overall course objectives, students also indirectly learn that interdisciplinary collaboration can lead to gratifying curricular experiences and that scholars in the academic community enjoy working together.

COLLABORATIVE DESIGN

The instructional design process for this digital storytelling project was initiated when the communication arts professor began adapting one section of the CAS 100A Effective Speech course as an honors option. To effectively convert the course into an honors option, an additional assignment needed to be added to the current curriculum. In the typical curriculum of this course, students are required to read a book chosen by the professor, deliver four informative and persuasive speeches, take two tests, and participate in a mock job interview. The communication arts professor wanted to create an experiential learning activity that required students to learn specific communication skills through peer collaboration and have deliverables at the end of the semester that could be showcased at the Penn State Scranton Undergraduate Research Fair and Exhibition, and perhaps beyond. In collaboration with the coordinators of the honors program, a project targeting all levels of Bloom's taxonomy was integrated into the course in which student groups would create digital stories about historical events (Bloom, 1956). Interdisciplinary collaboration with faculty members from the Penn State Scranton campus, as well as Penn State Media Commons, become an imperative component for the success of the project.

Before the course was set to run, the history and communication arts professors began the instructional design process by determining which decade in American history students would be directed to learn more about. Once a decade was chosen and agreed upon, the history professor compiled a list of major political, social, economic, cultural, and entertainment topics pertaining to that decade. The list of potential topics was given to the communication arts professor to share with the class, so student teams could choose topics that resonated with them. The communication arts professor would then convey back to the history professor which topics were chosen allowing for preparation of quick lectures on each. The history professor would deliver these short lectures during the usual class session. These lectures gave students a general understanding of the topic as situated within the historical time

period they were learning about and providing this context was key for students to decide the direction their research would take. The history professor emphasized the need for students to think about focusing their research to a specific aspect of their chosen topic. The topics were intentionally broad in scope to allow students the space to determine what was of interest or value for their learning. The final version of their video project was intended to have a clear focus and present a unique perspective of the story students chose to tell.

After the student teams were introduced to their topics and invited to consider the scope of their storytelling, guidance on searching for and identifying relevant sources was offered. The research process for this assignment is critical as the sources students discover and read form the foundation for their scripts and storyboards. The reference and instruction librarian backwards designed an instructional session around several key student learning outcomes. Students would first learn how to derive a specific focus to their research by narrowing down their general topic using reference sources. Additionally, students would learn how to locate and identify relevant pieces of scholarly literature from searching different databases. The tragedy of the Space Shuttle Challenger was used as a sample topic. A reference article was shown that described and quoted the presidential eulogy which became the focused topic, an example of tightening the research scope. Conducting primary source research is a key learning outcome and students were invited to discover voices of the historical period firsthand. Thus, how to locate the transcript of the eulogy itself was important to demonstrate. Following the search demonstrations, discussion was facilitated by the librarian on the difference between primary and secondary sources and the importance of both to establish a comprehensive understanding of any historical research topic.

A partial jigsaw learning activity was planned for students to apply what had been demonstrated in the first part of the instructional session by the reference and instruction librarian. They were asked to crowdsource a reference list of sources that would be useful to create a digital story of any aspect of the Scopes Monkey Trial of 1925. For this academic exercise, students worked within their video project teams and each group was given a specific type of source to find and database to search within. The student groups were asked to share their search experience with the entire class and described the sources they selected for the collaborative reference list. Following the instructional session, students would be encouraged to contact the reference and instruction librarian for additional guidance as needed.

DIGITAL STORYTELLERS

To put the technological aspects of the storytelling project into motion, the communication arts professor contacted Penn State Media Commons. Media Commons is a university-wide resource that provides the equipment, resources, and instructional support required by students to complete multimedia assignments. Before a specific technology is identified for a project, a media commons specialist conducts a consultation with the faculty member. During this time, project objectives are discussed, and a project plan is created. This plan will parallel and reinforce the student learning outcomes, including critical thought, and determine various scaffolded deliverables of the multimedia project. These deliverables correspond with Media Commons trainings in which a consultant discusses the multimedia production process, best practices for telling a thoughtful story in a scholarly manner, and the software needed to create the project. Additionally, at the end of the semester, a critique is offered by the media commons consultant. These critiques provide feedback on the rough draft of the project and incorporate guidance on how students can improve their digital story before handing in the final iteration.

Before the student teams could begin their storyboarding in earnest, they needed to make important decisions related to video design. Primarily, the type of production students would like to create to tell their story needs to be determined. The students had to decide whether they prefer their video to be educational, promotional, documentary, or entertainment. Scripts and storyboards are integral parts of the students' videos. Scripting helps organize the thoughts and ideas that will be delivered in the production (Penn State Media Commons, 2021a). Storyboarding can assist in the planning of angles, sizes, and order of camera shots and movement to elicit various emotions from the audience (Penn State Media Commons, 2021b). For this project, the software that was originally chosen was the iMovie app for the iPad. The Mobile Media Program, facilitated by Penn State Media Commons, lends iPad minis to classes for multimedia projects. The program allows all students throughout the university an equity of access to the newest technology, both hardware and software, for completing their multimedia assignments. During the pandemic, the software shifted from the iMovie app to Adobe Rush and personal phones were utilized for recording video. Adobe Rush is a program that is more widely available to students, cross platform, and compatible with both mobile and desktop machines. This programmatic shift proved successful and may become the preferred method of video production for this project in the future.

MOVING FORWARD

Educational projects can always be improved, adapted, and changed to better the students' experiential learning. The historical decade students are learning about and the research topics within those time periods are easily transformable. Each time this digital storytelling project was assigned by the communication arts professor, who also integrated variations of this project into other courses such as CAS 250 Small Group Communication, the historical era has differed. To date, most of the twentieth century has been researched by students. Since the key student learning outcomes of this project are primarily focused on the digital

storytelling process, American history topics will continue to be chosen to provide students with the opportunity to delve deeper and learn something novel about familiar people or events.

Time constraints of class sessions has led both the history professor and the reference and instruction librarian to move through their lectures or learning activities quicker than anticipated at times. Implementing more ways in which the students can reach out and continue to consult with these faculty members regarding their video projects has been noted as an area for improving their overall productions. Also, flipping the classroom by giving students assignments on finding resources for their projects prior to their class time with the librarian has been discussed. This method would enable students to establish a foundation of basic searching prior to class that can then be scaffolded, with active learning prioritized during class time. In later iterations of assigning this project, the librarian created a course guide devoted to the primary and secondary source databases that students are introduced to during the information literacy instruction session, as well as other helpful resources.

This digital storytelling project is highly adaptable to other courses, as evidenced through its later integration into CAS 250 Small Group Communication. Based upon the student learning outcomes of a particular course, a different combination of interdisciplinary collaborators could be assembled. Essentially, having colleagues from different academic areas eager to participate in the initiative is the most crucial requirement for successfully assigning this digital storytelling project to undergraduate students.

The experiential learning achieved from this project imbues students with a genuine sense of accomplishment. Students, throughout the entirety of the semester, are given command of their own learning paths with the faculty members providing guideposts along the way. Several of these digital projects have been showcased to the academic and local community by the student creators in the campus' annual Undergraduate Research Fair and Exhibition. Even in these current times of transition to and expansion of hybrid or remote learning, this capstone project has remained as a mainstay of experiential learning and interdisciplinary scholarship at Penn State Scranton and will continue to be into the future.

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