



THE UNIVERSITY OF TEXAS AT ARLINGTON

Hands-On History: Three Open Pedagogy Models to Unleash Student Creativity

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Part of an eclipse exhibit based upon archival materials created by students and archivists in SPCO

What is Open Pedagogy?

Open pedagogy is an educational approach emphasizing collaboration, transparency, and student agency in the learning process, utilizing open educational practices to facilitate access to knowledge to foster creative, highly participatory learning experiences. Central to open pedagogy is the integration of peer learning, where students collaborate to construct knowledge collectively, and experiential learning, which emphasizes learning through first-hand experiences, active engagement, and reflection. Learners explore concepts, develop skills, and gain insights through practical application. Students are creators, not just consumers of content, leading to a deeper understanding and retention of knowledge.

This poster provides information on three different models of open pedagogy I deployed in AY 2023-2024.



Two students working with a SPCO archivist to learn how to use a medieval astronomical volvelle.

OER TEXTBOOK

HIST 1332

Science and Technology in American Society II

The open online textbook I am writing for this course includes student creation of supplemental enrichment materials (linchpin of the course open pedagogy design). Each semester students work in groups, allowing them to delve deeper into topics of interest. Teams have worked in Special Collections bringing storytelling and archival documents together (e.g., the Trinity River project, building a railroad spur in west Texas, WWII medics). Other students have created short documentaries, video games, and board games about their topic. Some have even made historically based plans for FabLab builds (e.g., miniature mockup/launch of a Saturn V rocket, a 3D printed articulated hand, a model of the Golden Gate Bridge showing engineering). This project is based upon a team model/process utilized by the aerospace industry for an authentic experience.

The course also serves as a “teaching incubator” for doctoral students, who work closely with me on tweaking course pedagogy/design, creating the course OER, and conducting research on course effectiveness as preparation to be future history instructors.

PUBLIC-FACING ARTIFACTS

HIST 4352

Medieval Technology and Scientific Thought

This class had two projects where the groups collaborated with each other on one artifact.

“*Theoria Eclipsium: Curiosity, Captivation, and Connection*” (a physical exhibit) and *Celestial Wonders: Medieval Thoughts on the Night Sky* (a digital exhibit hosted in MavMatrix) created in conjunction with SPCO archivists, the Digital Projects Librarian, myself, and the students. For the first half of the semester, students collaborated with Special Collections on an exhibition featuring over 500 years of Eclipse history based on maps/charts, rare books, and photographs from the UTA archives. Students learned how to create metadata and museum style captioning; mount digital and physical exhibits; and web page creation. Some crafted FabLab builds of instruments described in the documents. Some acted as docents on the day of the eclipse, they will present their posters at the Virginia Garrett lectures, submit their work for publication in the *Making History* journal and some are planning to present their work at conferences.

In the second half of the course, students research the science and technology of medieval siege. Two groups are building table-top replicas of historic petrary weapons (catapults and trebuchets), while other groups explore castle defense and other siege technology. The students are creating a documentary about siege which will include a “flinging day” competition between the two replica petrary weapons. They are learning video production and editing skills with the History Department Communications Assistant. They are also encouraged to submit this project to *Making History*. The documentary will be promoted on the departmental History Lab website and students will investigate other means to bring their work to the public eye.

OPEN JOURNAL

HIST 4352

Medieval Crusade and Jihad

Students piloted a class digital project for the first issue of the new History Department student journal, *Making History*. They determined the scope and decided upon a retelling crusade history through first person accounts (in which travelers and the city of Jerusalem itself were key actors) and brought together a balance of participant voices – Muslim, Christian, Jewish, Frankish, Kurdish, Arab, and even Persian. Four students, selected from this course, are currently department interns, pulling together the first issue and laying the foundations for this journal.

Students worked with the UTA Libraries Digital Publishing Librarian to learn about open journals, Creative Commons licenses, copyright and other information about publishing

THINGS TO CONSIDER WHEN ADOPTING OPEN PEDAGOGICAL PRACTICES

- The UTA Libraries is your best resource on campus – if you can imagine it, librarians and other staff can help you bring your project to reality – take a tour or chat with Experiential Learning or Open Practices librarians to brainstorm ideas
- Reach out to others on campus (even if in a discipline that has no obvious intersection with your own) who also utilize project-based learning, open pedagogy, or experiential learning; they have great ideas for things to try and warnings about what not to do
- Don’t fear failure – what is failure to you (i.e., a blown-up course calendar or the project not coming together) is still a fabulous learning experience for your students. Tweak and try again next semester
- There is never enough time. Bring your students into class crisis management when things inevitably hit a snag. Have them help you with schedule recovery and decision making. This, too, is educational and very “real world”
- Join our Open PLC group next year, join Tech Ambassadors (an informal faculty/staff group discussing all things EdTech), consider the MAFE program, apply for the library ELFF program, attend CRTLE teaching presentations and library workshops
- Consider “ungrading” practices for the project grade, subtracting points for non-engagement or not making revisions as needed, to take away the “fear” of a failing grade – students are more comfortable taking the risk to learn a new skill and collaborate freely

MY NEXT STEPS

- Collaborate with colleagues in the Arts, Sciences, and Special Collections to create a cross-disciplinary exhibit “Moonstruck: A Journey through Lunar Lore, Science, and Discovery” in advance of the upcoming Artemis mission’s return to the moon
- Publish the HIST 1332 OER textbook through Mavs Open Press; facilitate publication of first issue of *Making History*
- Methodically scour the archives for additional documents and materials to use as a basis for new projects for my History of Technology and Science courses
- Apply for grants withing the university (CRTLE and UTA Libraries) and without (NEH) to support expansion of Hands-On History, part of the History Department’s reimagining of a 21st Century History degree
- Presentation of research on open pedagogy at conference and through journal article

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