Name of Researcher
Cara Tremain

Department/Faculty
Anthropology

Position in Department/Faculty
Instructor

Project Title
Heritage for the 21st Century: Increasing Student Engagement using Digital Tools

Term of Project
Fall 2021- Spring 2022

Please introduce yourself – include pertinent background information relating to the topic of your research project.

I have been teaching archaeology and anthropology classes at Langara College since 2017, and have been increasingly interested in digital technologies in the last few years. In the Spring semester of 2021 I offered a new special topics course called 'Digital Archaeology'. The success of that course in terms of student engagement with the topic, and success in the ability of students to apply various digital tools to their learning (such as 3D modelling), inspired me to conceive of this research. It also builds on my past experience with digital tools in anthropology classes, whereby I have facilitated student engagement with heritage via 3D printing. The aim of this research is to study the impact and affect that digital tools have on student engagement with cultural heritage.

Please discuss your educational background and your work experience that led you to taking on this research project. If possible, include a quote that helps define your interest in this project.

B.A. Archaeology, University College London, 2007. M.A. Anthropology, Trent University, 2011. PhD. Archaeology, University of Calgary, 2017.

Please summarize your project in plain language that others not in your field could understand.

Heritage is relevant for everyone, yet it is something that we need to engage with to fully understand and appreciate. This research aimed to increase student engagement with cultural heritage in exciting, modern, and relevant ways by providing opportunities for students to use augmented and virtual realities to explore heritage objects and sites.

Identify the project goals and objectives. Explain how the results may be used to solve a problem or inform further research in the field.

The goal was to determine whether augmented and virtual realities can help students feel more engaged with, and appreciative of, cultural heritage.

There are various benefits of this research:
• It helped students learn about the importance and relevance of heritage

• It allowed students to engage with digital technologies that they might not otherwise be able to
• It made students aware of the value of studying anthropology
• It demonstrated the value of integrating digital technologies into the classroom
• It helped Langara be seen as an institution that provides opportunities for students to experience up to date, exciting, technologies

Briefly explain the steps taken (methods used) to conduct the research, and describe the key findings.

Students from across the college were invited to take part in a 2 hour in-person study in the anthropology lab, where they were asked to use an Ipad to explore heritage in augmented reality, and an Oculus virtal reality headset explore different heritage sites. SWAP students helped me faciliate these studies, and collect feedback from the volunteers (who were renumerated with a $30 gift card for their time). I also allowed students to use the equipment at Applied Research Day, where I also collected feedback for the study. Overall, students overwhelming enjoyed exploring heritage with these digital technologies and 90% agreed they would consider enrolling in anthropology classes if they could use these kinds of technologies. Initial findings show that students learned the value of heritage through these technologies, and appreciated aspects such as scale/ intrinsic value/ ability to 'travel' to heritage virtually.

Who was involved in this project (eg. faculty, students, community partners)? How did their involvement contribute to the project's success? Were there any challenges to overcome?

Fall 2021: two SWAP students helped conduct studies in the anthropology lab
Spring 2022: one SWAP student helped conduct studies in the anthropology lab, and assisted at Applied Research Day. Two other anthropology students also assisted at Applied Research Day.

Please share any personal stories that made this research experience memorable/valuable.

I really enjoyed working closely with different kinds of students across the college, and seeing their enjoyment of these technologies. Some were keen to go home and download the software so they could continue learning about heritage! Overall it was a great experience, and I really enjoyed conducting this research project. I only wish I had more time to dedicate to it outside ot teaching.

What are the next steps for this project and for you as a researcher?

To write up the findings for an academic article, hopefully for publication in late 2022 or early 2023.

Langara Institutional Repository Consent

By submitting, I consent to uploading my ARC Fund final report to the Langara Institutional Repository (The LaIR).