

Final Report Documentation

ATU Professional Development Grant

February 2019 Funding Round

Patrick Hagge

RESTATEMENT OF THE PROFESSIONAL ENHANCEMENT OPPORTUNITY

I presented original research in a paper presentation (*“Student Perceptions of Virtual Reality Usage in a University Classroom Using Google Earth VR”*) at the 2019 Annual Meeting of the American Association of Geographers in Washington, D.C. on April 5, 2019.

BRIEF REVIEW OF THE PROFESSIONAL ENHANCEMENT OPPORTUNITY

The American Association of Geographers (AAG) is the largest organization of geographers in the world, with professional geographers from academia, government, and industry represented in paper presentation sessions, poster sessions, and panel discussions. One of my major research interests is the use of virtual reality (VR) in higher education, with an emphasis on student usage of new mapping technologies.

Specifically, my research for this opportunity focused on questions of in-class VR usefulness from a student’s point of view. If students exposed to in-class VR view these technologies as ineffective, of what use are virtual environments for higher education? At various times during the Fall 2018 and Spring 2019 semesters, students in several face-to-face geography courses at Arkansas Tech University were exposed to the immersive “Google Earth VR” app using the HTC Vive head-mounted display. Individual students used Google Earth VR to “visit” places of interest in that day’s lecture, and the video output of such movement was displayed on a classroom projector in real-time for all students to watch.

Data collection of student perceptions of VR were recorded through two surveys of all enrolled students at the beginning and end of a semester. Survey results speak to the future applicability of VR devices in a university geography classroom. An AAG meeting is the premier

opportunity to interact with the small group of immersive technology-focused geographers, so this professional opportunity was of vital importance for my VR-related research.

SUMMARY OF EXPERIENCES

The April 5 paper presentation session in which I presented was the fifth in a series of six “Immersive Technology” sessions. I gave my 20-minute presentation, and then participated in a discussant-led panel at the end of our session. My paper was extremely well-received by the other VR-using geographers in the session. Conversations (both during the end panel and in informal conversations afterward) were valuable in gaining important feedback for further research. Our session’s formal discussant is one of the leading academics in VR education, and he and I discussed several specific methods (and possible improvements) for delivery of geography-focused VR experiences. Also, differences in cultural usage of VR were discussed with professors from Europe. After the session, conversations with other geographers included topics such as specific hardware improvements (Oculus hardware vs. HTC Vive hardware, etc.) as well as VR-specific classroom management/student participation strategies.

CONCLUSIONS AND RECOMMENDATIONS

I am grateful for the ATU Professional Development Grant in covering the costs of this national AAG conference trip. This PD grant, along with a 2017 ATU IRC grant that funded the VR equipment, have allowed me to shape my research in further detail. Due in part to encouraging feedback received at this conference, the results of my initial two-semester study will be submitted in journal article form to a geography education journal by late 2019.

EVIDENCE OF CONFERENCE ATTENDANCE/PRESENTATION

Immersive V: Digital Socialities - Immersive Technologies and Experiences

Type: Paper
Theme:
Sponsor Groups: Media and Communication Geography Specialty Group, Cultural Geography Specialty Group, Digital Geographies Specialty Group
Poster #:
Day: 4/5/2019
Start / End Time: 3:05 PM / 4:45 PM
Room: Roosevelt 7, Marriott, Exhibition Level
Organizers: Joseph Palis, Dino Kadich, Alexander Klippel
Chairs: Joseph Palis

Description

Digital Socialities

How is sociality performed in the digital age? This paper session endeavors to map and critically engage with our digital society through various forms of interpreting, knowing and analyzing the geographical world. We discuss the ethics of the increasing datafication of human lives, the mediation of technology and artificial intelligence in everyday living and the new geographies that emerge from these encounters.

From ludic geographies including Pokemon Go! to digital economies and virtual affects and senses, and their effects on corporeal and urban landscapes, we examine various scales of digitalization to the body, the urban space and the virtual terro-realities.

Agenda

Type	Details	Minutes	Start Time
Presenter	Dino Kadich*, <i>University of Cambridge - Geography, Pokemon Go and the 'oddly bodily' geographies of encounter in Sarajevo</i>	20	3:05 PM
Presenter	Linnea Saltin*, <i>Nostalgia in Virtual Reality</i>	20	3:25 PM
Presenter	Patrick D Hagge*, <i>Arkansas Tech University, Student Perceptions of Virtual Reality Usage in a University Classroom Using "Google Earth VR"</i>	20	3:45 PM
Presenter	Seth Kudym*, <i>University of Nebraska - Omaha, Holocaust Mobilities: Beyond the Mapping, Stressing the Narratives</i>	20	4:05 PM
Discussant	Alexander Klippel <i>Pennsylvania State University</i>	20	4:25 PM

