

**A Study of Anecdotal Student Response
to Virtual Art Museums in Online History Courses**

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Abstract

This anecdotal pilot case study of practice addresses the question: How can technology be used to make online history courses more engaging with museums? Findings from this case study suggest that virtual art museums via the Google Cultural Institute (now Google Arts & Culture) were an effective way to encourage students to do more than the minimum required for the online forum response assignment in a survey (100-level) history course at a community college in the northwest United States. The instructor designed an assignment that was posted in the learning management system as a PDF. Implications for practice are that online instructors of history, as well as online instructors of humanities, can assign virtual art museum visits with an online discussion component to encourage student engagement centered on course content.

Keywords: Virtual Museums; Student Engagement; Interdisciplinary; Humanities; History; Community College; Case Study; Action Research; Online Discussion

Introduction

The prevalence of hybrid courses has grown over the years, though there are still many students who prefer a completely online course because of personal commitments outside of school (Monto, 2017). As student demand for online course options increases, there is an increasing emphasis on curriculum design for actively engaging students in online learning environments. This case study focuses on student reaction to a virtual art museum assignment in three online history courses at a community college. With the increase in online courses, it is important to provide ways for students to interact with history through media other than textbooks. Museums are a way to accomplish this learning goal while adding to content area enrichment in history courses. The question addressed is: How can technology be used to make online history courses more engaging with museums? Students' comments about the assignment itself are specifically discussed because their comments about the assignment were spontaneous and positive. The implications of this study suggest that virtual art museums may foster an engaging, interactive learning experience in online history courses. Some students suggested in the assignment discussion forum that they enjoyed the assignment itself in addition to posting notably more than the minimum.

Context and Method

Experiencing art either through hands-on crafts or through museums can boost academic achievement (Catterall, 1998). Research into virtual museums' effect on learning in K-12 has been documented in various studies (see Bouck et al., 2009; Bouck et al., 2008; Cassady et al., 2008; Okolo et al., 2010; Okolo et al., 2007; Paquin & Barfurth, 2007; Prosser & Eddisford, 2004). For example, Guan et al. (2020) discussed the use of virtual museums for teaching and learning about cultural heritage in relation to the environment. A mixed-methods study by Jones

and Alba (2019) found that students who used virtual museums first and then the physical museum next tended to increase their knowledge acquisition.

Popular media has also recently identified virtual museums as a pedagogical entertainment tool. According to Farago's (2020) reporting in the *New York Times*, "The Musée du Louvre in Paris has reported a tenfold increase in web traffic, from 40,000 to 400,000 visitors per day" (para. 2). Also specifically mentioned was "Google's Arts & Culture initiative, which promises virtual experiences of the world's great galleries with the same 360-degree views familiar from its Maps application" (Farago, 2020, para. 5). Google's Arts and Culture initiative is not new; it has been available by various names since about 2010, going by the names of Google Art Project and then Google Cultural Institute. These names all refer to the same Google program (<https://artsandculture.google.com/explore>) that digitizes museums from around the world for 3D exploration on any computer or smart phone connected to the internet.

While there have been studies of the usefulness of virtual museums in the K-12 learning environment, there is no pedagogical research on adult learners' perceptions of virtual museums in college coursework. Adult learners' anecdotal responses to a virtual museum assignment in online history courses were evaluated because the assignment could be added to the learning management system (LMS) and students' access to the Google Cultural Institute was free; thus not adding any cost to students' access to complete the assignment. The instructor designed an assignment that was posted in the LMS as a PDF in which students were asked to visit museums designated by the instructor or of their choosing depending on the prompt. For example, one of the questions was: "How does the design of the Hall of Mirrors in Versailles use architecture to show personal branding of the King of France and exert his authority over visitors?" Students then followed the link provided in the PDF and then wrote their responses in the discussion

forum in the course LMS. These questions both encouraged interdisciplinary exploration in context with the historical documents and textbook and student interaction centered on the content of the course.

This study explores the implementation of a virtual art museum assignment into three online history courses at a community college in the northwest United States. This study reveals implications that virtual art museum activities may anecdotally increase student engagement of online college history courses while maintaining commonly accepted academic standards. Virtual art museum assignments can foster an interactive and interdisciplinary element to online history courses by encouraging students to study the arts and history together.

This study is an anecdotal pilot case study using action research principles (Stringer, 2007) as its theoretical foundation to provide an answer to the following practice-based question: How do students respond to virtual art museum assignments in their online history course? Students were given an instructions sheet as a PDF file in the online learning management system (LMS) for completing the virtual art museum activity via the Google Cultural Institute's Art Project. The virtual museums are real museums that Google has virtualized through 3-dimensional scanning of the inside of the museum. Student-written comments in the course's assigned discussion forum were evaluated. Students demonstrated their learning from this activity in the online discussion forum. Students were not asked to comment on whether they liked or disliked the assignment, but a significant number (see results section below) spontaneously commented in positive and affirmative language in the discussion forum that they liked the virtual museum assignment.

Limitations

The data are from three online 100-level history courses in one quarter in 2013 at a community college in the northwest United States. There were full-time working adult students in these courses with multiple age ranges represented in the sample. This study was a convenience sample. Results are anecdotal, not generalizable. The assignment was the same across all three sections except for small details of screen images of virtual art museums that were aligned with the content of the course. These courses were in one quarter with a total of 50 students.

The Assignment

The assignment was given in a history of Western civilizations course and two United States history courses. The PDF assignment had instructions that were to the point step-by-step format. Here is the assignment for the Western civilizations course.

“Go to the Google art project’s virtual museums at (<https://artsandculture.google.com/>) and consider: Versailles was commissioned by Louis XIV (1643-1715) and was referred to as the ‘Sun King.’ Think about what you have learned about the Renaissance, Castiglione, Machiavelli, Humanism, and the centralized kingdom-state. Navigate to Versailles. Explore FIVE rooms and write what you can think of that denotes Louis XIV’s goal. What was the goal of the room? For example, how does the room signify authority, prestige, wealth, renaissance, and personal branding? Post your response in the Virtual Museum Discussion Forum.”

The United States history course had the same assignment but instead of a unit on Europe discussing Versailles, the unit was on leaders in early United States history. The semi-structured assignment gave just enough structure that students knew what to do while also giving enough

freedom of intellectual movement to explore on their own in a way that encouraged students to discuss what interested them personally.

Results

During the first academic term in this study, fifteen students—30 percent of the class—made comments specifically about their reactions to the virtual art museums assignment itself. This is important because virtual museums in and of themselves were not new per se, but the use of virtual museum e-field trips appeared to be more than a novelty to students. The virtual museum e-field trips seemed to generate genuine interest from students in this survey course who were not history majors. The virtual art museum assignment forum in the online course LMS was originally intended as a short observation in which student would post about something that they learned from their virtual museum visit. However, 30 percent of students wrote much longer observations and praised the assignment itself. The comments tended to suggest that they had fun doing this assignment—virtually visiting a real museum that had been virtualized into a 3D environment as if the student were standing and walking in the physical museum. Some students were “amazed by the actual building” (see Figure 1).

Figure 1.

An example of a student response in the LMS discussion forum to the architecture of the museum.

Directions	
Required to post a 50+ word reflection on what you learned from your visit to a virtual museum. Include in your reflection 1) the name of the virtual Museum, 2) the titles/descriptions of the art piece(s) you looked at, 3) and note any relevant connection to the course content/readings. (30 points). All comments must be respectful.	
The Smithsonian National Museum	1/20/2013 10:36 AM
Score: --	Flag: --
<p>I took a virtual tour through the Smithsonian National Museum and I was amazed first by the actual building, what a marvelous piece of architecture. Then I saw the Castles and Crusaders exhibit and it depicted several religious artifacts and a breath-taking picture of Jesus on the cross. Next I went into a series of Western Cultures exhibits and began exploring. Exhibit one depicted two Indian men in a cave, one holding fire(for light) and the other painting a horse on the cave wall. The next exhibit took place on a river bank and showed soldiers apparently supervising slaves working in the fields. The next was an exhibit about Trade and Empire, which showed pottery and other goods for trade. These exhibits directly reflect the early and raw beginnings of Western Culture. I have never visited a virtual museum before and have to say I will be sharing this experience with my children. As a child I had the privilege of visiting numerous museums in San Francisco, I have wanted to bring my own children there, perhaps now I can.</p>	

Another student (“Student 1”) wrote:

“All right, so how cool is this Google Art Project!? I had no idea this even existed before this class! I visited the Smithsonian American Art Museum. I kinda (virtually) stumbled throughout the rooms for awhile until I found several portraits of Native American Indians.” (Student 1 response, 2013)

This student was interested in Native American history and was able to find portraits that were of interest to them personally. This semi-structured exploration activity using virtual museums seemed to encourage students take charge of their own learning in which the instructor was the guide. Some students wrote remarkably more than the minimum and made connections between popular culture and history based on their virtual museum visit (see Figure 2).

Figure 2.

An example of a student response in the LMS discussion forum indicating enjoyment of the assignment itself.

Directions	
Required to post a 50+ word reflection on what you learned from your visit to a virtual museum. Include in your reflection 1) the name of the virtual Museum, 2) the titles/descriptions of the art piece(s) you looked at, 3) and note any relevant connection to the course content/readings. (30 points). All comments must be respectful.	
Native American Virtual Museum Visit	1/16/2013 4:07 PM
Score: --	Flag: --
<p>All right, so how cool is this Google Art Project!? I had no idea this even existed before this class!</p> <p>I visited the Smithsonian American Art Museum. I kinda (virtually) stumbled throughout the rooms for awhile until I found several portraits of Native American Indians.</p> <p>http://www.googleartproject.com/collection/smithsonian-american-art-museum/artwork/wah-ro-nee-sah-the-surrounder-chief-of-the-tribe-george-catlin/544143/ (Wah-ro-née-sah, The Surrounder, Chief of the Tribe 1832, George Catlin).</p> <p>http://www.googleartproject.com/collection/smithsonian-american-art-museum/artwork/elk-foot-of-the-taos-tribe-eanger-irving-couse/540381/ (Elk-Foot of the Taos Tribe 1909, Eanger Irving Couse).</p> <p>http://www.googleartproject.com/collection/smithsonian-american-art-museum/artwork/mah-to-toh-pa-four-bears-second-chief-in-mourning-george-catlin/540412/ (Máh-to-tóh-pa, Four Bears, Second Chief in Mourning 1832, George Catlin).</p> <p>http://www.googleartproject.com/collection/smithsonian-american-art-museum/artwork/the-last-race-mandan-o-kee-pa-ceremony-george-catlin/540414/ (The Last Race, Mandan O-kee-pa Ceremony 1832, George Catlin).</p> <p>http://www.googleartproject.com/collection/smithsonian-american-art-museum/artwork/making-sweet-grass-medicine-blackfoot-ceremony-joseph-henry-sharp/549137/ (Making Sweet Grass Medicine, Blackfoot Ceremony ca. 1920, Joseph Henry Sharp).</p> <p>I LOVED this picture:</p> <p>http://www.googleartproject.com/collection/smithsonian-american-art-museum/artwork/corn-dance-taos-pueblo-norman-s-chamberlain/579046/ (Corn Dance, Taos Pueblo 1934, Norman S. Chamberlain).</p> <p>I think it's important to remember the roots of the United States, and those that lived here before the mounds of settlers that flocked from lands afar completely toppled Indian culture.</p> <p>As I was reading through our textbook, (Ayers et al 2009), I became increasingly disgusted at how humans treated one another so callously. The sheer degradation of slavery. Forcing Native Americans off of their lands. Creating wars and spreading illness. What especially pointed my interest was how the US government treated the Native Americans in particular, especially this quote: "Great Britain's neglect of its Indian allies in negotiating the peace led the U.S. government to treat them as a conquered people. With great bravado, considering the Confederation's small army, American commissioners said to the Ohio Indians, "You are mistaken in supposing that ... you are to become a free and independent nation, and may make what terms you please You are a subdued people" (chapter 6, page 156, Ayers et al 2009).</p> <p>Looking at the pictures in this virtual museum, I wondered what their culture was like for the Indians before their world was ripped from beneath them. What was life like? Our textbook mentions in the early chapters that they were a highly complex group of civilizations. These pictures show a life filled with ceremonies.. with practices and a way of life. They feature individuals, not a 'subdued' person.</p> <p>I was reminded of the 1975 movie "I Will Fight No More Forever", where the movie begins with the following voice-over: "This story began when the first white man set foot on the American continent and found it occupied by the people he would call Indians" (http://www.jacknilan.com/nativeamerican/fight.html).</p> <p>If you haven't seen the movie, I would sincerely recommend it, especially as it may put what we've read in our</p>	

Student 2 wrote:

“When I told my husband I was going to take a virtual tour of a museum, we laughed about the idea of a robot that I controlled wandering around a museum, knocking over priceless artifacts, and commenting on the artwork in a loud robot voice. Of course, my visit was nothing like that. I was very pleased to see technology put to such good use. The virtual museums are an excellent tool for learning. I love that you can simulate actually being in the museum with the walking around feature. I viewed the National Gallery of Art, Washington DC, the Smithsonian American Art Museum, and the White House collections.” (Student 2 response, 2013)

The student’s response indicated that the activity was fun; so much so that she included her family to learn together with her while completing the exploration.

Student 3 wrote: “First off, wow! I love the idea of a virtual museum because there is so much one can learn by just observing a work of art whether it be a painting, an object, or a sculpture” (Student 3 response, 2013). This student was interested in sculpture and enjoyed the process of virtually walking through the museum. These museums are real; Google used 3D technology to take pictures of the entire inside of the facility, so students could get a sense of the actual real-life building.

Student 4 wrote:

“I loved the idea of a virtual museum visit. After seeing how many different works of art were available for viewing it seemed amazing. I really enjoyed the interactive museum view that was available when you went to the Smithsonian American Art Museum.” (Student 4 response, 2013)

This student, similar to others, may never have visited most or any of the museums that were part of this activity had it not been for this virtual platform that allowed students to virtually “visit” the museum in person.

Student 5 liked the virtual museum tour but also noted that the controls could be more user-friendly: “I very much enjoyed the [virtual] museum tour, but found that it took a lot of getting used to navigating around” (Student 5 response, 2013). Google has made several adjustments to the navigation. This student did get used to the navigation after a while and enjoyed the activity.

Student 6 noted that she is back in school after thirty years and considered the virtual museum assignment to be an enjoyable activity for a history course:

“Putting faces with names of the people you are studying is amazing. I have not been in school for over thirty years so the technology is very different. The ability to take a tour of the era you are studying and taking a look at the furniture and art is fascinating.”
(Student 6 response, 2013)

This student appreciated how technology was being used in this online course to take a virtual field trip from their house.

Student 7 wrote in response to another student on the forum for the virtual museum assignment: “I LOVE THIS! I just spent the last twenty minutes showing these [virtual museums] to my husband, haha! Thank you so much for sharing; super cool!” (Student 7 response, 2013). These comments from students themselves suggest how much fun the virtual art museum assignment was to do—so much fun, apparently, that some students even involved family members in their virtual museum visit.

Conclusion

These responses suggest the direction for an additional study on a larger scale to examine adult learner response to virtual museums in online history courses. Virtual art museums can be implemented as assignments in online history courses to increase student engagement in the historical material covered in the course. The virtual museum was seen as a fun, interactive activity by students who indicate that this tool will be used even after the course is completed. Although most students enrolled in the course did not specifically comment on their opinion of the assignment itself, 30 percent of students commented on the assignment itself even though they were not prompted nor instructed to do so. This is a substantial percentage for an action research study involving online 100-level courses and seems indicative of the virtual museum assignment being an engaging and fun activity for students.

Inferred from these anecdotal discussions from students in their online course assignment forum within the LMS are that students appreciated getting to virtually visit real museums via Google's platform. The assignment itself was semi-structured so that students had specific questions to answer within a topic while being able to focus on aspects of the virtualized museum that were of most interest to them personally. This seemed to be an effective balance between assignment parameters and encouraging student engagement.

Future research direction could focus on the continued importance of engaging virtual learning options in online courses. Physical museums that have been virtualized can be studied systematically across online college courses for learner engagement. Assignments can be designed that are informed by systematic research into learner response to virtual museum assignments across history courses and humanities courses.

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