

Assignment 1: Proposal for Using AR/VR/AI to Teach or Train

“Bringing the World of the Victorian Dead to Life” is a virtual reality (VR) project aimed at genealogists, family historians, folklorists, and anyone else who visits graveyards and wants to know more about them. High school or freshman college students would find this experience particularly interesting. Learners are introduced to topics such as the significance of imagery on headstones, causes of death in the Victorian period in America (for our purposes, ca. 1860-1890), the carver of the stones and his process, recreational uses of cemeteries during the period, and funerary and mourning customs. The project would be implemented by creating the various characters and scripting their possible responses. Artificial intelligence would greatly enhance the ability for more realistic responses to questions, but that is not essential for project completion.

The setting of the VR experience is an American graveyard during the Victorian period. Learners may wander at will through the setting, interacting with the following four areas: headstones, a stone mason workshop, picnickers, and a church.

Any of the headstones throughout the setting will display name and birth and death dates floating above. When a headstone is interacted with, either by touching or walking near it, that person will appear, dressed in his or her period clothing. The deceased person will converse with the learner on topics pertaining to occupation when alive, cause of death, and various facts about their role in society. The character will also explain what the symbols on their headstone signify.

The stone mason workshop allows the learner to discover how the headstones were created. The learner interacts with the stone mason to see a demonstration of shaping a stone and carving the epitaph. The stone mason will also coach the learner in making a headstone, giving the student actual (simulated) experience with the tools.

The picnic area introduces the rural cemetery movement (Kendall, 2018), during a period in which graveyards also served as recreational areas. This movement happened against the backdrop of deadly epidemics and a high infant mortality rate. Picnicking in cemeteries allowed people to continue to associate with their dead loved ones, but also to get out in nature and enjoy the garden-like atmosphere. The learner in this area interacts with two young couples who are picnicking in the cemetery to learn more about why they would do this, an activity so foreign to us today.

The church area shows a Victorian-era funeral and burial. The learner may interact with the minister and the mourners to learn about the complex mourning customs of the time. Outside, the learner may follow the casket to the burial. The gravedigger will explain disposition of the dead in a time before funeral homes.

This interactive experience presents an often neglected and even shunned aspect of society in a relatively recent time period. The learner will understand more about these aspects and understand them as a reflection of the era, helping to achieve a theory of the influences that shaped the people of the time, and how those older traditions affect those of today.

Learning objectives include:

- Interpret the meanings of symbols found on tombstones in the context of the Victorian era.

- Describe the process of creating a headstone, from rock outcropping to finished product.
- Explain the reasons behind the practice of picnicking in cemeteries during the period.
- Hypothesize from the experiences a theory for these funerary practices and customs in the context of what was happening in America at the time.

I chose virtual reality for this project rather than augmented reality because of the ability to control the entire setting. The infographic “Divergent Realities: AR vs. VR” displays the differences between the two, explaining that in VR, “your screen becomes your world” (LumusVision, 2016?), allowing for the presentation of an immersive reality, the very concept I had in mind for the project.

The project uses most of the fundamental principles required for VR learning experiences, as set forth by Kapp (2017). It is instructionally grounded, not using technology for its own sake, but because it allows for a richer learning experience. Everything revolves around the learner and her or his interests, fulfilling the “participant centered” principle. The experience will be bounded (“contextually situated”) so that the learner will encounter all the learning objectives listed above. The scripts will need to be written to accomplish this. By its nature, the experience is action oriented. Most of this action is conversation, but the stone mason workshop does involve the learner in physical activity.

Kapp’s 5th principle is not explicitly present in this project. Consequential experience is not an integral part of this learning module. Learners are doing more consuming and less contributing, thus violating Kapp’s 6th fundamental VR principle of being collaboratively motivated. This aspect could be achieved by incorporating artificial intelligence into the experience. Learners could offer their modern-day experiences of funerary culture to the characters with whom they interact, for a two-way conversation.

The last of Kapp’s principles required for VR learning experiences is “reflectively synthesized.” At the end of the interactions with the cemetery, learners would come together to discuss their ideas about what they learned. The final assessment of the activity would be a group blog relating the customs and practices surrounding death in the American Victorian era to the events and attitudes of the time, meeting the “hypothesize” learning objective.

Kapp, K. (2017, January 7). Principles for creating a successful virtual reality learning experience [Blog post]. Retrieved July 11, 2019, from <http://karlkapp.com/principles-for-creating-a-successful-virtual-reality-learning-experience/>

Kendall, J. (2018, October 24). Remembering when Americans picnicked in cemeteries [Blog post]. Retrieved July 12, 2019, from <https://www.atlasobscura.com/articles/picnic-in-cemeteries-america>

LumusVision. (2016?). [Divergent realities: AR vs. VR] [Infographic]. Retrieved from https://samford.instructure.com/courses/13053/files/1040967?module_item_id=328222

McCurley, V. (2016, May 22). Storyboarding in virtual reality [Blog post]. Retrieved July 12, 2019, from <https://virtualrealitypop.com/storyboarding-in-virtual-reality-67d3438a2fb1> [Used template for storyboard]