

There be monsters: How augmented reality is blazing the trail of innovative information literacy instruction

Amber Sewell - The University of Tennessee, Knoxville

There be monsters: How augmented reality is blazing the trail of innovative information literacy instruction

Amber Sewell, M.S.I.S, Graduate Teaching Assistant -
The University of Tennessee

The Problem

Less than 50% of all first-year composition classes at the University of Tennessee, Knoxville come to the library to receive information literacy instruction.

Even with those numbers, human resources and space constraints create barriers for meeting the instructional load.

How do we reach the more than 50% of first-year students who are not receiving library and information literacy instruction while being mindful of these restraints?

Peer Survey

To get a sense of how others were meeting this challenge, a survey of 16 institutions identified as aspirational peer institutions by the University of Tennessee, Knoxville was conducted in the fall of 2018, inquiring about their practices for delivering information literacy instruction to first-year composition classes.

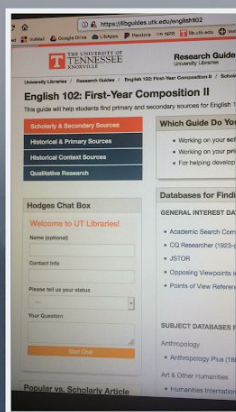
Of the 13 respondents, 11 offer only face-to-face instruction; of the two that use mixed method, the online components are limited to modules, tutorials, and quizzes.

The Solution

Augmented reality is a way to bring students into the library on their own time while still addressing traditional learning outcomes.

Inspired by a popular first-year composition theme, students will hunt myths and monsters throughout the library, visiting key service points and learning basic information literacy skills along the way. Springshare's LibChat function will be utilized to further guide the experience, introducing students to yet another library resource.

This approach allows the Teaching & Learning Programs Department to broaden the scope of its instruction in an innovative way, while tackling some of the common barriers found in online instruction.



These are examples of triggers similar to those used in the game. Students will locate such triggers to view video content explaining an aspect of the research process, or an introduction to a key service point in the library.

To view the AR content, launch the ARIS app and locate "LOEX 2019 Demo". Hold the device over the images above to trigger the video. Users have the option to click "Continue" on the initial screen to open the video in a different window.

Literature Review

While many academic libraries are recognizing the need to expand the scope of library instruction, attempts to do so are so far largely limited to online tutorials and worksheets/scavenger hunts. Numerous studies have been done concerning students and their online learning habits, and one summary of studies of online library instruction in particular found that "self-paced tutorials, self-directed learning, problem-based instruction, point-of-need instruction, and chunking information into learning modules were noted as optimal both for student preference and for effective learning" (Watts, 2018). Another factor that librarians often focus on is the problem of scalability versus personal impact (Moran & Mulvillill, 2017), keeping library anxiety in mind as a prominent barrier to student library use (Mellon, 1986).

Attempts to bridge the gap between students and information literacy outside of embedded librarianship or one-shots differ by institution, from online worksheets in Google Forms (Dai, 2017), to scavenger hunts within the physical library (Ly & Carr, 2010; Luckenhaus, 2017), to self-guided tours (Foley & Berrel, 2019; LeMire, Gilbert, Graves & Faultry-Okonkwo, 2017). Augmented reality, defined as "digital overlay on top of the real world, consisting of computer graphics, text, video, and audio, which is interactive in real time" (Papagiannis, 2017) is slowly being incorporated in the academic library (Lota & Tschape, 2019; Van Arnhem & Spiller, 2014), but its use is primarily limited to tours of the library, designed to introduce students to the physical space, rather than for instructional purposes (LeMire, Graves, Hawkins & Kallani, 2018; Labrake & Deptula, 2018).

Resources

See handout for resources, available at: <https://tiny.utk.edu/loex2019ar>

For more information about this poster, please contact Amber Sewell at asewell@volk.utk.edu.

Learning Objectives

Students will be familiar with the following after completing the experience:

- Using the library's SMS chat function
- Knowing where to check out a book and request research assistance at the public services desk
- Conducting a search in the library's online catalog using Boolean operators and appropriate search filters
- Accessing the relevant course LibGuide and locating their subject librarian
 - Accessing a scholarly database
- Conducting a search in a scholarly database using Boolean operators and appropriate search filters
- Finding a book in the online catalog, and using the mapping feature to physically locate the book in the stacks
- The location of the library's special collections, and some of its relevant uses for research for their course

Game Flow

Students begin at a LibGuide containing instructions and tutorials, begin the game.	Students receive a message directing them to the library's website.	Students use app to trigger video explaining library's chat function.
Students are guided to a database, where they must complete a search to receive their next clue.	To find more resources, students are directed to their LibGuide, where they will learn about their subject librarian.	Students are directed to visit the library, beginning at the public services desk, where a video will explain research assistance & checking out books.
Students are guided through locating a book in the online catalog, then going to physically find the book in the stacks.	Students are finally guided to Special Collections, where they'll see a cool archival resource before concluding the game.	At the conclusion, students will be congratulated, then prompted to complete a short assessment.

Next Steps

This summer, the pilot will be finalized and tested by several user groups.

The AR experience will be offered to English instructors in the fall of 2019.

Assessments of students and instructors will be conducted both during and at the conclusion of the semester; results will be used to inform future iterations of the project design.

To view the AR media for the images above, open the ARIS app and search for "LOEX 2019 Demo". Hover over the image to view these examples of how AR will be used to aid in the delivery of instruction.

References:

- Dai, J. (2017). *The library scavenger hunt reimagined: Incorporating the ACRL's Framework for Information Literacy for Higher Education into the library scavenger hunt* [PDF document]. Retrieved from <https://www.scla.org/assets/docs/iTeach4/dai%20presentation.pdf>.
- Foley, M., & Bertel, K. (2015). Hands-on instruction: The iPad self-guided library tour. *Reference Services Review*, 43(2), 309-318.
- Labrake, M., & Deptula, M. (2018). Reinventing new student orientation with an augmented reality scavenger hunt. *Marketing Libraries Journal*, 2(1), 96-103.
- LeMire, S., Gilbert, S., Graves, S., & Faultry-Okonkwo, T. (2017). Selfie as guide: Using mobile devices to promote active learning and student engagement. *University Libraries Faculty & Staff Contributions*. 87.
- LeMire, S., Graves, S., Hawkins, M., & Kailani, S. (2018). Libr-AR-y tours: Increasing engagement and scalability of library tours using augmented reality. *College & Undergraduate Libraries*, 25(3), 261-279.
- Lota, J., & Tschaepe, B. (2015). Tapping into the first year experience: Effective learning with augmented reality and pop culture. Presented at LOEX 2015.
- Luetkenhaus, H. (2017). Redesigning the library scavenger hunt [PDF document]. Retrieved from <https://sc.edu/nrc/presentation/annual/2017/handouts/CT-134%20Redesgning%20the%20Library%20Scavenger%20Hunt%20in%20First-Year%20Seminars%20Part%202.pdf>.
- Ly, P., & Carr, A. (2010). The library scavenger hunt strikes back: Teaching "library as place". CARL 2010 Conference Proceedings.
- Mellon, C. (1986). Library anxiety: A grounded theory and its development. *College and Research Libraries*, 47(2), 160-165.
- Moran, C., & Mulvihill, R. (2017). Finding the balance in online library instruction: Sustainable and personal. *Journal of Library & Information Services in Distance Learning*, 11(1-2), 13-24.
- Papagiannis, H. (2017). *Augmented human: How technology is shaping the new reality* (First ed.)
- Van Arnhem, J., & Spiller, J. (2014). Augmented reality for discovery and instruction. *Journal of Web Librarianship*, 8(2), 1-17.
- Watts, K. (2018). Tools and principles for effective online library instruction: Andragogy and undergraduates. *Journal of Library & Information Services in Distance Learning*, 12(1-2), 49-55.

Contact Amber Sewell for more information at asewell1@vols.utk.edu.