Sense of Direction: Embedding a Virtual Tour in Course-Integrated Instruction Sessions at an Academic Library

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Abstract

Because academic library tours typically require an entire class period to conduct, some professors are reluctant to provide students with opportunities for physical library orientation. Thus, when classes meet for course-integrated instruction without a tour, some students enter the library for the first time with little sense of their surroundings. For many students, an academic library can be overwhelming, posing potential barriers to learning. As an attempt to solve these problems, the University of Wisconsin-Stevens Point Libraries created a 4-minute virtual tour. In fall 2015, the tour was embedded as a quiz in the course management system D2L. That semester, two professors assigned the D2L quiz to five freshman English classes, and 88 undergraduates attempted the assignment. This case study describes how a virtual tour was embedded in a course management system to enhance library instruction. This paper also examines original data to determine if video viewership increased after the virtual tour was assigned in courses and if students satisfactorily completed a 10-question quiz based on the tour.

Keywords: virtual library tour, library instruction, library anxiety, course management system

University Library boasts a robust instruction program at the University of Wisconsin-Stevens Point (UWSP). Nearly 90% of the student body visits the library annually for course-integrated research sessions (Schmetzke, 2016). As part of the instruction program, librarians offer guided walking tours and a scavenger hunt to orient students to the building. However, both activities require an entire 50-minute class period, which some professors hesitate to surrender. Thus, when classes meet for library instruction without a tour, some students enter the 128,270-square-foot building for the first time with little sense of their surroundings. For many students, an academic library can be overwhelming (Mellon, 1986; Gremmels, 2015; McAfee, 2018), posing potential barriers to learning. To combat these problems, University Library created a 4-minute virtual tour in summer 2015. Posted on the library's YouTube channel, the tour (youtu.be/W1VcwPYrqj0) attracted few viewers initially. To increase exposure and provide professors with a time-saving alternative, the tour was embedded as a quiz in the course management system D2L in fall 2015. That semester, two professors assigned the D2L quiz to five freshman English classes, and 88 undergraduates submitted the assignment. This case study describes methods for creating a virtual library tour and examines the results of embedding the video into a course management system. The data reveal if viewership increased after the virtual tour was assigned in courses and if students satisfactorily completed a 10-question quiz based on the video. This paper provides an example for instruction librarians considering embedding a virtual tour in a course management system in order to offer a time-saving alternative for professors and to ease library anxiety among college students.

Institutional profile

Founded in 1894, UWSP is a regional comprehensive institution with branches in Wausau and Marshfield. The Stevens Point campus reported an enrollment of 9,231 students in fall 2015 (University of Wisconsin-Stevens Point, 2015), which is the timeframe of this study. University Library, which occupies seven floors of Albertson Hall on the Stevens Point campus, has a permanent collection of approximately 500,000 titles. The library provides access to 132,000 print and online periodicals and subscribes to more than 270 databases (U.S. National Center for Education Statistics, 2019). Eleven librarians primarily serve traditional undergraduates but also assist graduate students and faculty members. All librarians participate in instruction, including one-shot sessions, credit courses, internships, and workshops.

Literature Review

Academic libraries have offered online tours since at least the mid-1990s. Evans Library at Texas A&M University released a virtual library tour in January 1996 (Mosley & Xiao). The tour gave users the choice of an interactive map or a list of 64 links. Mosley and Xiao said of the project, "The intent of the tour is to provide an alternative library orientation mechanism targeted specifically to students that are more comfortable with a computer learning environment" (p. 30). Three years later, Evans Library created another online tour to showcase a new annex (Xiao, 2000). Harnessing virtual-reality technology, this tour featured 360-degree realistic views. When the tour was unveiled at the annex's opening ceremony, Xiao noted, "The audience responded enthusiastically; they were amazed that they were able to view every detail of the new building without walking through the site" (p. 183). Also in 1999, the Albert R. Mann Library at Cornell University launched a virtual tour as part of a $4 million endowment campaign (Morris-Knower, 2001). Supplementing in-person tours for potential donors, the virtual tour highlighted the building, collections, and projects. The virtual tour received more than 211,000 hits within 11 months.

To save time and expand outreach, academic libraries continued to employ virtual tours in the new millennium. In 2000, Tolppanen, Miller, and Wooden examined library websites from 133 medium-size universities, finding that 18% offered virtual tours. In a 2002 study, Mach and Oling discovered that 54% of 123 Association of Research Libraries institutions posted virtual tours on their websites. In recent years, academic libraries have incorporated multimedia into virtual tours. At Appalachian State University, the Justice-Query Instructional Materials Center embedded panoramic images, a jigsaw puzzle, movies, and a quiz into its online tour (Rice & Gregor, 2013). In the tour's quiz section, students answered 13 of 14 questions correctly at least 80% of the time. In Australia, the Royal Melbourne Institute of Technology library morphed its virtual tour into a videogame titled "Library Amazing Race: Zombie Edition ONLINE" (Ingalls, 2015). Texas A&M University Libraries created a video library tour starring three student dance troupes (Anders, Graves, & German, 2016). The video was viewed more than 68,000 times. Soon after, Texas A&M University Libraries released an augmented-reality tour that was assigned to English students (LeMire, Graves, Hawkins, & Kailani, 2018). The tour included a short quiz embedded in course management system Blackboard, but the results were not published.

Method

Background

According to internal statistics, UWSP librarians taught 8,284 students during instruction sessions in the 2015-16 academic year (Schmetzke, 2016). Although some students attended multiple sessions, this figure represents nearly a 90% saturation of the student body based on fall 2015 enrollment of 9,231 students (UWSP, 2015). Students' familiarity with the library varied prior to attending instruction sessions. Some had attended several library sessions previously while others never had entered the building. To familiarize students with the physical layout of the building, librarians had developed a popular scavenger hunt called "Where's Stevie?" based on the school mascot, Stevie Pointer. By following clues, students collected letters of the alphabet throughout the library. After visiting seven areas, students unscrambled the letters to spell A-R-C-H-I-V-E-S. Students then visited the University Archives to pose for a photograph with a vintage Stevie Pointer mascot head. The scavenger hunt required an entire class period to complete, which some professors were unwilling to yield.

Design

To offer a shorter alternative to the scavenger hunt, University Library created a virtual tour in summer 2015. Based on the "Where's Stevie?" scavenger hunt, the virtual tour followed mascot Stevie Pointer as he explored six floors of the library, discovering a service or collection on each floor. For example, Stevie occupied a group study room on the fourth floor with the university chancellor. The lighthearted video sought to introduce students to the building while reducing library anxiety. The virtual tour was created with digital photographs, Adobe Photoshop, Microsoft PowerPoint, and Camtasia Relay. A campus photographer had uploaded 318 snapshots of the mascot on the university's public SmugMug photo-sharing site. Using Photoshop, the author carved cutouts of Stevie in several poses. The campus photographer also had uploaded dozens of images of the library, including scenes from every floor. In PowerPoint, the author transposed mascot cutouts over library scenes. After writing a script (see Appendix A), the author recorded the tour using Camtasia Relay. He uploaded the Camtasia Relay video to the library's YouTube channel and added closed captioning using YouTube's video manager. Although the final product measured 4 minutes and 3 seconds, the project took days to complete.

Implementation

Uploaded on July 1, 2015, the virtual tour received 29 views in the first two months according` to YouTube analytics (see Table 2). Viewership was understandably low considering the video was launched during summer break. With the fall 2015 semester approaching, the author sought to increase the tour's visibility by marketing it to professors. To accomplish this goal, the video was embedded in a quiz within the course management system D2L, used across campus. The quiz instructed students to watch the video and then answer 10 questions (see Appendix B). D2L automatically graded the quizzes, further reducing professors' time commitment. In the fall 2015 semester, two English professors agreed to incorporate the virtual library tour into their courses. The author exported the quiz as a zip file, which professors then imported directly into their D2L courses. The quiz was assigned to one section of English 150: Advanced Freshman English and to four sections of English 101: Freshman English. The professors agreed to share anonymized quiz scores for this study.

Results and Discussion

Eighty-eight students completed the quiz in D2L. Students averaged 9.18 correct answers out of a possible 10 (see Table 1). The advanced English 150 section posted higher average scores than the four English 101 sections. Overall, test scores suggested that the virtual tour adequately introduced students to the University Library. Because of strong scores, no major changes were made to the virtual tour under the assumption that students satisfactorily comprehended the materials. Likewise, no changes were made to library services based on the quiz results.

Overall viewership of the video increased with 637 views during the fall 2015 semester (see Table 2), reflecting a nearly 1,100% increase for the collective months of September, October, November, and December. However, viewership declined after the semester. From January 2016 until the video was replaced in October 2017, average monthly views dropped below 40. By separating views by month in Figure 1, usage largely followed the traditional academic year. Views remained steady during fall and spring semesters while nearly vanishing during summer and winter breaks. Views spiked dramatically whenever the tour was assigned in classes, such as in September 2015 and February 2016. Despite spikes and lulls, viewership averaged slightly more than 55 views per month during the video's 27-month lifespan.

Table 1

Virtual Library Tour Quiz Scores in Fall 2015

Course	Students	Average Score
English 150	13	9.85
English 101	75	9.07
Total	88	9.18

Note. Scores based on 10 possible points.

Table 2

YouTube Views of Virtual Library Tour

Period	Views	Monthly Average
July-August 2015	29	14.50
September-December 2015	637	159.25
January 2016-September 2017	828	39.43
Total	1,494	55.33

Figure 1

YouTube Views of Virtual Library Tour by Month
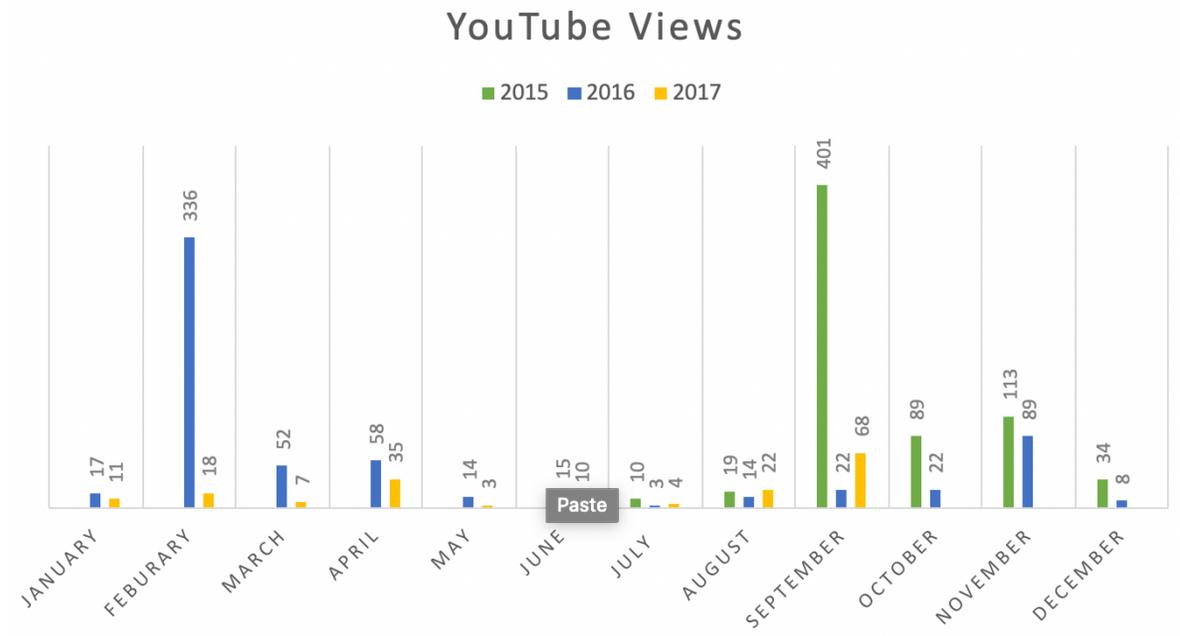
Note. The virtual tour was publicly available on YouTube from July 2015 until it was replaced by an updated version in October 2017.

The virtual library tour accomplished the goal of providing a brief, online option for students to familiarize themselves with the building, collections, and services. When students attended library instruction sessions for their English classes, they possessed a basic concept of their surroundings prior to entering the building. The tour provided an online option for professors as well. Instead of committing an entire class period to a scavenger hunt or in-person guided tour, professors assigned the virtual tour as a quiz, which D2L graded automatically. As statistics indicated, students did not seek the virtual tour unprompted. As stated previously, views skyrocketed when the tour was assigned in classes and practically disappeared during academic recesses. Librarians may want to consider this pattern before creating a virtual tour. Without the benefit of class assignments, tour viewership could remain low, thereby nullifying the substantial staff time invested in the project, which will be discussed below.

Limitations

Although 88 students completed the D2L quiz, the virtual tour's YouTube statistics increased by more than 600 views after the video was assigned to five English classes during the fall 2015 semester. To answer quiz questions correctly, English students perhaps watched the video multiple times, potentially inflating YouTube views. More likely, viewers outside of the English classes discovered the virtual tour as well. Although a correlation seems to exist between the D2L assignments and higher YouTube views, it is unknown if viewership would have grown without the quiz. Judging by test scores, students comprehended the virtual library tour well, posting better than a 91% average on the quiz. However, students' prior knowledge of the library is unknown. It also is unknown if the virtual tour oriented students better than a physical tour or scavenger hunt. No data exist whether the virtual tour eased library anxiety or if students preferred the virtual tour over a scavenger hunt or an in-person guided tour. Future quizzes could ask students about their familiarity with the library, such as the number of times they had visited the building, prior to watching the virtual tour. Similarly, the quiz could ask students to rate their library anxiety before and after watching the virtual tour. A space on the quiz also could be provided for comments.

Technology and resources. The virtual tour required proficiency in several software programs, which might hinder some librarians. If following the example outlined in this article, librarians should be skilled at Microsoft PowerPoint. Photo cutouts also are valuable and can be created in Adobe Photoshop or PowerPoint. Although narration was added using Camtasia Relay, voiceover also can be accomplished in PowerPoint. Of course, many other software

programs are available for creating videos if librarians are uncomfortable with PowerPoint. The video's quality benefitted from professional photographs, but some libraries might not have access to campus photographers. Cost also could be prohibitive because software and professional photos would be expensive to purchase. A virtual tour also requires substantial staff time, which carries a significant dollar value. Although hours were not tracked, the author spent days designing, assembling, recording, editing, captioning, and posting the tour. The video was created in the summer when academic library staff traditionally have extra time to tackle lengthy projects. Also, the university owned licenses to all the software for the video, thereby requiring no additional expenditures beyond staff time. Despite being labor-intensive to create, the University Library virtual tour became outdated within months of its release. For example, the library stopped circulating iPads, rendering a portion of the video as incorrect. The following year, the library building changed its name to Albertson Hall, creating a glaring inaccuracy in the video. To reflect these developments, the virtual tour was revamped in fall 2017.

Conclusion

The results of this study indicate the benefits of a virtual library tour from a time-management perspective, saving professors an entire class period of instruction. Test scores also suggest that the virtual tour successfully oriented students to the building. Data further show that video viewership increased after assigning the virtual library tour in college courses. With these benefits in mind, University Library has continued to promote the virtual tour. The tour has been embedded in a videogame in which students compete against classmates by answering timed questions. Professors have assigned the videogame in multiple courses, providing opportunities for further data collection and study. Outside of courses, University Library has published a link to the virtual tour on promotional bookmarks, which have been distributed during orientations and outreach events. The video also has been shown during orientations when sufficient time for walking tours was unavailable. Nevertheless, librarians should consider the staff time, resources, and technical skills required to create a virtual tour. The return on investment could be disappointing, especially if the video is not integrated into coursework. For University Library, the effort largely has paid off, equipping staff with an outreach tool for promoting services to patrons before they enter the building.

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Appendix A

Transcript of Virtual Library Tour

Meet Stevie. Stevie is a new student at the University of Wisconsin-Stevens Point. For good grades, Stevie will spend a lot of time at the UWSP Library. Let's go there now.

The UWSP Library is located in the Learning Resources Center. The library contains 600,000 items throughout sixth floors. The building also features computer labs, a museum, a coffee shop, a tutoring center, disabilities services, the IT Help Desk, and much more. Let's follow Stevie on a tour of the UWSP Library, shall we?

On the first floor, Stevie visits the Access Services Desk. At the Access Services Desk, Stevie can check out books, periodicals, course reserves, laptops, iPads, and many other items.

Around the corner, Stevie stops by the reference desk, also located on the first floor. At the reference desk, Stevie can ask UWSP librarians for help with his research assignments.

On the second floor, Stevie explores the periodicals collection. In periodicals, Stevie can find journals, magazines, and newspapers.

The third floor hosts the Instructional Materials Center, better known as the IMC. In the IMC, Stevie can find videos, children's books, school textbooks, CDs, and other items. Stevie especially enjoys creating objects on the library's 3-D printer, which also is located in the IMC.

UWSP Library's main book collection begins on the fourth floor and continues to the fifth floor.

The fourth floor also offers 16 group study rooms. Group study rooms can be reserved at the Access Services Desk on first floor. However, two IDs are required. Make sure to bring a friend.

Along with the library's main book collection, the fifth floor houses the University Archives. The Archives preserves historical documents from the university, county, and state. The University Archives is a wonderful place to research the campus, important events, and Central Wisconsin genealogy. Stevie even bumped into a few ancestors.

The sixth floor contains government documents. The collection features thousands of documents from the federal government and the state of Wisconsin.

That concludes our tour of the UWSP Library. To learn more about the library, visit www.uwsp.edu/library. Thank you for tagging along.

Appendix B

Virtual Library Tour Quiz Questions

Based on the "UWSP Library Tour" video (youtu.be/W1VcwPYrqj0), these questions were embedded into a quiz in the course management system D2L at the University of Wisconsin-Stevens Point:

1. Where is the UWSP Library located?
   o   Learning Resources Center
   o   George Stien Building
   o   Dreyfus University Center
   o   Schmeeckle Reserve

Correct answer: Learning Resources Center

2. How many items does the UWSP Library contain?

  o   400,000

  o   1 million

  o   150,000

  o   600,000

Correct answer: 600,000

3. What types of items can you check out at the Access Services Desk on first floor?

  o   laptops

  o   books

  o   course reserves

  o   all of the above

Correct answer: all of the above

4. Where can you ask a librarian for help with research assignments?

  o   Access Services Desk

  o   Reference Desk

  o   Instructional Materials Center (IMC)

  o   Government Documents

Correct answer: Reference Desk

5. Where are government documents located?

  o   fifth floor

  o   first floor

  o   third floor

  o   sixth floor

Correct answer: sixth floor

6. Where can you reserve a group study room?

- o   Access Services Desk
- o   University Archives
- o   Periodicals
- o   Reference Desk

Correct answer: Access Service Desk

7. The main book collection begins on which floor?

- o   fifth floor
- o   fourth floor
- o   second floor
- o   first floor

Correct answer: fourth floor

8. Where are newspapers located?

- o   Reference Desk
- o   Instructional Materials Center (IMC)
- o   Government Documents
- o   Periodicals

Correct answer: Periodicals

9. Where is the library's 3-D printer?

- o   Instructional Materials Center (IMC)
- o   Periodicals
- o   Reference Desk
- o   University Archives

Correct answer: Instructional Materials Center (IMC)

10. Where is the best place to research UWSP historical events?

o   Government Documents

o   Access Services Desk

o   Periodicals

o   University Archives

Correct answer: University Archives