Sustainability in the first-year experience
Taking library orientation online

Since 2012, Pace University in New York City has used a library scavenger hunt for the required library orientation for first-year undergraduates. As detailed in a 2013 article in *C&RL News*, the scavenger hunt replaced library tours and classroom sessions as undergraduate enrollment grew and individual class visits were no longer feasible. As student enrollment continued to increase each year, it became less manageable and more wasteful to conduct a paper scavenger hunt. Each fall, more than 1,000 students collected five separate sheets of paper in order to complete the activity. Not only was this a waste of library resources and an unacceptable environmental impact, it also required a great deal of Jennifer Rosenstein’s time to print the volume of clues and complete the data entry for the surveys. For fall 2016, she was determined to make the scavenger hunt as close to paperless as possible.

Prior to 2016, Rosenstein was hesitant to require students to use smartphones in order to complete the library scavenger hunt. The primary concern was that some students, especially low-income students, would not have their own smartphones. However, anecdotal observations of students seemed to suggest that essentially every student now has a smartphone, as the technology has become more ubiquitous. We felt confident that switching to a paperless activity would not cause problems or alienate low-income students. Since many students chose to do the scavenger hunt with a partner or in a small group, if necessary, they could share a device.

Going paperless
Pace University subscribes to Qualtrics, an online survey platform. Qualtrics has well-developed mobile functionality and seemed like an excellent choice to build the online scavenger hunt. Rosenstein was able to create the scavenger hunt as an online survey in Qualtrics and add the specific features we wanted to direct students’ completion of the activity. One of the concerns with switching to a paperless activity was that students still needed to move about the library to collect clues and explore the library’s physical layout. Rosenstein wanted to ensure as much as possible that students would correctly answer each question in the online version before moving on to the next question and not just guess or try to skip to the end. In order to do this she used the Force Response option for each question. If students did not select the correct answer, they...
received a message that they needed to answer the question correctly. For the open-ended questions, we required a minimum number of characters in order to advance to the next question, in order to cut down on the number of students who did not actually work through the entire activity.

It is common for students to complete the scavenger hunt in pairs or small groups, and we wanted each student to complete the activity and not simply rely on a classmate for the answers. We separated the questions into sections called blocks and used options in Qualtrics to randomize the order of the blocks, except the introductory text and concluding survey. As they started the activity, students were informed that if they were working with classmates, they would have all the same questions but not in the same order. This choice was intended to encourage more students to complete the questions themselves rather than rely on a classmate's answers.

In order to make the scavenger hunt easy to access, we used the site tinyurl.com to generate a short, easy-to-use URL that students could easily type into their phones' web browser.

Results
The paperless version of the scavenger hunt premiered in fall 2016, and student responses to the online scavenger hunt were quite positive. As part of the activity, students were required to complete a short survey on the experience. Seventy-five percent reported that they liked using a phone or mobile device for the scavenger hunt. Sixty-five percent said that completing the scavenger hunt made them more likely to use library resources for assignments, and 86% found the library staff friendly and helpful. Overall student comments were positive, with many students saying that they found the scavenger hunt fun and helpful.

Positive comments included, “I thought it was a nice way to get around and learn about the library. I hadn’t ever thought of anything like this, so I think it is very creative.”

Some students did report frustration with the university’s Wi-Fi network or had technical problems with their phones. One student commented, “It was slightly annoying and difficult to get the website I’m using to work on my phone and I [sic] had to create new tabs to read the articles and search the database in order to complete the hunt.” Other students felt the amount of reading and writing required was unnecessary, for example “I feel like the scavenger hunt contained elements unrelated to the library. I did not think that reading an article and answering questions or prompts about it will help me locate different areas of the library.”

Switching to the online activity reduced the amount of paper required and the amount of time Rosenstein needed to spend making copies and stocking the different points of the scavenger hunt that had previously required paper clues. For the 2016 version of the game, the only paper required was library maps—which students were encouraged to return at the end—and certificates of completion—which each student received for completing the game. The certificates used two sheets of paper, one with the certificate and one with some further information about the library. Given the large number of students completing the activity, this was still more than 2,000 sheets of paper.

For the 2017 version of the activity Rosenstein sought to address the concerns that students had raised the previous year and further reduce the paper use. The amount of reading and writing required was cut down to make it easier to read and respond on a smartphone. In the 2017 version, students were also required to get a library barcode as part of the scavenger hunt. At Pace University, students must request a library barcode from circulation, and the barcode is required to access the student’s online library account. In previous versions of the scavenger hunt, students were encouraged to get a library barcode after completing the activity, but it was not required. After conversations with
the Circulation staff, Rosenstein became convinced that it was important to complete this step as part of the scavenger hunt, to ensure more students had their barcode.

Based on suggestions from colleagues the final certificate of completion was changed to a half-sheet of paper, with library information on the back, instead of two full sheets. This drastically reduced the amount of paper needed for the scavenger hunt activity.

The final survey was also shortened in the 2017 version, as we wanted to focus on the most essential information from students. The survey no longer asked if they liked the use of mobile devices for the scavenger hunt. The 2016 data indicates that the shift to the paperless version was a success, and given the enormous amount of paper saved, we do not intend to return to a paper version. Going paperless saves the library money and staff time, and is much more environmentally friendly. The final survey in the 2017 scavenger hunt asked the following three questions, with a simplified Likert scale for answer options:

Once again student responses were overwhelmingly positive. The survey also asked students to explain why they disagreed with any of the three statements, and to give any comments or suggestions for changing the activity for next year. Many of the students who disagreed stated that they felt the activity was not helpful or that they already knew how to use the library. However, there were only 60 responses out of a total of 1,081 who completed the activity, so it seems a fairly small number of students were unhappy with the activity.

Students had the option at the end of the survey to leave comments or suggestions for changing the activity for next year. Out of the 301 students who left comments, 59% of the comments were positive. Only 8% were negative, with the remaining comments being neutral or offering constructive suggestions. The negative comments mostly suggested that some students felt the activity was unnecessary, for example one student commented, “Don’t do it.” Positive comments included “It was a great way to explore the library and bond with classmates,” and “This is a great activity to explore the library. I have been using the library before this but after this scavenger hunt i [sic] found out there are more things to do here other than just use the computers. Definitely do this again next year!”

In the fall 2018 semester, Rosenstein was promoted to a graduate services position and Gina Levitan assumed responsibility for the scavenger hunt. Levitan decided to slightly revise the activity but keep the general format from previous years: we still used Qualtrics and the mobile site. The previous iteration of this activity included a reading comprehension section that required students to find a passage in a reference book. This section was substituted for a series of questions that highlighted instead the spaces and services that the library provides. Students were no longer required to give correct answers before moving on to the next question, rather many questions were left open-ended. These open-ended questions made for interesting

2017 orientation survey results. View this article online for detailed images.
observations on how students were interacting with the scavenger hunt, but going forward they will be changed to multiple choice, in order to quantify the results more accurately. There were 1,011 completed responses out of a first-year class of 1,408 students (approximately 72%), and 67% of the first year class chose to comment on the activity. Of those responses, approximately 87% were positive, suggesting a higher level of engagement with the scavenger hunt over previous years.

The final survey in the 2018 scavenger hunt used the same three questions as the previous years, and student responses were quite similar, as seen below.

**Future directions**

The evidence from fall 2016 through fall 2018 shows that moving to a paperless online scavenger hunt was a success. One challenge for other institutions wishing to attempt something similar is having access to a platform that can be used to create the activity. Our institutional access to Qualtrics made it easy to build a scavenger hunt that worked well on a mobile device and had all the required functionality. If an institution does not have access to a similar platform, it could be quite difficult to create a stand-alone app or website.

Increasing student participation in the library scavenger hunt has been a priority each year. In fall 2017, 77% of first-year students completed the library orientation, which was the highest percentage since 2012. However, the orientation is officially mandatory for all students and ideally 100% of students would complete the activity. The original goal for fall 2018 was to increase the percentage of students completing the library orientation through targeted outreach to those instructors who did not bring their classes to the library in fall 2017. Due to staffing shortages in the library, this outreach was not possible for fall 2018, but will be a priority for 2019. The size of the first-year class has increased every year, making it more challenging to contact all UNV 101 instructors.

As noted by Katherine Boss, Katelyn Angell, and Eamon Tewell, “Very little research exists regarding the assessment of library orientations specifically.” The fall 2019 version of the scavenger hunt will allow students to answer incorrectly on multiple-choice questions, opening up a new avenue of assessing the learning outcomes of the first-year library orientation.

**Notes**
