No Budget, No Experience, No Problem: Creating a Library Orientation Game for Freshman Engineering Majors

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Background

As the Applied Sciences Librarian at James Madison University (JMU), I hoped to develop an engaging, hands-on activity to introduce freshman engineering majors to the resources and services available at JMU's Rose Library. A search of library journals turned up several examples of academic libraries that had used games as an orientation activity. Some of these games were special events resembling murder mystery dinner parties (Boykin & Willson-Metzger, 2005), and used props and actors to add realism. Others combined a computer game with real-world elements (Donald, 2008; Broussard, 2010). At Trinity University, an alternate reality game titled "Blood on the Stacks" required students to search for clues online, in videos, and in the library building to solve the mystery of a stolen Egyptian artifact (Donald, 2008).

While reading about the success of these library games was encouraging, several factors constrained my project. I had no budget to purchase materials for the game and no previous experience as a game designer. The game would also need to be quiet and largely self-directed to avoid interfering with normal library operations. With these limitations in mind, I set out to design a simple, inexpensive library orientation game modeled after "Blood on the Stacks."

Development

The game, titled "Mystery at the Library", was intended to familiarize students with the Rose Library building and give them experience with basic library tasks such as checking out an item on reserve, looking up a book in the online catalog, and finding a book on the shelf by call number. I also wanted to introduce the students to RefWorks, an online reference management program.

While many library orientation games involve solving a murder or missing persons case (Marcus & Beck, 2003; Boykin & Willson-Metzger, 2005; and Kasbohm, Schoen, & Dubaj, 2006), the theft of a rare book seemed a more suitable crime for a library setting. In order to appeal to engineering students, I decided that the stolen book would be the (fictional) lab notebook of inventor Nikola Tesla. The suspects were four researchers who had been working in the library the night of the theft. A series of paper clues containing citations and call numbers allowed players to retrace the thief's steps through different areas of the building. One clue included the username and a password hint for a RefWorks account. After logging in, players could match the saved citations to the research interests of one of the suspects and identify the thief.

"Mystery at the Library" was introduced as a library orientation activity for freshman engineering students in 2010. Although response to the first iteration of the game was generally positive, feedback from players, comments from library desk staff, and my own observations identified several places where players tended to get stuck. If the sticking point was an element that added challenge to the game but did not actually teach players anything about the library, such as a puzzle that required deciphering a coded message, I eliminated it. Player comments indicated that navigating a large, unfamiliar library provided enough challenge to make the game interesting. In fact, one of the most common suggestions for improvement was that the game should involve even more exploration of the building. A revised and expanded version of "Mystery at the Library" made its debut in 2012.

Evaluation

Two sections of a 100-level Engineering course participated in "Mystery at the Library" in the fall of 2012. A third section that did not participate in any library orientation activity served as a control group. A survey was distributed to all three sections of the course after the experimental group completed the game. This survey asked students to rate their familiarity with library tasks on a 5-point Likert scale (1=Strongly Disagree, 5=Strongly Agree). The experimental group was also asked to provide feedback about the game. The response rate was 92% for the control group and 77% for the experimental group. I compared the mean level of familiarity from the control group to the mean level of familiarity from the experimental group. The experimental group indicated greater familiarity with each of the listed tasks (see Table 1). Reaction to "Mystery at the Library" was favorable (see Table 2), and the game was recommended for use with future classes by 79% of respondents.

	Control (N=22) Mean	Experimental (N=34) Mean
Get an item that is on reserve for your class	2.7	4.0
Look up a book in the JMU catalog	3.2	4.1
Find the book you want on the shelves in the library	3.2	4.1
Find the periodicals section (magazines & journals)	3.0	4.2
Find the reference section (dictionaries & encyclopedias)	3.0	4.0
Log in to RefWorks	2.3	4.1

Table 1: "Do you know how to perform the following tasks at Rose Library or online?"

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I had fun with this activity	3%	9%	26%	47%	15%
I learned about the library from this activity	3%	3%	6%	61%	27%
I feel more comfortable using the library now	3%	3%	21%	53%	21%
I feel more comfortable asking for help at the library now	3%	3%	24%	47%	24%

Table 2: Evaluation of game by experimental group (N=34)

Conclusion

Lack of money was not an obstacle to creating a successful game. The puzzles in "Mystery at the Library" were designed to make use of existing library resources and the building itself. Input from players and library desk staff was valuable in identifying areas for improvement. Although it was tempting to include extra puzzles to make the game more challenging, this led to unnecessary confusion for some players. A simple narrative with puzzles focused on learning objectives was sufficient to provide structure for the game and keep players engaged.

References

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