In Fall 2010, a group of librarians, staff, and students at the Henry Madden Library at California State University (CSU)-Fresno, created an online orientation game for students with the intention of familiarizing them with library resources and services. Our game, HML-IQ, was inspired by Picture the Impossible, an online game developed jointly between the Rochester Institute of Technology’s Lab for Social Computing and the Democrat and Chronicle newspaper, which encouraged participants to explore their community. Although Picture the Impossible was our inspiration, as a state university we have limited access to resources and chose to use open source games that we could customize to incorporate previously created information literacy materials.

Game development

The learning objectives of our game were to make students feel comfortable in the library, learn about library services and departments in a fun way, and understand the importance of the library in the research process. The game was located in Fresno State’s course management system, Blackboard, and students could take part in it at their convenience. Each week had a different theme with games such as an online puzzle, an online hangman game, a printed crossword puzzle, and videos with an accompanying timed quiz. Prizes were offered on a weekly basis for the student with the highest score.

In the final two weeks, students were encouraged to demonstrate their creativity and the new knowledge they had acquired by creating a promotional video about the library. At the end of the game, a Gaming Night celebration was held in which the top three winners were awarded prizes such as an iPad, an iPod Shuffle, and a Flip camera. The dean of the library gave us a budget of $900, and

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HML-IQ

Fresno State’s online library orientation game
we used it for weekly prizes, the celebration, and the high-level prizes to encourage active participation.

**Why open source?**

For the HML-IQ game, we wanted to use open source components due to cost considerations and the ability to adapt the games to our own needs. In general, open source refers to any program or software in which the source code is made freely available for use or modification as users or developers see fit. Open source programs and software are usually developed as a public collaboration and made freely available online.

During the process of planning the game, we looked at many Web sites, which included free games as well as open source online games for reference and inspiration. Games like the 4 Free Online Game, Quia, and the Information Literacy Game at the University of North Carolina-Greensboro, were reviewed extensively by the committee. Although these sources provided great examples, we decided that they would not work for HML-IQ due to accessibility issues. CSU has a mandate to be 508 compliant and many of these games used Adobe Flash or other animation and animated text which cannot be read by a screen reader. We also decided that any games we wanted to use or create would have to fit into Blackboard so that the player would not be taken to a separate Web site. Additionally, with this approach, we could use Blackboard’s Gradebook feature to keep track of the points players accrued throughout the game.

We were fortunate to have access to the programming and design skills of the computer assistants employed by the library’s Instruction and Outreach (IOS) department. With their assistance, the HML-IQ hangman game was created using PHP programming. One of our unique games, What’s Wrong With This Picture?, was created using Snagit by Techsmith, a Windows-based screenshot program. Another game, the HML-IQ Jigsaw Puzzle was created using the Web site Jigsaw Planet. Once completed, Jigsaw Planet gave us an embedded code for the game which we simply copied and pasted into Blackboard.

**Game play**

The HML-IQ game ran for six weeks, and each week had a different theme: Week 1 was orientation to the library building. Our library was only a year old at the time, so we included an interview with the interior designer who discussed the themes used in the creation of the building. We also had hangman games relating to features of the physical space as well as a jigsaw of the exterior. Week 2, Library Services, included an interview with the associate dean, who provided an overview of the services for students, another jigsaw of the “stairway of knowledge,” and a print crossword puzzle using library and information literacy terms. Week 3 featured information literacy and focused on our products, such as our online tour, 7 Secrets to Success, the online tutorial Searching, Finding and Evaluating Books, and the hangman game about Studio 2, our information literacy center. For Week 4, we chose the Music and Media Library as an example of a special collection. In addition to a video highlighting the collection and services, there was a “Name That Tune” game, which included audio clips and melody lines for the students to answer. The final two weeks of the game were devoted to creation of the video featuring the services of the library from a student viewpoint.

**Publicity**

We knew that getting the word out would be critical to the success of HML-IQ. In order to reach as many students as possible, we chose...
a multi-prong advertising approach. We created fliers which were posted and made available during the library’s Welcome Week and at library orientations for International Students, the Upward Bound programs, etc. We used social media tools like Facebook and Twitter to invite students to the game, and an announcement in Blackboard was sent to all enrolled students in Blackboard courses.

Also the Henry Madden Library’s Web page uses “spotlight tiles” to advertise new events and one was made for HML-IQ, providing more information about the game, such as when it was to take place, where the game could be accessed, and whom to contact for further information. More importantly, we encouraged our public service personnel to publicize the game to students at service desks, in library instruction classes, and to faculty.

Game feedback
Since this was the first time the library had created an online orientation game, we wanted to learn as much as possible about what participants did and did not like. We used two main methods of obtaining feedback: weekly discussion boards and a survey to all participants. We found both of these to be very informative and useful and plan to use the information we obtained to improve future versions of the game. We also hope information gleaned from the feedback will increase the number of students who complete the game all the way through. Our initial numbers indicate 252 students signed up. The biggest drop off was from the first week. Only 23.5 percent completed all of the games that week. However as the game went on, the percentage of participants who continued on rose each week.

Our first method to obtain feedback, weekly discussion boards created in Blackboard, allowed students to respond to a series of questions and provide feedback on how the game was going. This proved to be a valuable tool that allowed us to interact with students based on their responses and learn about what the students found interesting and useful. It was also frequently used as a place for reporting technical difficulties and providing tips for troubleshooting.

Questions such as, “What were the three most important facts that you learned about the library?” and “What did you think about this week’s games?” were used to get conversations started on the discussion boards. Game administrators responded to students’ posts by providing encouragement and, when necessary, addressing technical problems.

As an example, in one response to a discussion board topic, a student stated, “I think this game is pretty cool because we get to learn about the library and when we go in we won’t feel so intimidated, as I did the first week I came back to Fresno State. I like it because I will know about it and I can take my family and tell them about the history of the library and how it came to be and it makes me feel like I’m a part of it.”

One of the game administrators responded by saying, “We think it’s great that you want to share this information with your family as the Henry Madden Library is a resource for the community! Thanks for taking the time to comment! Good luck on the game!” Some students addressed technical issues in their posts, while others mentioned concerns they had with content or other aspects of the game. Many students responded very positively to learning more about the building itself, and others appreciated the opportunity to learn about services that they were previously unaware of. One student stated, “I liked that the crossword puzzle was something you had to go pick up and interact with. I also learned the different ways to get in touch with the reference desk. I used the ‘IM a librarian’ feature of the Web site to get help with one crossword clue, as well. I had a lot of fun finding the

Instructions for week 1 of HML-IQ game.

Week 1

Instructions:

1. Watch the video.
2. After you watched the video, click on the Mark Reviewed icon. The quiz will pop up.
3. Take the quiz.

*Note: The quiz is timed and you can only take it once. Your score will be entered in the Graded.
answers.” While the number of participant responses on the discussion boards dropped off as the game progressed, we were still able to learn a great deal about how the game was being received from discussion board posts like these.

The participant survey, our second method of obtaining feedback from students, was also very informative. We asked specific questions about how the participants found out about the game and asked for suggestions on how to publicize it in the future. We also asked for recommendations on what games and content the participants would like to see included and how the game could be improved overall. Several students mentioned that they would like to see a scavenger hunt where they could actively search the library and engage with services. Others mentioned that requiring participants to create a video promoting the library might be a barrier to those who had no skills in this area or who did not own a video camera. The responses were very diverse and allowed us to see the game from the perspective of the students.

Promotional video
The culminating activity for the HML-IQ game was a competition in which participants were asked to create a video promoting the library. The purpose of the video competition was threefold. First, it measured how much the students learned about the library from the games. Second, the video showed what the students thought was important about the library to share with their peers, and, finally, the videos could be used by the library as marketing tools. An additional perk came from strategically choosing faculty and staff to serve as judges from other parts of campus who would learn more about the library themselves and thereby become library advocates. While judges were chosen for their expertise, they also represented the campus’s administration. A collection of student-made videos promoting libraries was selected from YouTube as examples and inspiration for participants. These videos, as well as the judges’ scoring rubric, were made available on Blackboard.

Even though the scoring rubric was made available to all participants several weeks prior to the due date, we should emphasize that the content of the video (i.e., what they were teaching their peers about the library and its services) was the most important criteria in the judging process. Presentation was certainly a consideration, but content and quality outweighed the technical expertise involved in creating the videos. While we were fully aware that students may not have the skills required to make a professional-looking video, we wanted to give them an opportunity to express their creativity and demonstrate what they had learned. At the conclusion of the game, we were very happy with the videos that were submitted and, with a little editing, were able to use these videos for publicity on the library’s Web site.

Conclusion
Looking forward, potential changes to the game process include advertising the contest in a wider variety of formats (ironically, during informal conversations with many of the participants we learned that they found out about the contest from paper fliers rather than online venues, such as the library’s Facebook page or Web site). We will probably also change the video scoring rubric to emphasize content over form, add more games, and update the videos. Both the discussion boards and the survey responses provided game

HML-IQ week 4 winner Niraj Gir with author Vang Vang. Gir received a $20 Barnes and Noble gift certificate.
administrators with valuable information on how to improve future versions of the game, such as adding more images to the videos and providing more interactive activities. We plan to incorporate these, and other, feedback methods in future versions so that we continually refine the game and make it useful—and fun—for students.

Additionally, although we only received one time funding from our Library Administration, we see a likely partnership with our library Friends’ Group and the recognized student body government organization at CSU-Fresno, Associated Students, Inc. for contest prizes. All in all, we consider this project a success for both the library and students and are looking forward to offering HML-IQ on an annual basis.

Notes


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