For Good Measure: Assessing the Impact of Game-Based Instruction in the Archives

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FOR GOOD MEASURE: ASSESSING THE IMPACT OF GAME-BASED INSTRUCTION IN THE ARCHIVES

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By the end of this session...

- Understand the value that Escape Rooms and other game-based instruction can have in effectively teaching primary source literacy skills to participants from a variety of disciplinary backgrounds.

- Begin to apply knowledge of traditional instructional assessment to game-based instruction in order to measure student mastery of primary source literacy skills.
Game-Based Instruction in Libraries

Game-based instruction/learning refers to the borrowing of certain gaming principles and applying them to real-life settings to engage users (Trybus 2015)
Escape Games at Zach S. Henderson Library

Blind Willie McTell
Simple escape activity aimed at FYE students and centered around the basic research process.

Frankenstein
Created to celebrate the 100th anniversary of Shelley’s Frankenstein. Fun was main goal.

Science Ethics Circus
Adapted Escape activity format to allow a large group to participate at same time. Small teams rotated through stations.
Adoption of Game-Based Instruction in the Special Collections
Special Collections Instruction

Instructor-led sessions usually targeted a limited number of skills and primary source types.
The Game

Creating a physical game experience where participants work together to examine archival collections in order to solve puzzles and clues.
Francis Harper Materials

- Plantlife and culture of the Okefenokee Swamp
- 1912-1952
- Handwritten correspondence, field notebooks, photographs, audio recordings, and film

Used by historians, folklorists, biologists, archealogists, and geologists.
**Designing a Game experience**

**END GOAL:** Skeleton key will unlock steamer trunk to find **CONGRATULATIONS & Harper’s film reels**

- **A loop of animal sounds** will play continuously on a loop. Players will place the animals in order by the sounds playing in the room. Owl, Alligator, Woodpecker, Bobcat
  - **Code:** → ✩ ⬛ ▲

- **Players will use the cipher over the list of markers to discover five digit letter clue**
  - **CODE:** FIRST

- **Five (5) portrait photographs will contain groups of people. Number of people in each photo will be the code.**
  - **Code 45237**

- **Govt Doc will reveal the year to unlock the lock**
  - **Code:** 1937

- **Key will unlock round tube with govt doc hint**

- **List of dates for seven of Harper’s notebooks. The “missing” notebook date will be the unlock code**
  - **Code Lock- 4/30/19**

- **Players will ‘fish’ for list of travel dates**

- **Key will open container holding Harper’s notecards on flora and fauna. Each of these will have a different shape**

- **Document with list of markers will be hidden in desk**

- **Key to round tube will be hidden in glass bottle**

- **Key will be hidden in a fake rock which is holding photographs**

- **Cipher will be on a laminated blue index card.**

- **Cipher will be hidden inside mess kit which will allow the players to decrypt the letter as Folkston, Chase Prairie, Floyd Island, Mizell Prairie**

- **Magnet key will be placed on shovel to be used to unlock desk which will have 2 of the notebooks and a govt doc**

- **Black light will reveal letters next to place names. The order of these letters will be determined by encrypted letter. **Code Lock: FOLKS**
  - To unlock tin box with three notebooks.
Puzzle Design Process

Primary Sources Literacy
Outcomes

Inspiration

Puzzle tasks were created using backwards-design and the Guidelines for Primary Source Literacy developed by SAA-ACRL/RBMS Joint Task Force.

Using real-world scenarios and the discoveries of our own researchers became the greatest, and most authentic source of inspiration.

E.g. “Provide participants with a list of needed archival resources.”

Wednesday, August 16, 1922
Near Callahan, Fla.

8:30 a.m. Camp on south ridge
1/2 mi. N.W. of Callahan

20°F. 110° F.

1. Kate
2. Mr. Crow
3. Mrs. Huthatch
4. Mr. Bower
5. Mrs. Pringle
6. Mr. White
7. Mr. Turner
8. Mr. West
9. Mr. Harris
10. Mr. Scott

Mr. Scott was absent; was quite non-reactive.
Full Immersion

Sensory immersion allowed authentic engagement with the materiality of collections, their historical context, and the deeper critical narratives within the collection.
Game Play
50% Humanities Majors

11% College of Science & Math Majors

39% All others including Education, Nursing, Math, and Engineering
For Good Measure: Assessment of Game
Summative Assessments for Game Design

LibWizard Survey
All faculty and staff that participated in preview game sessions were sent a post-game survey.

Focus Groups
Games with faculty, staff, and student teams met with librarians in post-game focus groups to discuss the game, game design, and learning objectives.

Secrets, Sources, and Swamp Feedback

What did you like most about the game experience?

What did you like least about the game experience?

What is one way to improve the gaming experience for the University community?
Formative Assessments For Student Learning

Game Puzzles
Completion of multi-step game tasks were, by-design, able to measure students mastery of primary source learning outcomes.
“Wrap Up” Exercise
Each game session ended with a 10-minute recap where faculty librarians answered participant questions and facilitated an assessment worksheet directly targeting their major or disciplinary interest.

Summative Assessments For Student Learning
Summative Assessments For Student Learning

Instructor-Led Activities

Many of the “preview” faculty offered the escape game activity as a credited opportunity in their courses. These opportunities came with additional requirements from the instructors that were shared with librarians at a later date.
“The actual film reels can be found in the archives of the library along with other items. I genuinely enjoyed this escape room because I actually learned a lot from it. I never knew that film was a popular way to show research back in the 1900’s. I was also surprised at how many interesting artifacts are held in our library.”
“....that everyone was willing to get “hands-on” with something and invest their time into other people and think from a perspective that does not only center around benefitting their own lives or situation...... helped to unify a small group of strangers, educate them in a creative and involved way, which kept the group “on-track”; providing a new and innovative teaching strategy to education that may be a better way to learn (more expensive maybe, but better all the same) for visual learners like myself, that find it hard to learn information via lectures, readings etc..”
“I was really impressed with how well set up everything was given the limited amount of space. They did very well depicting being in the swamp and bringing it to life with the swamp noises and scenery.”
“The room set up was so cool! They had transformed the room into the swamp. The room was dark, it had water, gators, a cot, a campfire, and nature sounds. The props and decorations of the room were very well done and made the game even more fun.”
What did we learn?

- Assessment should be about continuous improvement
- Varying assessment measures can capture more robust data even within a small population or limited amount of time
- Quantitative and Qualitative data is a meaningful way to articulate program value
Thanks!

bit.ly/gamesinarchives

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