

Georgia Southern University

Digital Commons@Georgia Southern

Library Faculty Presentations

University Libraries Faculty Research and
Publications

11-13-2020

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

Autumn M. Johnson

Georgia Southern University, autumnjohnson@georgiasouthern.edu

Dawn Nikki Cannon-Rech

Georgia Southern University, dcannonrech@georgiasouthern.edu

Follow this and additional works at: <https://digitalcommons.georgiasouthern.edu/lib-facpresent>



Part of the [Library and Information Science Commons](#)

Recommended Citation

Johnson, Autumn M., Dawn Nikki Cannon-Rech. 2020. "For Good Measure: Assessing the Impact of Game-Based Instruction in the Archives." *Library Faculty Presentations*. Presentation 151. <https://digitalcommons.georgiasouthern.edu/lib-facpresent/151>

This presentation is brought to you for free and open access by the University Libraries Faculty Research and Publications at Digital Commons@Georgia Southern. It has been accepted for inclusion in Library Faculty Presentations by an authorized administrator of Digital Commons@Georgia Southern. For more information, please contact digitalcommons@georgiasouthern.edu.

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

AUTUMN M. JOHNSON
Special Collections Librarian
[she/her/hers](#)

DAWN "NIKKI" CANNON-RECH
Research Services Librarian
[she/her/hers](#)



Society of Georgia Archivists 202 Annual Meeting

November 11-13, 2020



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

A person wearing a grey t-shirt, shorts, and a baseball cap is sitting on a grey carpeted floor. They are looking towards a small wooden table with metal legs. On the table, there is a black box, a small electronic device, and some blue cables. In the background, there is a white wall with a power outlet, a trash can, and a whiteboard on a stand. The overall scene suggests a workshop or a learning environment.

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)

1



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.

A photograph of three people in a tent-like setting. On the left, a woman with long brown hair is sitting in a green chair, looking at a tablet. In the center, a man in a dark shirt and khaki pants is standing next to a wooden table, looking at something on the table. On the right, a woman with short dark hair, wearing glasses and a colorful patterned dress, is smiling. The background is a white tent structure with some items hanging from the ceiling.

Adoption of Game-Based Instruction in the Special Collections

2



Special Collections Instruction

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



A group of people are gathered around a large board on the floor in a dark, green-lit environment. They appear to be engaged in a collaborative activity, possibly a game or puzzle-solving. The scene is dimly lit with green ambient lighting, and the participants are focused on the board. The board has some papers or cards on it, and one person is pointing at it. The overall atmosphere is one of concentration and teamwork.

The Game

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

3



Francis Harper Materials

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

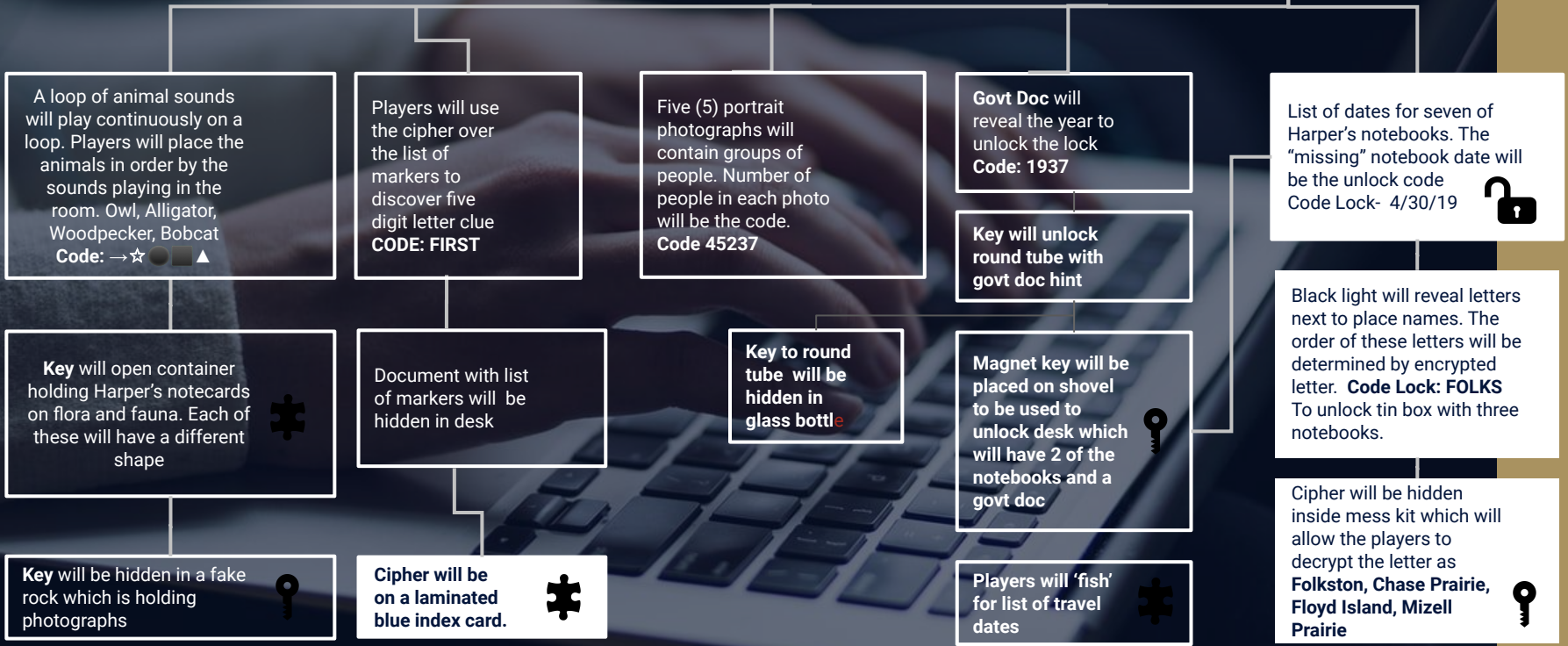
Used by historians, folklorists, biologists, archeologists, and geologists.





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 


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


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.

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

Cipher will be on a laminated blue index card. 

Players will 'fish' for list of travel dates 

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



8-16-22

@ 10 p.m. Camp on oak ridge
@ 1 1/2 mi. N.W. of Callehan
air * con.

Puzzle Design Process

Primary Sources Literacy
Outcomes

Inspiration

Puzzle

Various individuals had seen
to find what were found at night
alligator on the bank
This was only captured at
was quite non-resistant

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.

Wednesday, August 16,
Near Callehan, Fla.
(@ 1 1/2 mi. N.W.)

W @ 2:20 a.m.
Sunny.
nearly calm.
Temp. @ 80° (3:30 a.m.);

1. Kite, *1
2. Am. Crow sev
3. Br-h. Nuthatch, *1
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
- 12.

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

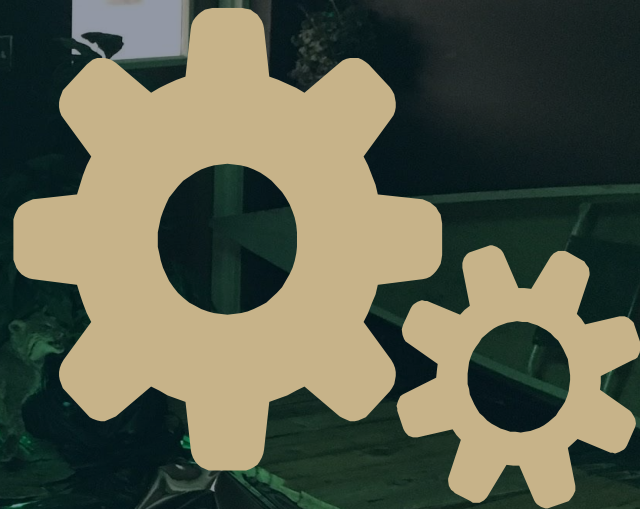
- at Callehan:
1. Thrush, 1
 2. Kingfisher, *1
 3. Blue Jay, *1
 4. Ground Squirrel, 2
- a soft, low, cooing oo-oo-oooh, etc.
H. cinerea, *1 or 2



47.59

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%

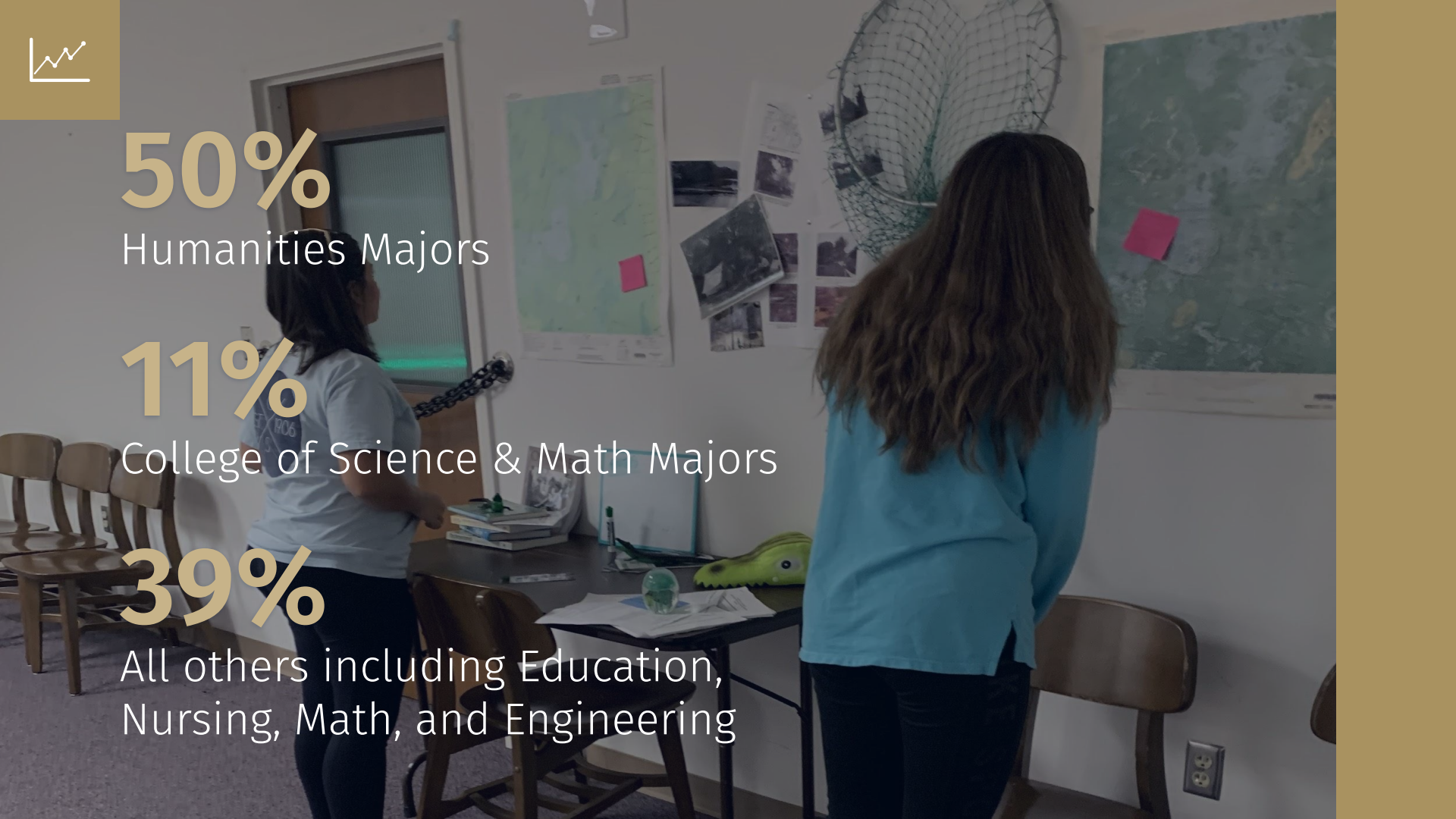
Humanities Majors

11%

College of Science & Math Majors

39%

All others including Education,
Nursing, Math, and Engineering





For Good Measure: Assessment of Game

4



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?

Who do you think we should target in our



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

Be
obj
has

Terra needs Harper's materials for these dates:

1912 May 1

TANT

1918 Apr 30

7-16-22.

@ 10 p.m. Camp on oak ridge
c 1 1/2 mi. N.W. of Callehan
over #100.

The Callehan Frog smarts
like the frogs I heard along
the St. Manza last year,
and which I considered
A. ascopta. This opens the
question of the identity of the
frogs along the St. Manza.
Various individuals, half-grown
to full size, were found at night
sitting about on the banks where
the road crosses Alligator Swamp.
They were easily captured, and
were quite new specimens.

Nedves
Near
@ 220 a.m.
during
nearby cal
Temp. @ 80°

1. Kate #1
2. Am. Crow
3. Br. Ch. Nuth
4. Shrike, 1a
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.
- 11.
12. at Cal

1. Shrike, 1
2. Kingfisher #1
3. Phoebe #1
4. Ground slave, 2
a soft, low, cooing ooo-oooh;
ooo-oooh, etc
H. cinerea, #102

Field Notes

May 31, 1921

to

June 30, 1921

(One in case)

Thomas Harper

Gosh
outs



Summative Assessments For Student Learning

“Wrap Up” Exercise
Each game session
recap where faculty
participant question
and facilitated an
directly targeting
interest.

Secrets, Sources, & Swamp Assessment

File Edit View Insert Format Data Tools Add-ons Help

100% 123- Default (Alt...)

Last edit was seconds ago

Like	Least?	Type of Materials?	Francis Harper's Purpose?	How can it be used?	Where are they found?	Bonus 1	Bonus 2
8	Blank	Field notes and Photographs	Study animal life	To learn about the culture and biog	Henderson Library, 2nd floor	1912	1922
9	The darkness of t	Vocab cards, and Field n	To learn about folklore, record pla	To write histories, songs, and make	Special Collections		
10	Blank	Journals, Video	He was researching and observin	They can use the materials to help	GSU Library	1912	
11	Blank	Field notes, some videos	Learn and document plant and animal	Biologist and historians can use the	GSU Special Collections	1912	
12	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections, second		
13	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
14	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
15	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
16	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
17	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
18	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
19	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
20	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
21	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
22	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
23	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
24	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
25	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
26	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
27	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
28	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
29	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
30	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
31	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
32	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
33	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
34	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
35	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
36	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
37	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
38	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
39	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
40	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
41	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
42	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
43	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
44	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
45	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
46	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
47	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
48	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
49	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		
50	Blank	Field notes, some videos	Learn and document plant and animal	Education and environmental prese	Special Collections/Henderson		

1. What type of materials were used to document the Okefenokee? *Field notes, photos, journals, etc.*
2. What was Francis Harper's purpose? *To record the history of the swamp.*
3. How can scholars use these materials? *To learn about the culture and biog...*

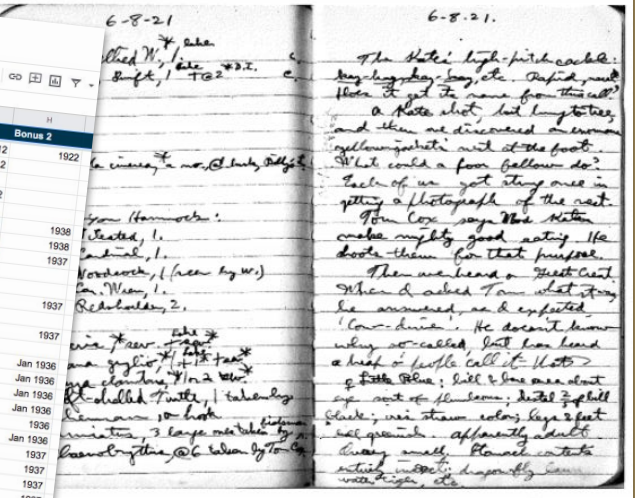
Assessment Science Majors

Secrets, Sources, & Swamp: An Escape Activity Celebrating National Archives Month

October 2019

1. How did the Okefenokee Swamp region change once it became protected land? Use the current literature and advertisements for the swamp to help answer this question. List three ways you think this region shifted its focus (or changed) since Harper's research.
 - 1) It was less inhabitable. Less people lived there.
 - 2) It was more a tourist place.
 - 3) It is used to research.

Review the image below of pages taken from samples of Harper's Field Notes and compare it with the current Field Notebook provided:





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

03:50

Escape Room Reflection on the Secrets, Sources, and Swamps

I went to the escape room located in Room 4206 of the library. During this experience, I got to experience learning about a special collection called secrets, sources, and swamp by Francis Harper. His career consisted of being a Cornell-trained naturalist. He studies plant life in the Okefenokee Swamp and the cultures within the swamp. In this activity, me and four other classmates went into this game thinking it would be a piece of cake. Once the timer started, I soon realized that this game would be harder than we thought.

To start off, we had to read a couple of pieces of his work and took some of those clues inside the escape room with us. Once we got inside, we saw the swamp and many mysterious figures in each corner of the room. There were multiple journals from his trip that were a part of the clues. We were confused until we noticed the dates on the boxes. We thought that had something to do with one of the answers to one of the locks on the journals. We kept looking around. I was trying to figure out the date card we got outside of the room and how it reflected back onto the journals. We found many pictures that had clues on them getting the first lock to be unlocked. We saw the map that he took on the Okefenokee Swamp and we looked through many of his findings. We kept finding clues like letters on the map found with a black light. That had another answer to one of the locks. Eventually we found out why the journals were significant because his whole study consisted of 39 years, from 1912 to 1951. We could not open the journals because it was not available to open. Each one of the journals had a title and dates. We learned that's how Francis Harper documented his trip in journals.

After many minutes of trying to solve this puzzle, we finally unlocked the last lock and found the key to the chest which opened up to a beautiful Congratulations sign with candy as treats. We apparently broke the record of the fastest group to go. Teamwork was a big part of this because without working together and combining our brain power, we would probably still be in that room figuring it out.

This bonus point opportunity reminded me of the time when I was in middle school. In the 6th grade, we actually took a field trip to the Okefenokee Swamp. I remember seeing an alligator and many Lilly pads. A couple of years passed since I have been to the Okefenokee swamp until my family traveled to St. Simons when I was in 9th grade where I got to go back to the Okefenokee Swamp to tour again. After many years, the last time I heard about the Swamp was from all the firsts they were having in 2017. A wildfire had broken out and it made me sad because it's a cool tourist site to visit and learn some material about wildlife and swamp life.

With doing this escape room, I got to bring back a little of my childhood and swamp life. Of the trips we took way back when. I liked this bonus point opportunity because it's a cool history lesson mixed with a little bit of biology. The most satisfying part was when we found that final key to unlock the chest and got the candy. I did not particularly like was the page we had to fill out after. I felt like I was being tested for something I had no idea about before that day, but I understand why they make college students fill it out. They don't want us to just walk away from that without learning anything. I learned about a new historic figure and it's cool because during his journey, he used a lot of unfamiliar pieces of equipment to make his expedition successful.



“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

Liked Least?	Type of Materials?	Francis Harper's Purpose?	How can it be used?	Where are they found?	Bonus 1	Bonus 2	
Blank	Field notes and Photographs	Study animal life	To learn about the culture and biog	Henderson Library, 2nd floor	1912	1922	
The darkness of t	Vocab cards, and Field n	To learn about folklore, record pla	To write histories, songs, and make	Special Collections			
Blank	Journals, Video	He was researching and observin	They are informative about the wildl	Second Floor of the Library			
Blank	Field notes, some videos	Recording the animal & plant life	They can use the materials to help	GSU Library			
It was super hard	Field notes	To record plant and animal life	Biologist and historians can use the	Second Floor of the Library			
Struggling to open	Field notes	Learn and document plant and ar	Education and environmental preser	Special Collections	1912	1922	
We ran out of tim	Field notes and audio/vi	Learn/document plant and animal	Environmental Preservation/Educa	Special Collections, second			
Blank	Videos, Pictures	Document animals, foliage, and p	To see how the swamp has change	Special Collections/Hendert	1918	1938	
Nothing	Film, his journals, picture	To see what was in the swamp ar	To reflect on the past and how the si	Henderson Library	1912	1937	
Blank	Film, pictures, some of hi	Look at the people/culture that w	Look at the history, reflect on past	The library on the second floor			
No free food	Film/pictures	To look at their culture and chang	To document the people and anin	To understand the past	Henderson Library		
Too many people	Film, photos, pec	To document the people and anin	To understand the past	Henderson Library	1912	1937	
Nothing	Film, recordings, pictures	See what was in the swamp & let hi	Talk about how it has changed from	Second floor of the library in			
Some things were	Field notes/Film	Record wildlife and the life of the	Research papers, first hand sources	Zach Henderson Library/Ar	May 1912	Jan 1936	
Blank	Field notes/Film	Record wildlife and the life of the	Research papers, first hand sources	Zach Henderson Library/Ar	May 1912	Jan 1936	
How many locks I	Films	To capture the history of the swar	Primary sources, research papers	In the library/archives	May 1912	Jan 1936	
Nothing	Films, field notes	To capture the history of the swar	Primary sources, research papers	In the library/archives	May 1912	Jan 1936	
The ending was if	Field notes	To capture history	Research papers, first hand sources	In the library/archives	May 1912	Jan 1936	
Blank	Films	To capture history	Research papers, first hand sources	In the library/archives	May 1912	Jan 1936	
Blank	Biography notes	To preserve and document the wi	To teach	Zach Henderson Library/Ar	1912	1936	
The desk with all	Biography notes about the t	To preserve and document the wi	To see what types of wild life lived in	In the Henderson Library	May 1912	Jan 1936	
Blank	Biography notes about the t	To preserve and document the wi	To see what types of wild life lived in	In the Henderson Library	1912	1937	
Blank	Field notes	To preserve and document the wi	To see what types of wild life lived in	In the Henderson Library	1927	1937	
Good was a little	Pictures, notes, film, book	To document the pla	Photos	They could use it for history of area	Zach S. Henderson Library	1912	1937



Thanks!

bit.ly/gamesinarchives

Autumn M. Johnson
Special Collections Librarian
autumnjohnson@georgiasouthern.edu

Nikki Cannon-Rech
Research Services Librarian
dcannonrech@georgiasouthern.edu

