BEYOND REINVENTING THE LIBRARY SCAVENGER HUNT: TEACHING LIBRARY LITERACY TO FYE STUDENTS USING AN ESCAPE ROOM

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INTRODUCTION

Librarians are always looking for inventive ways to engage first year students in Library Orientation programs. In 2017, ACRL released the *First-Year Experience Cookbook*, which included chapters on topics such as how to use social media to engage FYE students, various innovations of the traditional scavenger hunt, and other great ideas. This book showcased how librarians are always looking for new ways to promote active learning of both online and physical resources and how to help students understand the importance of the library in their college career (Pun & Houlihan, 2017).

As early adopters of an escape room format for FYE orientations, the authors have had a chance to use, assess, and improve the program at the University of North Alabama (UNA). In the interactive workshop presented at LOEX, the authors shared the basics of how to develop an escape room game for library orientation programs, how to assess the effectiveness of the game, and how to continually improve and update it to keep it fresh. The presenters also detailed how this orientation met the goals of the University’s FYE instruction plan (UNA, 2017).

The authors shared the results of their Fall 2017 study of this FYE program. Their post-instruction survey instrument was comprised of six yes/no questions and two free-form response questions. With over 150 survey responses, data showed that over 90% of students stated they had a better understanding of the library and 95% had a better understanding of the library’s website. Over 50% of the student responses indicated that the students retained the ability to name specific website links and specific physical collections within the library.

To prepare for their workshop, the authors brought four Breakout EDU kits and designed a special LOEX-themed game, so workshop participants could actively engage with the kits and understand the concept and its value as a teaching tool. Everyone who participated had a chance to “break out” of the traditional and into the innovative world of team-based strategy that has shown to be exceptionally effective in FYE instruction at the University of North Alabama (UNA).

ADOPTING THE ESCAPE ROOM GAME

The idea to build an escape room game using a Breakout EDU kit began in the summer of 2017, when one of the authors attended a conference where using escape room kits for instruction was demonstrated. The idea of changing the current FYE orientation format had been discussed for a period of time, but nothing was in place as a new activity. Instructors had previously discussed what could be implemented to re-energize and revitalize the FYE library orientations and as soon as escape room kits were discovered, instructors chose to focus on making a game that teaches library orientation and familiarization (Breakout EDU, 2018a). The kits were purchased in June 2017 immediately following the conference and the librarians spent the summer testing the kits. Breakout EDU purchases are accompanied with an archive of games that have either been created by the company, or submitted by
others. The authors used those games to get familiar with the equipment before designing a game. Following familiarization with the equipment, the authors were ready to create a library-specific escape room game.

The Breakout EDU kit (Appendix A) includes various combination and key locks with additional equipment to build an escape game. It has two boxes that you can break into, one being a small box, the other is a large box with more space to hold bigger items. There is a hasp to hold multiple locks, a UV flashlight, and a UV pen to make things UV flashlight-discoverable. A red lens viewer is available for deciphering clues, and a USB drive if you want to insert a digital clue. Additionally, the company is constantly revising the contents of the kit and adding new materials.

The game the librarians designed is themed around an evil group from a rival university attempting to sabotage all of the UNA library resources. It is up to the game participants (FYE students) to save their library resources with the clues that have been left behind. In the game, they are told in the first clue that they have stumbled upon the workspace of that evil group (Appendix B). The evil group has left clues within their plans that can assist the game participants in escaping, thus thwarting the plan.

The intention of the game is to increase familiarity with the library’s digital and physical spaces. The instructors identified the items in the kit that could be used, the learning objectives of the game, and what was feasible within the classroom space. Four locks were identified out of the escape room kit that could be used for the game. Items that did not fit well in the space or learning objectives, such as the key lock, were omitted. The following sections breakdown the individual clues and learning objectives that were used in the game to promote library literacy. Though we present the clues to the game in an ordered format below, students were free to solve the clues in any order that worked for them.

**Digital: Library Home Page**

For the first combination lock clue, the instructors place in the students’ workspace a memo that includes a screenshot of the UNA library website (Appendix C) and details regarding which helpful links (e.g. Interlibrary Loan) the villains want removed. Different numbers on that screenshot correspond with links that are referenced. The numbers within the three referenced areas create the combination for the lock on the small box. Inside the small box, students find another clue and the UV flashlight. The clue in the small box is discussed in the following paragraph. The UV light does not work with this clue, but with another clue that will be discussed later in this paper. This misdirection, along with false clues (or red herrings) placed in the students’ workspace keep the game from being too easily solved.

A second clue mentions additional links on the library’s homepage (Appendix D). In this clue, the evil plot leader invokes the conspirators to “take direction” when trying to sabotage library resources. The direction from one link to the next on the homepage gives the participants the combination for the second combination lock, which is a directional lock with arrows instead of numbers.

To decipher these clues and unlock the locks, students have to navigate to the library’s homepage and locate each of the links mentioned. They spend a fair amount of time studying the page and the placement of the individual links in order to be successful. These clues help familiarize students with the variety of services available from our main page.

**Digital: Library Maps**

Appendix E shows the third clue which will help students uncover the combination for the 4-digit lock. Students are given the location of multiple places within the Collier Library. In this case, these places are valuable collections within the building that the evil conspirators wish to have removed. The collections are on various floors of buildings but the actual floor number has been omitted on the paperwork. The floor where each of those are located, in order of occurrence on the sheet, will unlock the 4-digit lock.

This clue requires students to locate the homepage link for the library maps. Once selected, this page contains links to floorplans for each level of the library. Using these floorplans, the students will be able to see where items are located in the library. This gives the students familiarity with the physical spaces for the game and potentially for future research and study needs.

**Digital: Library Liaisons**

The final game clue requires the students to navigate to the webpage that lists faculty and their subject liaison areas. This clue (Appendix F) is in the form of a fill-in-the-blank worksheet. To obtain the correct combination of letters to unlock the 5-letter lock, students have to figure out that they need to use the UV flashlight. Using the flashlight will reveal that some of the letter blocks have been previously highlighted with the invisible ink pen.

The goal of this clue is to familiarize the students with how to navigate to the faculty page on the website and how to search for and locate a subject specialist in order to be able to discern who to best contact when they need research help for projects in their classes.
Physical: Archives, ThinkSpace, “CollierVision”

Once the students have solved the four clues above and have disabled all of the locks on the large box they are still not finished with this activity. Inside the large box they find a final clue with a set of directions. The clue (Appendix G) instructs the students to obtain a “We Escaped” sign from the librarian and then navigate to three locations in the library and take a picture of their group holding the sign in front that location. They have to post the photo on Instagram with the hashtags #weescaped and #myuna. Once they have visited all three locations and have posted the photos, they must return to the classroom. The first team to return is declared the winner and prizes are awarded.

The three areas chosen for this exercise are the library’s Archives, Thinkspace, and Collier Vision. The librarians chose these three locations for this section of the game because they determined that these would be the most useful spaces for FYE students to become familiar with early in their college life. The archives are used heavily by upperclassmen in the colleges of English, Communication, and History. Thinkspace is the library’s digital learning lab where students can experiment with 3D printing, virtual reality tools, collaborative digital workspaces, and more. Collier Vision is the library’s digital signage located near the entrance to the building. This digital sign lets students quickly see what is happening in the library, from classes to workshops to events, as well as learn how to book a study room or a research consultation.

PROGRAM ASSESSMENT

Post-Instruction Survey

Once all the FYE classes attended library orientation and played the game in Fall 2017, the librarians created a Qualtrics survey (Appendix H) to assess the effectiveness of the program. The survey consisted of a combination of six yes/no questions and two open response questions. The link for the survey was sent to the professors of each FYE class that participated in the escape room and they were asked to share the link with the students in their classes. The first question of the survey was a disqualifying question to allow the librarians to remove any responses from students who had not attended class the day of the escape room game. The remaining questions focused on student recall and comfort with the library.

Student responses indicate that about 85% had visited the library prior to their FYE class. It is worth noting that freshmen orientation, advising, and scheduling takes place in the library during the summer. The majority of the pre-FYE class visits were probably during this orientation. Conversely, only 49% of students indicated that they had visited the library website prior to competing in the FYE escape room.

Students were asked if they had a better understanding of what was on the website after the escape room visit. 90% of students indicated that they did have a better understanding. They were also asked if they had a better understanding of spaces, and 96% responded affirmatively. Finally, 94% responded that the escape room made them feel more comfortable and familiar with the building and the website.

When asked to share links and pages they remembered, students mentioned the library catalog, the faculty and staff directory, the library hours page, the study room reservation page, the library map, and the research consultation page, among many others less frequently. When asked what spaces and places in the building that they could remember, students most frequently mentioned the study rooms, ThinkSpace, Archives, computer lab area, and quiet areas.

Librarian Reflection & Future Directions

When administering the game, librarians learned to not rush in giving clues, to let the game play out, to let it breathe and live on its own. While it might be tempting to give a free hint early on, it is better to let the game play out and let the students compete against one another. It is almost a necessity to have a good prize; the instructors used a lucrative prize based on the university mascot—a foam stress lion. The combination of the game prize and the bragging rights of breaking out and being first back to the instruction room provided the necessary incentive to get buy-in from the students. Neither librarian had a class where a team did not actively participate and try to win.

The success and notoriety of the Library escape rooms has led to cross-departmental collaborations. Most recently, the library partnered with the nursing department and assisted them with two escape room installations of their own. This included lending the library’s Breakout EDU kits as well as helping with game design and set-up.

The librarians plan to create a new game each year for FYE and continue escape rooms as the library orientation activity as long as they engage students. They will determine the level of student engagement by continually assessing the program at the conclusion of each semester. One of the first modifications will be to the game’s final activity. The instructors would like to incorporate more app-based wayfinding in the final building activity and streamline image sharing of the photos taken in the building.
Librarians are also planning to incorporate escape rooms into upper-level instruction and information-focused instruction. This expansion of the program will more than likely require the purchase of additional kits.

**THE LOEX GAME**

To reinforce the idea that a game could be created with simplicity, and with supplies on-hand, the presenters created a LOEX and Houston-based game for the conference. The game used the same locks that were used during the library orientation exercise, however the focus of this game was an orientation and familiarization with Houston, Texas. The theme of this game was an evil henchman conspiring with library deans and directors to make the attendees stay in the session longer. Clues to release the locks were within the evil henchman’s documents in the escape rooms. The presentation attendees were divided into four groups and the presenters read an opening clue (Appendix I) and the game began.

The directional lock was based on a clue which mentioned different places to visit throughout Houston (Appendix J) and a corresponding map (Appendix K). Another clue mentioned the title of the presentation, with the text of the first letter of each word red instead of the standard black. Those letters were the combination of the 5-letter lock combination (Appendix L). The 3-digit clue was based on a LOEX schedule that was placed in the room. On the schedule there was a hand-written note that said “Extending past the end is the key to unlocking maximum value.” “End,” “key,” and “unlocking” were all underlined. The end time of the presentation was 12:05 p.m. 1-2-0-5 was the 4-digit combination. Lastly, 3 menus from Houston restaurants were placed around the room as dinner options for the LOEX presenters to meet with the evil henchman. Along with the menus was a list of addresses with the exact location number left blank. Filling in the address of the locations, then using a UV light pen, would allow a participant to discover that three numbers were highlighted, and would give the combination to the 3-digit lock.

Attendees worked together to solve the mysteries of the various locks and feedback during the game was overwhelmingly positive. All four teams were able to “escape” and the presenter had prizes for the first team to finish. Multiple attendees referenced the game on Twitter, including one who tweeted, “They made us a #loex2018 themed escape box?! Amazing!” (2018) and another who tweeted, “Broke out of an escape room first in an awesome gamification session! 😊 #loex2018” (2018). In addition, both during and after the game, the presenters were asked the following questions:

Q1: What is the best class or group size for each game?

A: Ideally, no more than 6 participants per Breakout EDU kit. The presenters have 4 kits in use at their institution and most FYE classes have no more than 24 students enrolled.

Q2: What is the size of the presenter’s institution?

A: Approximately 7500 FTE.

Q3: How did you get faculty and administration buy-in?

A: The presenters work at an institution that is supportive of innovation and experimentation. If attendees want to make a case for incorporating kits at their institutions, statistics from this presentation could be helpful.

Q4: How long does it take to build a game?

A: It can vary, but generally no more than a week to build the game elements. The most important step is to beta-test your game with faculty and staff to be sure that it all works as intended.

Post-LOEX, the presenters have been in contact with attendees who are purchasing Breakout EDU kits for use in their classes, both FYE and other information literacy instruction sessions. Both presenters are happy to provide help, advice, and feedback to anyone who would like more information.
REFERENCES


APPENDIX A

Breakout EDU Kit Contents
(Breakout EDU. 2018b. Image used with permission)

APPENDIX B

Starting Clue for UNA FYE Escape Room, Fall 2017

FYE Students,

Oh, no! Something terrible has happened and we need the help of your team. A Villainous group from a rival university has threatened to close access to all of your library resources. This will surely guarantee an unsuccessful year for the students of UNA.

You have stumbled upon their work area containing their plans to destroy your resources and access. The future is grim if they get their way.

There is a way to stop this. The villains have left a stoppage plan in the large lock box in your aisle. There are clues within their plans to unlock the box. Use the clues provided to you before it is too late and all of your library resources are gone. You have 40 minutes before access is gone, starting now!
**APPENDIX C**

**Clue for 3-Digit Combination Lock**

**ATTN:** Villains  
**Memo:** Homepage Link Removal  
Fall Semester 2017

Dearest Villains,

When removing links from the areas below, make sure to take valuable assets immediately.

Start by removing the ability to schedule 30 minutes of research help by removing the “Research Consultation” link.

Then, remove their ability to receive books and materials that Collier Library does not own by removing the “Interlibrary Loan” link.

Finally, take away their access to specific subject databases by removing the “Resources by Subject” link.

Thank you,

Your leader

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**APPENDIX D**

**Clue for Directional Lock**

**ATTN:** Villains  
**Memo:** Homepage Link Removal  
Fall Semester 2017

Dearest Villains,

We must remove vital links from the UNA Collier Library homepage guaranteeing a struggle for the school year for all students. Please, take this **direction** in erasing the links. It is imperative that we get this removed in the correct order.

Links to remove:

Citations, Copyright & Plagiarism  
Hours  
Policies  
Discovery  
Periodical Holdings  
Ask Us a Question

Thank you,

Your leader
APPENDIX E

Clue for 4-Digit Combination Lock

There’s too much valuable material in Collier Library! Remove the collections below:

- Audio Visual materials (DVDs, etc.)
- Main Books Collection (A-M)
- Main Books Collection (N-Z)
- Archives and Special Collections

APPENDIX F

Clue for 5-Letter Combination Lock

Villains! These subject librarians are too helpful when students need help with research! Find out who these librarians are so that we can stop them from helping students!

Elementary Education: ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

English: ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

Psychology: ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

Social Work: ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

History: ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

APPENDIX G

Physical Building Clues

Congratulations, you have made it this far. There is one final step to assuring that your library resources stay safe. In order for the leader of the villains to release the stoppage plan, he has requested to see students of UNA celebrating their library resources.

Turn the ticket in at the bottom of this page for escape signs. Then, visit the locations listed below and take your team picture outside of them with an escape sign. Someone from the group must post the images on Instagram and tag Collier Library (@unalibrary), with a post stating “We learned about our library resources today. #weescaped #myUNA”

Group images to take:

1. Next to the library resource for sharing current news and new items for circulation – Collier Vision – Ground Floor.
2. A place with a 3D printer, where you should take your picture, and other cool tools like a silhouette printer, presentation practice area, and large format printer – Thinkspace – Basement.
3. Outside of a one-of-a-kind collection, only available to UNA affiliated patrons. If you want to stand out when researching, do your research from here – Archives & Special Collections – 2nd Floor.

After visiting these locations and taking pictures, please revisit the library classroom for your reward.

ONE TICKET – We Escaped
APPENDIX H

FYE Escape Room Survey Questions

Q1: Did you participate in the Collier Library escape room for FYE library orientation? Yes/No
Q2: Prior to the Collier Library escape room activity, I had visited Collier Library. Yes/No
Q3: Prior to the Collier Library escape room activity, I had visited Collier Library's website. Yes/No
Q4: After visiting the Collier Library escape room, I have a better understanding of the tools available on the Collier Library website. Yes/No
Q5: After visiting the Collier Library escape room, I have a better understanding of the spaces available in Collier Library's building. Yes/No
Q6: The Collier Library escape room made me more familiar and comfortable in Collier Library and on the website. Yes/No
Q7: The links and pages on the website that I remember most from the Collier Library escape room are ________.
Q8: The places in the building that I remember most from the Collier Library escape room are ________.

APPENDIX I
LOEX/Houston Intro Clue

Oh, no! LOEX attendees, sorry, but we're required to share some bad news with your group. Your library director has compiled with the evil Dr. Lethargo, in a scheme to maximize the value of this conference. Dr. Lethargo has blackmailed your presenters for this session and is using them to extend the presentation throughout the evening, thus preventing you from enjoying the wonderful attractions and restaurants of Houston, TX. This will help Dr. Lethargo maximize the amount spent for your director.

APPENDIX J
LOEX/Houston Directional Clue (Text)

Houston is the home to numerous historical landmarks and sights to see throughout the city. However, you will not be visiting any of these due to Dr. Lethargo's villainous plan to keep you locked in this conference session, away from lunch, and away from evening exploration of the city.

If you were sightseeing, it would be beneficial to grab a map and set your direction toward the next sight to see. These are a few suggestions, should you ever escape:

Your starting point would be here at the Royal Sonesta, of course.

However, there is hope. If, in 20 minutes, you can help recover the blackmail documents that Dr. Lethargo has stolen within the bank's vaults, you can return them to the presenters, you are free to leave. Dr. Lethargo left clues to unlock the boxes within the documents scattered throughout your room. Perhaps, the most evil twist in all of this, is the fact that those documents highlight some of the exciting things to do in Houston, which you won't be visiting if he gets his way.

REMEMBER – YOU HAVE A HINT CARD
APPENDIX K

LOEX/Houston Directional Clue (Map)

APPENDIX L

LOEX/Houston Combination Lock Clue (5-Letter)

ATTN: Dr. Lethargio
From: Coalition of Library Directors & Deans
Memo: Extend the conference
May 4, 2018

Dearest Dr. Lethargio,

We are reaching out to you with hope that you can help us extend the conference for our attendees, thus maximizing the bottom line expenditures for us.

Our attendees are visiting the “Beyond Reinventing the Library Scavenger Hunt: Teaching Library Literacy to FYE Students Using an Escape Room” session on Saturday May 5th. Please, encourage the presenters to hold them captive and not allow them to enjoy Houston. We have attached some blackmail documents that you can use.

Thank you,
Library Directors & Deans