The Escape Room: Supporting Student Success Through a Game-Based Immersive Experience

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Who are we?

- **NC State University**
  - 35,000 students
  - 9,000 faculty & staff
  - 2.5 million annual visitors to the Libraries

- **NCSU Libraries**
  - Learning Spaces and Services
    - Student Success Division
    - Technology Workshops
    - Writing and Speaking Instruction
    - Library Technology Spaces
    - Shared Ask Us center supervision
Workshop Overview

- Virtual Reality, Digital Media & Makerspace (Fall ‘18)
  - 30 unique tech-focused workshops
  - 184 workshop instances made available
  - 872 individual students attended

- No workshop combined different categories of technologies together
Technology Lending Overview

- 160 unique tech items available
- Laptops, phone chargers, headphones, calculators by far the most borrowed items
- Popular items have greatest visibility at Ask Us
- Shorter lending periods for day of use
Non-traditional Tech Lending

- Little visibility outside of Libraries’ website
- Little opportunity for students to get hands-on unless checking out
- Previous attempts at “petting zoos” were unsuccessful
- Longer lending periods allowing users time to explore
Our own puzzle

- Promote non-traditional technology lending
- Provide further opportunities for student collaboration
- Combine elements of other technology workshops
The Idea
Why create a Library Escape Room?

- New and exciting
  - Promotes the Library as a campus destination
  - First workshop to have a “game” element
- Allows users to get hands-on with emerging technologies
  - Promotes the technology lending program
- Provides a platform for students to meet and connect
  - Supports student success mission
- Encourages attendance at other workshops
  - Students register via the same route as other workshops
Funding & Organization

- Funded by internal “Good Idea” grant
  - Spend to date around $3,500
  - Hired a student worker to facilitate evening hours Escape Rooms

- (Year 1) Identified and organized stakeholders into a project team
  - 4 Staff
    - Makerspace, Digital Media, First Year Instruction
  - 3 Librarians
    - Virtual Reality, Digital Media, Student Engagement

- (Year 2) Streamlined into smaller team
  - 2 Staff
  - 2 Librarians
Field Trip!

- How can you design an Escape Room if you’ve never been to one?

- Visited a commercial Escape Room
  - Understand the mechanics
  - Look at flow of clues
  - Stakeholder buy-in
Our Most Recent Field Trip...
Escape Room Puzzles

- Figure out the clues
  - What technology made sense?
    - FLIR Thermal camera
    - Arduino
    - Oculus Go
    - LittleBits mp3
    - Augmented Reality Snapcode
    - Amazon Alexa
    - Reverse Audio
    - MaKey MaKey
    - Sphero
  - What library literacy skills aligned with the room?
    - Call Number
    - Journal Search
Designing the Escape Room

- Linear, somewhat linear, or nonlinear?
  - Figure out your end goal and work backwards
- Find your theme
  - Every Escape Room needs a story
  - Student Relevancy
Designing the Escape Room

- Get organized!
  - Whiteboard
  - Sketchboard
    - Free
    - Limits to 5 accounts (free version only)
  - Lucid Chart
    - Free with Google Apps
    - Limitless accounts
Designing the Escape Room
User Testing

- User testing was essential
  - Length of game
  - Difficulty level (we want them to win)
  - Students interaction with the technology
  - Students interaction with each other
  - Feedback
    - Frequency of scheduling
    - What type of clues did they like/not like

- Visited by a commercial Escape Room
  - Test-driven from a critical perspective
Implementation

- Permanent Space established
  - Quick set up/breakdown
  - Control the space
  - More authentic and immersive
- Available Monday & Thursday evening’s during Fall & Spring semesters
- Students register as individuals or as part of a group (max 5)
E-Boards

The Escape Room

You’re trapped in the library, and you have to use our technology resources—and your smarts!—to escape.
Escape Room (D. H. Hill Library East Wing, second floor)
Mondays & Thursdays @ 5:30 p.m. and 7:15 p.m.

www.lib.ncsu.edu/events/escape-room
Pop-Up Tasters
Social Media push

THE LIBRARIES HAS AN ESCAPE ROOM? Oh yes! Get locked in with your friends and solve a series of puzzles involving some of our best tech in order to get out. Can you do it in under an hour?

The escape room is in D. H. Hill's East Wing, second floor, and runs Monday and Thursday evenings at 5:30 p.m. and 7:15 p.m. REGISTER NOW at www.lib.ncsu.edu/events/escape-room
Reaction from campus

- 80 “regular” Escape Rooms (Fall ‘18 and Spring ‘19)
  - 4 per week

- 80% sign-up rate
  - 75% of registered users actually attend

- Special Escape Rooms
  - Campus student success programs

- Other departments
  - Team-building
Assessment

● Students are asked to provide feedback post-Escape Room
  ○ Rate the experience out of 5
    ■ Average rating currently 4.77
  ○ Comments
    ■ 50% had strong praise
    ■ 10% specifically requested a second Escape Room experience
    ■ 5% had criticism
      ● Technology not working
      ● Repeat users impacted experience
      ● Space too small
Who is using the Escape Room?

- Undergrad - Freshman: 27.4%
- Undergrad - Senior: 15.4%
- Graduate student: 25.4%
- Undergrad - Sophomore: 17.1%
- Undergrad - Junior: 13.4%
- Other: 1.3%
Who is using the Escape Room?

Fall 2018
- Group member: 74.0%
- Individual: 26.0%

Spring 2019
- Group member: 98.0%
- Individual: 12.0%
What Clues have been popular?

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<td>Arduino Circuit</td>
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<tr>
<td>Blacklight &amp; Skeleton</td>
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<td>Jigsaw Puzzle</td>
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<tr>
<td>LittleBits MP3</td>
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Challenges & Solutions

- **Attendance** (ensuring students show up to take part)
  - Shorter window of time to register
  - Personalized greeting
  - Early e-mail reminder

- **Staffing**
  - Cross training staff to cover absence

- **Technology** (or when things didn’t work!)
  - Back-up supplies
  - Alternatives that can be subbed in

- **Campus publicity**
  - Don’t assume that if you build it they will come

- **Attention to detail is key**
  - One mistake can compromise entire game
Current & Future Steps

● Escape Room 2.0 (Fall 2019)
  ○ Encourage return users
  ○ Incorporate new technologies

● Escape Room Days
  ○ Multiple Escape Rooms
  ○ Support larger student programs

● Mobile Escape Room
  ○ Classroom-based Escape Rooms

● Finals Week Escape Room
  ○ Stressbuster Activity
Suggested Resources

- Guidebooks
- YouTube
- Commercial Escape Rooms
- Libraries with Escape Rooms
- Breakout EDU
Questions?