Escape Room Mini-Hackathon Session Playbook

OLC Accelerate 2023

About this Playbook

Play is an excellent partner in learning and escape rooms are a great way to engage a student or community in learning-ful play (or playful learning).

In this Playbook, you'll find a bunch of resources to help you build an escape room customized to your learning or community needs. We hope you find it useful and fun!

Escape Room Link

https://www.thinglink.com/scene/1766883614009590246

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Introduction: What & Why Escape Rooms?

What is an escape room?

Escape rooms are gameful experiences based around a series of puzzles or challenges that must be completed. Some escape rooms feature a time-limit and some are designed with a specific order of completion in mind. Most center around some aspect of storytelling (even if it's as simple as "you are about to [insert something that drives the urgency to act]. Solve the puzzles in order to prevent it from happening.")

Why use one?

Interestingly, escape rooms are leveraged within classroom spaces for a variety of reasons. They often require teamwork and encourage social interaction and communication. They are typically replayable, test strategic thinking, planning, and management. Most common of all, though, most who design or leverage them do so because the resulting experience is fun.

In the context of education, escape rooms can also be designed with remixing, reuse, and templating in mind. We have created this one, for instance, to model and template for you -- which means it lends itself to more easily be picked up by educators or designers in their respective contexts.

Tools

In this escape room (and accompanying playbook), we've used ThingLink as our Escape Room platform and Google Drive and Docs for supporting content.

Structure

The escape room co-created in this session uses a three part structure:

- an introduction/onboarding sequence;
- a puzzle sequence; and
- a concluding sequence.

Here's a diagram of the full sequence. [You can view a larger version of the image here.]

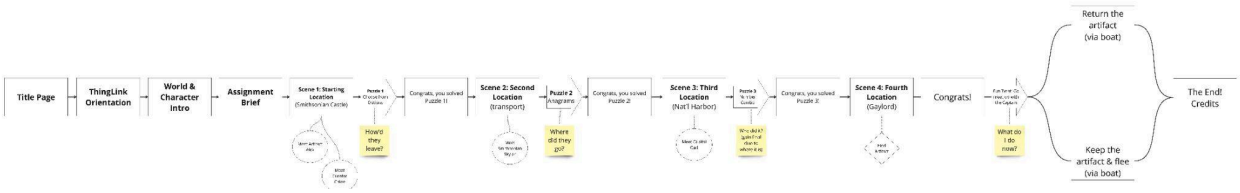


Image Description:

This image shows a series of shapes representing the different steps of the Escape Room. Some boxes have additional shapes connected to them to indicate additional information. The diagram shows this sequence of escape room scenes:

- *Title Page*
- *ThingLink Orientation*
- *World & Character Intro*
- *Assignment Brief*
- *Scene 1: Starting Location (Smithsonian Castle): Meet Artifact Alex & Curator Chloe*
- *Puzzle 1: Choose from Options puzzle type. "How'd they leave?"*
- *Congrats, you solved Puzzle 1!*
- *Scene 2: Second Location (transport): Meet Smithsonian Skylar*
- *Puzzle 2: Anagrams puzzle type. "Where did they go?"*
- *Congrats, you solved Puzzle 2!*
- *Scene 3: Third Location (Nat'l Harbor): Meet Capitol Carl*
- *Puzzle 3: Number Combo puzzle type. "Who did it? (gain final clue to where it is)"*
- *Congrats, you solved Puzzle 3!*
- *Scene 4: Fourth Location (Gaylord). Find Artifact*
- *Congrats!*
- *[Option 1] Return the Artifact*
- *[Option 2] Keep the Artifact and Flee*
- *The End! Credits*

Introduction & Onboarding Sequence

Each of the numbers below represents a "scene" or "page" in ThingLink.

1. Title Page: Escape room name & instructions for how to start
2. ThingLink Orientation: Instructions for how to navigate the escape room
3. World & Character Intro: Setting the stage for the story. Who is the player playing as (Detective Dupont) and where are they (Washington D.C)?
4. Assignment Brief: What is the player (as Detective Dupont) trying to accomplish in this escape room? Identify the thief and retrieve the stolen artifact.

Puzzle Sequence

Each of the numbers below represents a "scene" or "page" in ThingLink.

5. Scene 1: Starting Location (Smithsonian Castle): Meet Artifact Alex & Curator Chloe
    - This location contains Puzzle 1: Choose from Options puzzle type. "How'd they leave?"
    - A selection of clues and information to help the player (Detective) with their short term goal (solving the puzzle in this location and moving to the next one) and their long-term goal (identify the thief and retrieve the stolen artifact)
6. Congrats, you solved Puzzle 1!
    - Here, the player is rewarded for solving the puzzle and given a piece of information on their long-term quest to identify the thief and retrieve the artifact.
7. Scene 2: Second Location (transport): Meet Smithsonian Skylar

    - This location contains Puzzle 2: Anagrams puzzle type. “Where did they go?”
    - A selection of clues and information to help the player (Detective) leave this room and move closer to solving their ultimate goal.
8. Congrats, you solved Puzzle 2!
    - Here, the player is rewarded for solving the puzzle and given a piece of information on their long-term quest to identify the thief and retrieve the artifact.
9. Scene 3: Third Location (Nat'l Harbor): Meet Capitol Carl
    - This location contains Puzzle 3: Number Combo puzzle type. “Who did it? (gain final clue to where it is)”
    - A selection of clues and information to help the player (Detective) leave this room and move closer to solving their ultimate goal.
10. Congrats, you solved Puzzle 3!
    - Here, the player is rewarded for solving the puzzle and given a piece of information on their long-term quest to identify the thief and retrieve the artifact.
11. Scene 4: Fourth Location (Gaylord). Find Artifact
    - This location has no puzzle. Instead, it wraps up the story and informs the *Detective* that she’s completed the ultimate goal set forth.
    - From here, the player moves to the final “Congrats” page and end-of-game materials.

End Sequence

Each of the numbers below represents a “scene” or “page” in ThingLink.

12. Congrats!
    - This page informs the *Player* that they’ve completed the escape room.
13. [Option 1] Return the Artifact
14. [Option 2] Keep the Artifact and Flee
15. The End! Credits
    - Branding & acknowledgements

Surprise Ending!

Consider adding a surprise ending or cliffhanger just for fun!

Story

Not everyone views themself as a storyteller; for some, composing a story provides a design challenge in and of itself. We encourage you to nevertheless take time to play in the space of escape rooms knowing that the story can be simple.

For instance, say you want to leverage escape room design in a science classroom. You have come up with 6 seemingly unrelated puzzles that test a variety of skills or concepts, but they don't tie together. A simple storyline can simply be "You are a science teacher about to start class for the semester, but you didn't test the 6 assignments you designed. Because you left testing to the last minute, you now only have 30 minutes to make sure everything works. Complete the 6 challenges before time runs out."

In short, the core of any escape room "story" (even if it is only as long as a 1-2 sentence prompt) is the impetus to engage in the escape room in the first place. It is the 'why' for why participants should care about escaping. That said, story can also be leveraged to help onboard, deepen the context, share resources, practice skills, introduce concepts, and more.

Templates:

Whether you are a seasoned storyteller or new to it, we've created a storytelling template that gives you insight into some of the ways in which you can leverage story throughout your escape room designing.

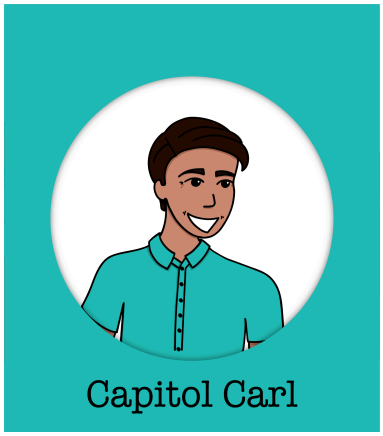
- [Template] Storytelling Guide
- Story Writing Instructions

Characters



Detective Dupont: Detective Dupont has always considered the heart of Washington, D.C. her domain. Born and raised in the bustling city, her connection to its streets run deep. Her path to becoming a savvy detective was etched with determination and an unwavering commitment to upholding the law. It was a career she embraced with the same fervor as her father, a retired police officer who instilled in her the values of justice and integrity. Dupont's unwavering dedication to the force was also influenced by her mother, a brilliant historian with a passion for preserving and uncovering the past. She left an indelible mark on Dupont's life.

Image Description: A simplified hand-drawn illustration of a Black woman with her hair pulled back on top of her head, wearing a shirt with cap sleeves. Underneath the drawing are the words “Detective Dupont.”



Capitol Carl: In the heart of the bustling nation's capital, Capitol Carl is known as the go-to electric scooter tour guide for those seeking an insider's perspective on the U.S. Capitol. With an encyclopedic knowledge of the iconic buildings and his intimate knowledge of the Capitol's inner workings and secret passageways, Carl is not just an affable guide; he is a living, breathing history book on two wheels. Over the years, he found he liked the opportunity his tours gave him to engage others in one of his favorite preoccupations: gripping tales of intrigue and investigation that centered Capitol gossip around famed stolen artifacts. Engrossed in these stories, Capitol Carl has always craved recognition beyond the confines of his tours, as he watched other figures in Washington's cultural and historical scene bask in the spotlight, he can't help but yearn to be acknowledged as a historian in his own right.

Image Description: A simplified hand-drawn illustration of a Hispanic man with short hair, wearing a button-up shirt. Underneath the drawing are the words "Capitol Carl."



Artifact Alex: In the heart of Washington's cultural scene, Artifact Alex stands as an enigmatic figure, shrouded in an air of mystery and the admiration of those who seek the rare and the priceless. Her private exhibitions are legendary, whispered about in hushed tones among collectors and historians alike. Known for her uncanny ability to procure relics that others could only dream of, Alex has earned a reputation as a master of the art of acquisition. With her extensive network of contacts and deep knowledge of historical artifacts, Alex isn't just a collector; she is a living link to the past. Her exhibitions aren't merely displays; they are

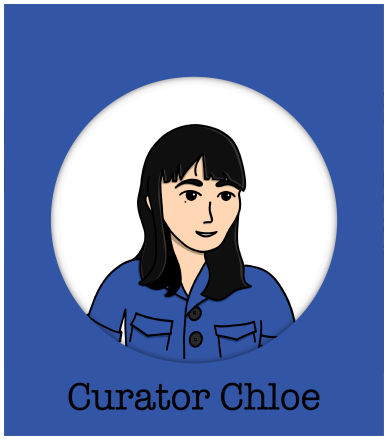
immersive journeys into bygone eras, transporting visitors to worlds long lost in the annals of time.

Image Description: A simplified hand-drawn illustration of a white transgender woman with long hair pulled back in a ponytail, wearing a sweater . Underneath the drawing are the words "Artifact Alex."



Smithsonian Skylar: Smithsonian Skylar reigns as a luminary historian whose documentaries and books are celebrated not only by prestigious museums but also by laypeople. Skylar's work is a captivating blend of meticulous research, compelling storytelling, and a gift for bringing history to life in a way that few could match. They have the unique ability to make even the most complex historical narratives accessible and enthralling. Their documentaries, broadcast on national television, and their books, perched on the bestseller lists, have an uncanny knack for unraveling the secrets of history and making them resonate with modern audiences. Skylar's passionate pursuit of the past has earned them admirers worldwide and solidified their place as a distinguished figure in the field of historical documentation. Despite the accolades and the celebrated career, Skylar faces a potential career-ending challenge. Their publisher has given them an ultimatum to finish the book they are currently working on; a book about a historical artifact Skylar has yet to gain access to.

Image Description: A simplified hand-drawn illustration of a white, nonbinary person with short curly hair, wearing a shirt with jacket over it. Underneath the drawing are the words "Smithsonian Skylar."



Curator Chloe: Curator Chloe is the esteemed guardian of the National Museum's most extraordinary artifacts and world treasures. With her vast expertise, she has earned a distinguished reputation as a custodian of history and a protector of the past. Chloe's intimate knowledge of the museum's collections and her unwavering commitment to preserving the world's heritage makes her not just a curator, but a living testament to the importance of safeguarding human history. Over the years, Chloe has developed a profound appreciation for the historical artifacts she curates – some even say obsession – often considering them as her companions in a journey through time. To her, each artifact holds a story, a piece of history waiting to be shared with the world. She believes it is her mission, and her mission alone, to ensure that these treasures are accessible to all, transcending the boundaries of time and space (and the bounds of museum culture).

Image Description: A simplified hand-drawn illustration of an Asian woman with shoulder-length hair and bangs, wearing a short-sleeve button-up shirt with front pockets. Underneath the drawing are the words "Curator Chloe."

Puzzles

Puzzles are the building blocks of escape rooms. They are what create playful and purposeful challenges and milestones that players must overcome in order to progress through the room. Puzzles can take on many forms and are often based on logic, deduction, problem-solving, or creativity.

Well-designed puzzles are challenging but fair. They should be accessible to a wide range of players, and they should not be too difficult or too easy. Puzzles should also be relevant to the theme of the escape room.

Examples of types of puzzles include:

- Jigsaws
- Decoding
- Combining and ordering

- Matching
- Scrabble
- Maze / navigational puzzle
- Choose your own adventure
- Pattern guessing

Templates

- [Template] Choose Answer from Among Options Puzzle Guidance
- [Template] Anagram Puzzle Guidance
- [Template] Number Combination Puzzle Guidance

Build

The build process itself can take many forms and be completed by an individual or a team. It's hard ahead of time to think of everything you'll want to include or need to do. That being said, the build process is more efficient if you have materials prepared before you start assembling the escape room.

We suggest you plan for an interactive building approach and anticipate time for revisions.

Assets

Example assets include:

- Background Images & alt text descriptions
- Clue / Info Photos & alt text descriptions
- Clue / Info Text
- Instructions
- Fun facts
- Logos, acknowledgements, credits
- Links

Testing

Consider asking a variety of people to test your escape room and creating an easy way to receive feedback (like a form). Consider the following escape room testers:

- You
- Colleague(s) familiar with the project
- **Your target audience**

Accessibility

Designing for Accessibility

Accessibility is important and should always be considered when designing. As is the case with anything else you design, this will require learning, commitment, and attention to detail. We've documented key steps we took within ThingLink (and were sure to leverage tools that could be engaged with through a screen reader), but if you are using or incorporating physical / tangible items, you will want to consider how best to make the *entire* experience accessible. For example, you might record audio files that can be listened to describing physical objects, pictures, etc. You should consider the physical set-up as well (e.g. making sure there is genuine egress, that furniture is accommodating, etc).

ThingLink Build Accessibility

There are some inherent limitations to the tools we used to design the STARTALK E-SCAPE escape rooms and the Mini-Hackathon escape room experience. Here are a few ideas to mitigate them:

- **Accessible viewer links:** ThingLink offers an "Accessible Player" of each scene. In each of our scenes, we include a button to the Accessible Player for that scene.
- **Background Image Descriptions:** in each scene, we have included a button with a description of the background image. ThingLink does assign alt text to the background images but it's very limited.
- **Alt text:** make sure to add alt text to images included in tags.
- **Image-based puzzles vs. text-based puzzles:** some puzzles depend on visual information. ThingLink is an inherently image-based tool and there's a lot of useful and fun visual puzzles you can design with it. If you choose to design visual puzzles, also design a path forward that does not depend on visual information. This could allow participants the option to choose the image- or text-based approach.
    - **An example** of this puzzle type could be an anagram that is hidden within a stack of newspapers. The image-based puzzle could have all of the newspapers laid out across a table and users can click around and explore the visuals while searching for the hidden letters. In the text-based version of this puzzle, maybe you provide the users with a slightly modified version where they have found the original Word Doc versions of the newspapers. They can then search through each of the Docs that have been created with proper headings, and still engage with the core task of the puzzle. In this example, the visuals add an additional element of engagement but aren't necessarily essential to the puzzle.

ThingLink Background Image Descriptions (Alt-Text)

This section is designed to highlight the level of detail that should be considered and included with a visual-based, virtual escape room.

Background Image Descriptions

- **ThingLink Orientation:**
    - This is a white background with two notable blocks of text and a corresponding red box. The first block of text says, “Instructions: On this page there are circular icons representing different types of information. These icons are selectable! To move through the escape room, use the icons to discover information, find puzzles, and unlock new locations.” The red box with this text says, “You’ll see these icons throughout the game:” There is another block of text that says, “Saving your Progress: You do not have to complete the escape room all at once. However, the escape room will not remember your progress for you. Use the note-taking document provided on the next page to keep track of your progress. If you leave and return to the game at a later time, use your notes to skip the puzzles you’ve already completed.” The last red box says, “Use the arrow to the right to continue:”
- **Title Page:**
    - A red background with a picture of a simplified hand-drawn illustration of a Black woman with her hair pulled back on top of her head, wearing a shirt with cap sleeves. There is white text across the top of the screen that says “STARTALK E-SCAPE. Detective Dupont in D.C.” In the center of the screen is a white rectangle with the words “Start the Escape Room - Select the circular arrow icon to the right to start.” Across the bottom of the page are the credits for the project, which reads, “This project was designed by the Online Learning Consortium for the NPA Startalk program.”
- **World & Character Intro:**
    - This background features the skyline of downtown Washington, D.C. In the foreground of the image are a series of large apartment buildings. In the background is the top of the Washington Monument, a tall obelisk shape. Also visible is the top of the former U.S. Postal Museum tower, which features a pointed roof. There are a few dozen small birds flying through a blue sky.
- **Assignment Brief:**
    - A picture of a vintage typewriter. The typewriter is black, with circular keystrokes. The word ‘FAVORIT’ is written in gold across the middle of the typewriter. There is a white piece of paper on the typewriter, across the top, that has the words “Your Assignment” written on it.
- **First Location (Museum):**
    - A picture of the Smithsonian Castle, located in Washington, D.C., on the National Mall. The castle is red and has a series of windows and vaulted architecture. There is also a statue of John Smithson, the founder of the Smithsonian Institution.
- **Second Location (Transportation):**
    - A picture of five electric scooters sitting on a street corner. Behind the scooters, there are vehicles parked and a white bus driving. Pedestrians are in the background, all walking away with their backs to the scooters. The scooters have

black wheels, black handles, a grey body, and a black pad where an individual would stand while riding the scooter.

- **Third Location (National Harbor):**
    - A picture of the Capital Wheel at National Harbor, near the Gaylord Resort. The Capital Wheel is a Ferris wheel with a series of compartments where individuals can get inside and ride the wheel around and around. The Capital Wheel is built on a pier into the Potomac River. In the foreground, some boats are docked on the pier. There is a blue sky behind the Capital Wheel.
- **Fourth Location (Gaylord):**
    - A picture of the main atrium of the Gaylord Resort at National Harbor. In the foreground, some tables and chairs are part of a small cafe and bar. In the background, there is a large glass panel that looks out onto the Potomac River. Along the sides of the image are the balconies for the resort hotel rooms that can look down into the atrium of the Gaylord Resort.
- **Puzzle 1 Success:**
    - A photograph of an open notebook. The pages are blank except for the words "Clues and Notes." Two pens, a pencil and an eraser sit nearby.
- **Puzzle 2 Success:**
    - A photograph of an open notebook. The pages are blank except for the words "Clues and Notes." Two pens, a pencil and an eraser sit nearby.
- **Puzzle 3 Success:**
    - A photograph of an open notebook. The pages are blank except for the words "Clues and Notes." Two pens, a pencil and an eraser sit nearby.
- **Return the Artifact:**
    - A black sign that resembles a lamp post, sticking out of a gray wall that says, “POLICE.” The wall has a series of rectangular shapes, in rows, popping out of the wall.
- **Keep the Artifact:**
    - A white boat tied up to a dock. The boat is floating in the water and has the words “Potomac Riverkeeper” written across the side. The boat has an indoor space. There are other boats docked in the background.
- **Congrats:**
    - A black background with an out-of-focus firework explosion. The word “Congratulations!” is written in white across the screen.
- **The End & Credits:**
    - A red background with a simplified hand-drawn illustration of a Black woman with her hair pulled back on top of her head, wearing a shirt with cap sleeves. The illustration is of Detective Dupont in the top-left corner. The slide says “The End,” and in the lower-right corner, it concludes with “...or is it?” On the bottom of the slide are the credits and the logos for OLC and the NSA STARTALK group.

Context: The STARTALK E-SCAPE Grant Project

The Online Learning Consortium (OLC) responded to a request for proposals and was awarded a grant from the National Security Agency (NSA) STARTALK pilot program to deliver innovative and creative materials to highlight foreign language federal government workforce development, targeted at high school juniors, seniors and college students (grades 11-16). This grant project includes designing and delivering a set of digital curriculum modules and learning resources centered around strategic language and cultural learning in service of federal workforce development, featuring engaging virtual escape rooms, interactive digital and print learning materials and artifacts, and the creation and curation of a digital library of interviews with professionals who utilize strategic languages in their careers.

At OLC Accelerate 2023

At the first of two conference sessions, we talked through the structure of the escape room and worked in groups to create puzzle and story elements. After this session, facilitators synthesized the groups' work to create the finished mini-escape room. At the second and final session, attendees played the escape room and we talked through key design choices and related possibilities.

Templates & Assets

Storytelling

- [Template] Storytelling Guide
- Story Writing Instructions

Characters

- Additional Characters (NPC) Instructions

Puzzle Design

- [Template] Choose Answer from Among Options Puzzle Guidance
- [Template] Anagram Puzzle Guidance
- [Template] Number Combination Puzzle Guidance

Images & Supporting Assets

- Background Images
- Character Images
- Smithsonian Artifact Images
- Music
- Detective Notes
- Fun Facts Template

Part 1: Mini-Hackathon (Build)

- Presentation Slides

During this 45-minute Mini-Hackathon, attendees first voted on key elements to include in the escape room including what the stolen item would be and which character would be the antagonist (thief). Then, working in six groups, attendees designed puzzles and story elements for the escape room.

Part 2: Purposeful Puzzles Session @ Block Party (Explore & Iterate)

- Escape Room

During this 30-minute session, attendees played the escape room. For those who had attended the earlier session, they go to see how their work integrated with everyone else's work and discover a few secret surprises (like who the antagonist they voted on turned out to be!). We also talked through some of the key design decisions of the escape room and related possibilities for remixing or creating your own escape room.

Presenters

Colette Chelf, Ed.D.

Director of Grants
Online Learning Consortium
colette.chelf@onlinelearning-c.org

Bucky Dodd, Ph.D.

ClearKinetic, LLC
buckydodd@clearkinetic.com
https://clearkinetic.com/

Laura Geringer, M.Ed.

Graphic Facilitator, Project Manager, & Community Engagement Designer
PumpkinBerry Consulting
laura@pumpkinberryconsulting.com
https://www.pumpkinberryconsulting.com/

Cody House, M.Ed.

Director of Academic Programs
George Washington University - College of Professional Studies
codyhouse@gwu.edu

Madeline Shellgren

Director of Community Strategy & Engagement
Online Learning Consortium
madeline.shellgren@onlinelearning-c.org