

What Is a Digital Breakout Game?

Digital breakouts are immersive online experiences not unlike their wildly popular counterparts, escape room games. These interactive diversions pose exciting challenges for players to overcome and along with them opportunities for libraries to impart learning outcomes and skill sets. Not bound to a physical location as are live escape games, these online adventures have the capacity to engross large numbers of students and library patrons by capturing their attention rather than their persons. Breakout games are being created by librarians and educators using a combination of free web-based tools and applications in order to simulate a series of locks to be opened, puzzles to be solved, and escapades to be carried out.

An Online Experience

Escape room games, rooted in entertainment genres such as adventure-style video games, immersive theater, and audience participation, utilize the principles of game theory to challenge groups of players to team together to solve a series of riddles and quests in order to solve the game or escape the room. These unique activities are much esteemed by libraries and corporations alike for their ability to promote teamwork and collaboration, as well as their ability to instill critical-thinking and problem-solving skills, all while engaging their participants.

Likewise, breakout games, the digital versions of these entertaining but useful pastimes, employ an online venue to achieve the same goals. Unlike live escape rooms, breakouts can be and most often are designed for individual players versus groups of participants. Breakouts are exceptional vehicles for presenting information literacy lessons that are cloaked in the appealing guise of a game and can be characterized by varying levels of difficulty and complexity.

Analysis of a Digital Breakout Game

Breakout games, much like escape rooms, can be set in a variety of fictional or real-life milieus, from space stations to libraries to prisons. They may employ a variety of themes, such as an impending zombie breakout, the American Revolution, or a scenario as mundane as missing the school bus. Many such digital games are focused on a book or a novel from which crucial clues to puzzles can be extracted. The possibilities are endless, and it is much easier to create fantastical settings and locales than in a live version of the game, particularly on a library's limited budget. Additionally, most successful digital breakouts are centered around one particular type of subject matter, skill set, or grade level and don't attempt to take on too much as these activities are meant to be completed in one sitting.

Main Components of a Breakout

Digital breakouts are comprised of simplified versions of the same elements that make up established escape room games. These are as follows:

- **The narrative** or backstory that sets the scene and the tone for the game. This bit of storytelling is what immerses the player in the event and informs the structure of gameplay by telling the participant what will be expected of them throughout the scenario. This is most often a short paragraph that sets the scene. However, it could also consist of an image, a series of images, or a video.
- **Locks** to be opened. Just as in a live escape room game, these digital versions have a series of locks that must be opened in order to complete the game. These locks can range in variety from simple number locks consisting of any number of digits to color locks that can be entered by using their hue's initial, such as RYGBOP, to directional locks

that can be entered similarly according to a route followed such as up, down, left, right (UDLR), or to alphabet or word locks. Instead of opening a lockbox, treasure chest, briefcase, or other physical container, these locks invariably reside within a single lock form listing all the locks to be solved in any order to win the breakout.

- **Puzzles** and challenges to be solved, and along with them clues left for the player. These puzzles can run the gamut from actual jigsaw puzzles that must be assembled in order to reveal a clue to word games and riddles, to image-based puzzles, quizzes, memory games, or task-oriented quests such as research-based challenges. The assortment of puzzles and riddles in a breakout add not only to the entertainment level of the game but also to the ability to impart lessons and set the scope and theme of the game.
- **A learning objective** to be met. While not all digital breakouts have a learning objective as their impetus, the vast majority do, as these online games and activities are used primarily by librarians and educators as teaching tools.
- **A resolution** to be found along with an accompanying reward. When players complete a conventional escape room game, they are rewarded by escaping the room and oftentimes given victory props such as signs saying “We escaped!” or “We Broke Out!” with which to pose for group photos. These victory rewards can be simulated by crafting a “Congratulations” note to victors that will be deployed upon the game’s successful completion, or digital badges can be created that will be accessible to those who are victorious.
- **A location** or setting for the game. In the case of a digital breakout, this is a virtual setting, yet still a necessary element. This is the “place” where all of the abovementioned components reside, including the lock form, the puzzles, the backstory with scene setting images, and so on, as well as the library or classroom branding. This virtual locale is most often a simple (and free) online website or document that serves to house the game.

Examples of Digital Breakouts

The very best way to familiarize yourself with all of the nuances of digital breakout games and the types of puzzles they typically employ, as well as the online tools most often used to build them, is to just start playing them. So jump right in!

Dracula’s Curse Breakout

Ellyssa Kroski
<https://sites.google.com/view/draculascurse>

I have created a simple digital breakout for a class that is reading the Bram Stoker classic *Dracula*. My breakout consists of four locks: three word locks and one number lock. To accompany the locks, I have created four puzzles, all of which are linked from within a large image of Bran Castle in Transylvania. On top of that image of Dracula’s castle, I created four circular portrait images of Vlad the Impaler and hyperlinked each one to a different puzzle, with each containing the clues necessary to solve the game: a jigsaw puzzle, a newspaper clipping, an acrostic word game, and a memory card matching game. While each challenge provides a clue, the player must have read the book or be familiar with the story in order to solve the game. In this way the breakout is entertaining yet still meets the learning objectives behind its creation.

Blackbeard Elementary School Supply Mystery

Erin Wilson
<https://sites.google.com/a/spotsylvania.k12.va.us/blackbeard-elementary-school-supply-mystery>

This excellent breakout incorporates both pirates and math as well as the need for critical-thinking skills. It consists of four different types of locks: a directional lock, a color lock, a word lock, and a number lock. All of the school supplies at Blackbeard Elementary School have vanished. In their place four locked pirate treasure chests have appeared. Can you unlock the chests and get the students their supplies back?

Og’s Great Adventure

Mari Venturino
<https://sites.google.com/site/digitalbreakoutjb/game-7>

In this clever breakout, players take on the persona of Og the Dinosaur for a fun adventure that puts them on the opposite side of the mountain from their friends. Og’s mom promises to take him to the other side of the mountain tomorrow if only the player can find her necklace. As Og, you remember seeing your little brother Goo place her necklace in a box and lock it, but since Goo can’t yet talk, you need to solve the puzzles to open it. This fun breakout game teaches players all about dinosaurs using a number lock and a word lock, as well as directional and color locks.

Game of Thrones Digital Breakout

Glenn Ferraris
<https://sites.google.com/sbstudents.org/gameofthronesdigitalbreakout>

Aimed at adults, this challenging breakout features a whopping six tough locks. Can you solve it? You are just about to watch the *Game of Thrones* finale when your cable goes out. Desperate to fix your cable

before the final episode, you must unlock the locks in order to get in and fix it before the show starts.

80s Movie Breakout

Glenn Ferraris

<https://sites.google.com/sbstudents.org/80smoviebreakout>

Five varied locks, including a date-format lock, guard this rad breakout aimed at adults. You are guaranteed to feel nostalgic playing this one if you grew up in the 80s.

Let's Play a Digital Breakout . . . or Five!

There's really no substitute for firsthand experience. The best way to learn the ins and outs of these is to start playing. So let's get going! Here are two great resources to visit in order to find ample digital breakout games:

Breakout EDU Digital Sandbox

<https://sites.google.com/site/digitalbreakoutjb/sandbox>

This massive listing organizes hundreds of free, community-created breakout games in subject areas ranging from history to music to library science and includes all grade levels from K–2 to adult. One of the most helpful features of this directory is the fact that it lists the email addresses of the breakout creators. So fear not! If you are stumped, you can always email the game designer to get the solution. I have done so myself.

The 50 States Digital Breakouts

<https://sites.google.com/tcea.org/digitalbreakouts/digital-breakouts>

This excellent collection of breakout games was created by educator Peggy Reimers, who is nearly done creating a custom breakout for each and every one of the fifty states. For an article about the process, see Peggy Reimers, "The 50 States Digital Breakout," *TechNotes* (blog), April 20, 2017, <https://blog.tcea.org/50-states-digital-breakout>.