

How to Create a Digital Breakout

Getting Started

Now that you know what digital breakouts are and how they can be used by libraries as effective teaching, training, and outreach tools, you're ready to begin creating your own online breakout adventure!

Main Components of a Breakout

Once again, these are the main elements found in all digital breakouts, and we will be discussing how to achieve each of these in turn within this chapter and following chapters:

- the narrative
- locks
- puzzles and challenges
- a learning objective
- a final resolution
- a location

Think about Your Endgame

Why do you want to create a digital breakout? What do you want your students or library patrons to gain from it? Will this activity be designed purely for entertainment value to be used as an outreach tool, or will this be an instructional aid for an upcoming workshop you'll be giving? Will players ultimately learn something from your breakout, and if so, why and what elements are important to pass along? What will be your measure for success? Oftentimes it's easier to start at the end rather than the beginning, especially with game development.

Develop Your SLOs

While you are brainstorming your endgame and goals, make a bulleted list of your student (or patron) learning outcomes (SLOs). These will inform your background story, your puzzles, and your locks. It all begins here. What are your goals with this digital breakout? What would you like library patrons to learn? Will this be a breakout based on a particular course or summer reading list book, or will it teach how to develop library research skills?

For example, when I was designing my *Dracula's Curse* breakout, my goal was to immerse students in activities related to the book they were reading for class to get them excited about it. I also wanted to be certain that they read the book, so I wanted to make sure that some of the puzzles and their clues would be difficult to find answers for if students hadn't completed the book. I came up with the following learning outcomes for students who complete the *Dracula's Curse* breakout:

- Students will know that the year that Bram Stoker's *Dracula* was published was 1897.
- Students will know that a city that Dracula traveled to in the novel was London.
- Students will know that Dracula's nemesis was Professor Abraham Van Helsing.
- Students will know that the historical figure that Dracula is said to have been based on is Vlad the Impaler.

Your learning outcomes will define your narrative structure for the game, determine what types of locks you will employ, and help you choose appropriate puzzle types.

Let's Begin!

Creating a digital breakout from scratch involves a lot of moving parts. You will be creating quite a few files, forms, and images that you will want to keep organized. The easiest way to manage all of these files is to set up an online account in order to store them all in one place. For this digital breakout step-by-step walkthrough, we will be using the Google platform in order to create nearly all of our content. So it makes sense to store everything within a Google Drive.

1. Set Up a Google Drive

If you don't already have an account with Google, set up an account on Google Drive. Sign into your Google Drive account. Once you are in to your account space, add a new folder (+ New on top of the left-hand menu), and name it after your breakout. Click into your brand-new breakout folder. This space will now house all of the things that you create having to do with your game.

Google Drive
<https://drive.google.com>

2. Create the Narrative

Once within your breakout folder, click + New in the left-hand menu and select Google Docs. Name this new document BreakoutNotes. Copy and paste your endgame or goals for your breakout as well as the SLOs that you developed to the top of the page and start thinking about how you can transform those into an enticing backstory and a game scenario. For example, here is the backstory I developed for my *Dracula's Curse* breakout.

Mina Murray needs your help! While sleepwalking through the foggy countryside of England, she has somehow been transported into your classroom. Dracula is fast approaching, and you won't be able to hide her for long. Follow the clues left by Jonathan Harker in his journal in order to unlock each of Dracula's many coffins and destroy them to save Mina.

What is important with the narrative is that you create a theme and an experience for the player. Unlike the case of a traditional video game, you don't have the benefit of high-quality special effects, custom artwork, and a soundtrack to add ambiance, so think about what you can do to immerse the player in the breakout game.

Once you have written your backstory, you will

have a direction to go for the rest of your game. Set it aside for right now, and let's build the lock form.

3. Create the Locks

Just as with a conventional escape game, digital breakout games must have locks to open in order to solve the game. And just as in the live versions of these games, they can vary in type and difficulty. These can include

- number locks
- color locks
- alphabet or word locks
- directional locks

This is where the fun and creative part begins. Take another look at your SLOs, and see if you can pick out some elements to be the "keys" to open your locks. For example, with my breakout SLOs

- Students will know that the year that Bram Stoker's *Dracula* was published was 1897.
- Students will know that a city that Dracula traveled to in the novel was London.
- Students will know that Dracula's nemesis was Professor Abraham Van Helsing.
- Students will know that the historical figure that Dracula is said to have been based on is Vlad the Impaler.

I chose to extract the following elements to serve as my keys and locks:

- the year 1897—4-digit number lock
- the city London—6-letter word lock
- the name *VanHelsing*—10-letter word lock
- the word *impaler*—7-letter word lock

These four locks served as my lock kit for the breakout.

Create a Google Form

Digital lock kits are easily created using Google Forms. In your Google Drive breakout folder, go to + New in the left-hand menu and select More, and the menu will expand to allow you to choose Google Forms. We will now set up the locks.

The Google Form by default is a dual-tabbed form that houses Questions in one tab and Responses in another. The Responses tab supplies both summary and individual statistics about the responses entered into your form by participants. It is here that you will later be able to browse through all of the correct as well as incorrect answers that have been submitted. But for now we will concentrate on the Questions tab.

The Questions form begins with one untitled section and one untitled question. Click into “Untitled form” in the top center of the form and replace it with the “Titleofyourform Lock Form.” For example, mine is “Dracula’s Curse Lock Form.” You may add a description below the form title, but keep this brief, such as “Unlock the locks to solve the game.” See figure 4.1.

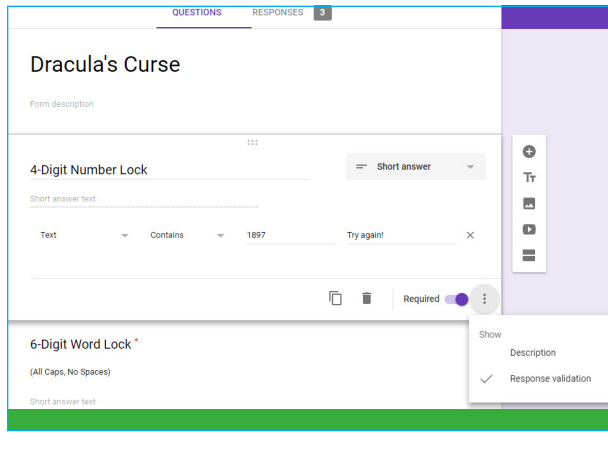


Figure 4.1
Setting up the lock form.

Set Up a Number or Word Lock

Now to the fun part . . . setting up the locks. Instead of questions on your Google Form, you will set up locks. Click on “Untitled Question,” and you will see this area expand. The first thing to do is to add a name for your lock, such as “4-Digit Number Lock.” To the right of each question is a drop-down menu with several choices of answer types for you to choose from. The default is set to multiple choice. You will want to change this to “Short answer,” which will allow the player to type in a single line answer to your question or lock.

Make Answers Required

Underneath the question, you have several options. You would click the icon that looks like a stack of papers if you’d like to duplicate this question. We will be doing this, but not until we’ve finished getting this lock completely set up. You may also delete this question if you decide that you have too many on your form. Next to the trash can, which allows you to delete your lock, you will see a slide on/off switch to make the question a Required answer. You will always want this in the On position. The default is Off, so go ahead and set this question to be Required. This will necessitate that players find the correct key to this lock before they can complete your breakout game.

To the right of the Required switch are three vertical dots. Click on them to make certain areas of your

question viewable and editable by you: the question Description and the form Response Validation. Click on each of these to make both of them visible. In the Description section, you have the opportunity to add brief instructions concerning the format with which players will enter their answers. For example, if you have a word lock you can include instructions such as “(All Caps, No Spaces)” so that players know how to enter their answers. This is especially important if you have multiple-word answers.

Tech Tip: While the form saves automatically as you make changes, Ctrl+Z will undo your last change if you realize you made a mistake.

Set Up Response Validation

When you clicked on “response validation,” you should have seen that the form expanded again, adding a new section. This is the area that will allow you to enter an exact or correct answer or response to your question.

You now have a myriad of choices of how you would like to set this up. On the first drop-down menu, you have the choice to receive your response in the form of a number or text. If you choose “Number,” the next drop-down menu will let you select to set this to be a number greater than a particular number, less than that number, a digit in between a series of numbers, and so on. Or you can choose “Equal to.” When you choose “Equal to” here, a blank line will appear for you to fill in with that number. Simply enter your answer number on that line to complete the sentence.

Alternatively, you could choose to receive your response as text for a number or a word. In this case, you would select “Text” in the first drop-down menu and “Contains” in the second. When you select “Text,” you will see a blank line appear; you enter your text answer here.

For example, the first lock on my lock form is a 4-digit number lock and I had the choice to set this up as

Text Contains 1897

or

Number Equal to 1897

Set Custom Error Text

The last line that you may fill out here is “Custom error text.” This will be the response that the player receives when they have entered an incorrect response and attempted to submit the form. For my locks I use the text “Try again!” as my custom error text, but you can adjust this as you see fit. It is important to note here that if you leave this blank, the form will give the correct answer to players when they submit the form

with text such as “Must be a number equal to 7.”

Tech Tip: You may preview your lock form at any point and enter answers by clicking on the eye icon on the top right of the interface. This will launch the form in another browser tab and allow you to interact with it.

Set Up Different Types of Locks

Now that you’ve gotten your question all set up, you’ve tested it out, and it’s working to your specifications, you will want to save yourself some work going forward by duplicating the lock. Click on the duplicate icon directly below the question to make a copy of it and create your next lock with all of your settings already applied.

Directional locks may be created by setting up word locks and specifying how answers are to be submitted in the Description section of the question, for example, “(U=Up, D=Down, L=Left, R=Right, All Caps, No Spaces, e.g., LLRUD).”

Similarly *color locks* can be set up by providing a description such as “(R=Red, Y=Yellow, G=Green, B=Blue, O=Orange, P=Purple, All Caps, No Spaces, e.g., PRGOB).”

You may even set up your own variety of locks such as those with symbols (*?/_\$%), letter and number combinations (13R5YP), compass directions (NWSWE), and so on. Get creative. The possibilities are up to you.

More Options

To the right of the question form, you may notice a floating menu that offers options to help you design your lock form according to your style and preference. You may choose to add new sections to your form if you have a large number of locks or if you’d like to separate your locks into different categories. You can also add a new title and description to your form in addition to the one at the top at any point within the form. This sidebar menu also gives you the option to import questions and add images and video to your form.

Form Settings

On the top right of the Google Form page, you will see a gear icon. Click it and you will see a three-tabbed Settings form. In the General section you have the option to collect the email addresses of those who play your breakout as well as a few other choices. The most important tab to pay attention to here is

the Presentation section. This is where you have the opportunity to enter a confirmation message to players. This is the Victory message that winners of your breakout will see when they have finally found all of the answers to all of your puzzles and unlocked your locks. You may choose to write a simple message to players such as “CONGRATULATIONS!! You solved Dracula’s Curse!” or a message with a link that leads to a digital badge that winners can display on their social media.

Sharing Settings

This is a rare instance in which you do not need to adjust the sharing settings for something that you create using a Google tool. Since we will be eventually embedding this form using a public link, this will automatically be visible to everyone, even if you’ve made your form private only to you. Sharing settings on Google Forms are changed only for purposes of adding collaborators to work on editing the form.

One thing that many forget to do when creating their digital breakouts is to change the privacy settings on their content creations to public. Google generates nearly every bit of content with a default setting of private, viewable only by the creator. If you don’t go in and change it on every document, sheet, website, drawing, quiz, and so on that you create for your breakout, you may have some frustrated players emailing you. But once again, for the lock form, you do not need to change or set any permissions or sharing settings.

Access Your Form

Google automatically saves new content as well as changes to content as it is edited. Since we navigated into our Breakout folder before creating this bit of content, it should reside there. Go back into your Google Drive and be sure that you can find your new breakout lock form. Set this aside for now, and we will return to it later on when it’s time to embed it into our public site.

And if you need additional help setting up your Google lock form, this is an excellent video on the topic: “Digital BreakoutEDU How To: ‘Locked’ Form,” posted April 18, 2016, by “A Ballsy Sense of Tumor,” YouTube video, 4:24, <https://www.youtube.com/watch?v=bAVT2xeVUQU&feature=youtu.be>.

The core of your digital breakout game is now complete. You have a clear direction developed, your learning outcomes are defined, and your lock form is built. Now you’re ready to craft some custom challenges for your players to overcome.