

Digital escape rooms for world languages

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Abstract

A digital escape room is a gamified activity in which students work collaboratively to solve a series of tasks or riddles within a certain amount of time. They are typically embedded in a story framework at the end of which students need to “escape” an imaginary scenario. Students explore the target culture while using the target language for solving puzzles with their peers. The versatility of digital escape rooms in language courses allows for implementation in online teaching, in F2F classrooms, and as homework assignments. Instructors can shape escape room tasks in many ways to help students practice relevant target language skills at all levels of instruction. Digital escape rooms are easy to set up by following the simple steps that are outlined in this article. Practical tips and student voices round out this article.

Keywords: classroom instruction, technology integration, student experiences

Introduction

Gamification in education has multiple benefits. Not only can it help increase learner motivation (Fotaris & Mastoras, 2019; Jonge & Labrador, 2020; Papadakis & Kalogiannakis, 2018; Vidergor, 2021), but it can also foster student engagement and collaboration (Kapp, 2012). Moreover, gamification can advance learning outcomes especially when reflective or debriefing activities follow the gamified task (Makri, Vlachopoulos, & Martina, 2021). In language education, gamified instruction has been shown to lead to learning outcomes that are comparable to traditional instruction (Cruaud, 2016; Rachels & Rockinson-Szapkiw, 2017). Digital escape rooms have become particularly popular during the pandemic (Costa, 2021) because they not only serve to advance language and culture learning goals but they are also a great break from more traditional teaching approaches. A digital escape room is a gamified activity in which students work collaboratively to solve a series of tasks or riddles within a certain amount of time. Since online teaching and learning can be tiring and easily

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becomes monotonous, instructors have turned to gamified approaches such as digital escape rooms to liven up their online classrooms. Nonetheless, digital (and non-digital) escape rooms also work in in-person classrooms where students can work together to solve riddles as well. Escape rooms offer an engaging and interactive way for students to review and practice disciplinary content and are a great tool for combining language and cultural content at all levels of instruction.

Digital Escape Rooms in the Language Classroom: An Example

Digital escape rooms can have any theme that fits the context of a particular class. Escape rooms that have a framing story are most effective, rather than a series of disjointed tasks. For example, one could design an escape room about living in the Middle Ages in a European country where students solve riddles to avoid being thrown into jail, or about having lost a passport abroad and navigating bureaucracy to still make the group flight home. This section provides one brief example of a digital escape room, created in Google Forms, to give a general idea of what tasks an escape room could include. The example escape room was intended as an introduction to and exploration of a cultural topic: German communities across the world. This escape room was originally designed for an intermediate (fourth-semester) university-level German class to fit into the last unit of a course on *Germans Abroad*. The escape room can also fit into other German classes where the students' language levels are strong enough because it does not require previous content knowledge of the topic. Similar escape rooms focusing on language communities across the world could be designed for other language courses, especially for languages that have minorities in different places. In this escape room, students learn about German communities in different parts of the world by reading short articles or watching videos online. Students use their German language skills to read and comprehend the texts to complete the tasks. They also use German to communicate with their teammates. Escape rooms could also include specific language-focused activities, such as those that require students to identify synonyms, complete fill-in-the-blank texts with correct vocabulary items, or other tasks requiring them to practice specific target language forms. This example escape room was not intended to practice specific language forms but rather to use already existing language skills to learn more about a specific topic.

The escape room starts with a general introduction (all directions and tasks are in the target language, translated for this article into English) that sets the context for the 60-minute game:

We are in the year 2021 in a small town in Germany. The pandemic is still going on and Germany is only making slow progress with vaccinations. You are stuck in Germany where you are currently studying abroad. But you are so tired of the lockdown and want to return to your home country. Before you leave Germany, you have to prove your knowledge about Germany so you can continue to represent the German language well when you return home.

Hurry! Your 60 minutes have begun...

After the introduction, students are led through a series of five tasks they need to complete in teams so they may leave Germany. All tasks require students to use their communicative abilities in interacting with their peers, in the target language. It requires skills of asking and responding to questions as well as skills of negotiating meaning together. The tasks also target students' cultural competencies. Students need to show their understanding of cultural texts and media and they acquire content knowledge while solving the riddles. The five tasks are:

1. *German minorities in North America*: Students answer multiple-choice questions based on information they find on provided websites. The letters of the correct answers in order constitute the code word, which takes them to their next task (e.g., *ACDBA*).
2. *Location of German minorities in the world*: Students have to identify countries and places where German minorities exist based on matching flags with geographical locations (Figure 1). The code word consists of the initial letter of each country.

Figure 1

Task 2: Identifying Places



3. *Ethnic minorities in Europe*: Students solve a crossword puzzle; the information they need is contained on websites that are linked. The website XWords (<https://www.xwords-generator.de>) was used to generate the crossword. This is a German crossword puzzle generator (language can be switched to English). Alternatives include LearningApps (<https://learningapps.org>) or Crossword Labs (<https://crosswordlabs>). The code word is the crossword puzzle keyword.
4. *German in the world*: Students complete a jigsaw puzzle (Figure 2, next page) that reveals the code word when all pieces are in place (Figure 3). The jigsaw puzzle was created using Jigsaw Explorer (<https://www.jigsawexplorer.com>). This task is always a nice cognitive break for students as it does not require them to read a text or watch a video. It's a quick task that students generally enjoy.
5. *German speaking minorities on a map*: Consolidating everything students have gathered and learned throughout the escape room, in this final task students identify countries on a map where no German minorities exist. Each country is numbered on the map (Figure 4, next page) and the code word consists of the numbers of those countries where there is no German minority community. The map was created in Google Maps and includes numbered markers with many locations but not all of them correspond to a place with a German community.

Figure 2
Task 4: Jigsaw Puzzle Scrambled



Figure 3
Task 4: Jigsaw Puzzle Completed

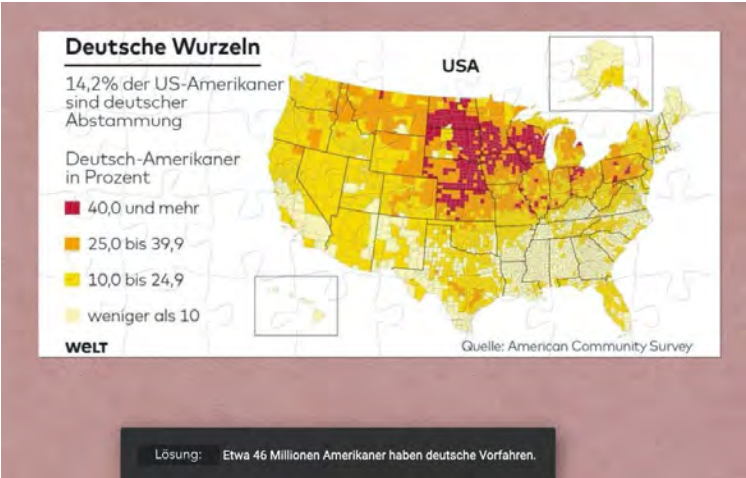
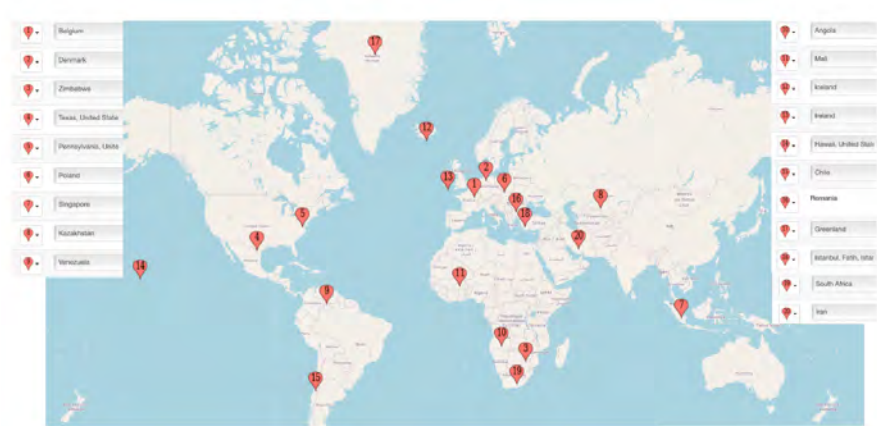


Figure 4
Task 5: Map of German Communities



After each task is completed successfully, students see a motivational image and progress update such as, “*Well done, you will be able to return home soon,*” before moving on to the next task. After completing the last task successfully, they see an image of an airplane with the message: “*Congratulations! You know a lot about German communities in the world! Please come back soon and, in the meantime, continue to speak a lot of German in the world.*”

Designing a Digital Escape Room Using Google Forms

The first step in designing an engaging and fun digital escape room in Google Forms is to define the language and/or content focus, using backward design principles (Wiggins & McTighe, 1998). What are your objectives? What do you want your students to learn and be able to do and/or know after completing the escape room? Next, develop your storyline. This should be interesting and relevant to your students’ lives. You will then design the tasks and create any visuals or activities associated with the tasks.

Once your storyline and task elements are done, create your Google Form. There are many other ways to create digital escape rooms (e.g., proprietary resources, Google Slides), but we found Google Forms to be easy and effective. Step-by-step instructions can be found in the Appendix.

Practical Tips and Student Voices

Escape rooms lend themselves well to an exploration of a cultural topic as well as for review of certain language forms. They are an ideal way to combine cultural content with language practice and can be used as an introduction to a new cultural unit or as the final session on a topic. By designing 3-5 tasks that all explore one cultural theme, students can learn more about the topic in an engaging, playful way. Further class sessions can then build on what students investigated through the escape room. For example, students can be assigned one community they found especially interesting which they can present to the class in more detail. This would target the presentational mode of communication. Alternatively, students could research other communities that were not included in the digital escape room and could prepare a poster on this group. Class discussions should round out the unit focusing back on the interpersonal and interpretive modes to give students an opportunity to share their opinions on the learning experience and the content that was acquired.

Teams of three work especially well for digital escape rooms. In teams of four or more, sometimes not everyone gets to contribute, and teams of two tend to take longer, which may frustrate students if the escape room is set up as a competition. Larger groups are not advisable.

How do students experience digital escape rooms? Student feedback on digital escape rooms collected by the authors has been overwhelmingly positive, which echoes general feedback summarized in research on digital escape rooms (Healy, 2019). Students describe the experience as fun, engaging, challenging, and motivating (Jonge & Labrador, 2020), and they appreciate the opportunity to use the target language in a less stressful environment (Costa, 2021). Students have also reported to be more actively involved in the language learning process through escape rooms and found that the approach leads to self-appreciation and more autonomous learning (Mudure-Iacob, 2021). In our own courses, students voiced similarly positive feedback. One student said:

The escape rooms were a really engaging way to delve into the topic material. I found that researching the topics to find clues and guess the answers was very helpful in getting me to recall things later on, as I was able to associate them with the escape room clues. Also working out the clues and getting them right was very satisfying

and rewarding. Maybe the only downside is that after a point you can skip ahead and guess the final answer once you have enough of the clues, but it was a very enjoyable experience.

Another added:

I really enjoyed the two digital escape rooms and was very impressed by how they were organized. It was probably one of the most interactive Zoom activities I've done since moving online. I really enjoyed the crossword activity, and the tidbits about the place that the "room" was in created the feeling like it wasn't all actually online. Some of the activities were a bit difficult without [the teacher's] help, but I think that's also because of the time limit. While the point of escape rooms is to complete the activities in the allotted time, I feel like there was an unnecessary time crunch. Overall, I felt excited when we had the escape room activity scheduled for class, and working together in small breakout rooms made it fun.

The overall enjoyment of the escape room activities is also seen in the comment by a third student, who explained:

Doing a digital escape room in a language class was a fun learning experience that allowed me to put my language skills into practice without me even noticing. I liked the fact that this exercise was made into a fun group activity, and was a great way to learn, especially over Zoom. All students in my group remained engaged as we worked together to solve each puzzle through different games, videos, and other activities. I would definitely love to do another digital escape room again.

Escape room activities are especially effective as a break from routine class learning. One student explained that "college classes can get kind of stuffy, and the escape rooms added a levity and silliness that I really appreciated." She also added that she "learned a lot from the escape rooms and they were really good at enforcing key concepts and themes from the course."

Digital escape rooms are an excellent way for students to work collaboratively on tasks that give them many opportunities to explore culture together while using the target language for solving puzzles. They allow students to practice specific language skills, targeting both interpretive and interpersonal modes of communication, while follow-up activities can focus on presentational skills.

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Appendix: Step-by-Step Guide for Creating a Digital Escape Room

This guide uses Google Forms for the digital escape room. It was adapted from Meredith Dobbs's (2019) website, which also includes screen shots and is an invaluable resource for designing a digital escape room.

Content/Language Focus

1. Choose a content focus or a particular language skill focus (culture topics, short stories, videos/reading comprehension, listening comprehension, etc.).
2. Come up with a story in which to embed the content (as is often done in traditional escape rooms).
3. Create 3-5 activities in which students explore the content focus or work specifically on the language skill focus. (Note: When choosing a content focus, you can choose any number of language skill areas to work on.)

4. The 3-5 activities should target the skills you want students to practice and should be different to hold students' attention. Examples include:
 - a. Quiz questions (students have to find the right answer to questions in a text they read, a website they review, or a video they watch)
 - b. A cloze text (students complete missing words; can be based on a text they read, audio they listen to, or from their own knowledge depending on objectives)
 - c. Ordering paragraphs/bringing into correct order based on a text/video/website
 - d. Matching activities
 - e. A jigsaw puzzle based on a photo (that displays a code word/sentence at the end; <https://www.jigsawexplorer.com>)
 - f. A crossword puzzle with keyword (<https://puzzlemaker.discoveryeducation.com/hidden-message>)
5. For each activity choose a key or code word that students will need to proceed from one activity to the next.
 - a. For example, for a multiple-choice quiz activity with multiple questions, the key could simply be the letters of the correct choices (e.g., acdb, 1432).
 - b. For a jigsaw puzzle, a code word or phrase could be displayed once the puzzle is finished (see Figure 3).
 - c. For a paragraph ordering activity, the key could be the numbers of the paragraphs in correct order (e.g., 15243).
 - d. Note: It is important to give clear instructions about what the key/code word is (if there are capitalized letters, spaces, etc.) to avoid frustration.

Technology

Now put your activities into Google Forms (<https://forms.google.com/> – a Gmail account is required).

1. Add a new form.
2. Title your form (change “Untitled form” to title of your escape room – the Google Form title will also change).
3. In the “Form description” box, provide the story you have come up with for your escape room.
 - a. Under “Untitled question” you may want to ask for the students' names so you know who completed the activity (short answer – see below).
4. You are now ready to enter your first activity – we will start with an open-ended question.
 - a. Click the “equal” sign on the bottom right to create a new section for your first activity.
 - b. Change “Untitled Section” to the topic of the activity or simply something like “Activity/Task 1.”
 - c. Add a “Description” to provide more context about the activity (optional).
 - d. Under “Untitled Question” type the open-ended question students have to answer.
 - e. In the drop-down menu on the right, select “short answer” or “paragraph” as applicable.
 - f. On the bottom, toggle “Required” to the right so it is on. This ensures students have to complete the activity before the next activity is displayed.
 - g. Click the three dots on the bottom right and select “Response validation.”

- i. Change the first drop-down menu to “Text” (or whatever your key is), second drop-down “contains,” then type your key or code word in the “Text” field.
 - ii. You can also add a “Custom error text” such as “Try again” or “Almost there” or even provide a hint for students’ second attempt.
- h. Under the three dots, you can also check “Description” and type more information where your students can find the answer.
- i. You have just created your first activity!
5. Click the “equal” sign on the bottom right to create the next section and enter your next activity.
6. Other activity types:
 - a. Multiple choice – asks students to select one of multiple answer choices
 - b. Checkboxes – allows students to select more than one correct answer choice (probably not used in escape rooms)
 - c. Dropdown – a multiple choice activity that displays the options in a drop-down rather than with radio buttons
 - d. For other activity types like the jigsaw puzzle or an ordering activity, you will create a short answer question and link to a jigsaw or upload an image with accompanying directions.
7. Other features in Google Forms:
 - a. You can insert links to websites in any of the text fields by typing/pasting the link.
 - b. + icon on the right adds a new question/activity (should you want to display more than one in one section – unusual for an escape room).
 - c. Image icon on the right lets you insert an image – this is useful between sections or if you want students to refer to an image as they solve an activity.
 - i. Add images between sections/after an activity to provide a motivational phrase for students such as “Almost there” or “One more activity!” etc. or other information that ties back to your story.
 - ii. At the end of all activities, add an image that shows students they have completed the escape room and have “escaped” (or found the diamond, or caught the thief, or anything else that works with the story you created).
 - d. Video icon on the right lets you insert a video via YouTube search or by URL.
 - e. Preview your escape room by clicking on the eye icon on the top right (opens in new tab).
 - f. You can add a header, change the theme and background colors, and change the font by clicking on the pallet icon on the top right.
8. Share your escape room with your students.
 - a. Click the “Send” button on the top right.
 - b. Click on the hyperlink icon (next to envelope icon) and copy your link (you can shorten it as well).
 - c. Paste the link in your Learning Management System or email it to your students.

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