

**Creating a Virtual Escape Room
to Promote Learner Engagement in a Gamified Context**

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Since the onset of the COVID-19 pandemic in spring 2020, educators in every field have sought new ways to engage their students in a rapidly changing virtual environment. Foreign language educators have been using digital tools for many years, both as an alternative to face-to-face courses and as a supplement to teaching in the classroom. Computer Assisted Language Learning (CALL) is a dynamic, interdisciplinary field that is constantly changing to meet the needs of the language teaching and learning community. This project, creating a virtual escape room for students studying introductory Spanish at a large, midwestern public university, is an example of how we can leverage technology to make language learning more interesting and engaging for students. Our goal in developing this virtual escape room was to break up the

monotony of Zoom classes by giving students a challenging and unique language learning experience.

In recent years, escape room activities have become increasingly popular as a creative way to use the target language in a gamified setting. These activities are immersive experiences, which encourage students to be active participants in their own learning (Domingues Ferreira da Cruz, 2019). Escape rooms encourage students to work collaboratively as they solve problems and think outside the normal “box” of language learning. They are a creative and exciting way for students to work collaboratively with their peers and “play” with the target language, hopefully leading to greater motivation and engagement in the virtual classroom. Our goal was to adapt this type of activity to an online setting, creating an immersive online experience for our students.

Background

Although escape rooms have been used for many years in language classes, when we decided to create this activity, research on virtual escape rooms in language classes was very limited. Therefore, we began our project by looking at what instructors in other fields had done. Instructors have been successful in leveraging Google Forms (Alonso & Schroeder, 2020; Vergne et al., 2020), Moodle (Yllana Prieto et al., 2021) and a variety of digital tools such as FlipGrid, Google collaboration tools and Camtasia (Stephens de Jonge & Labrador, 2020) to create virtual escape rooms for their students.

For our escape room, we chose to use Google Forms due to its ease of use, access, and flexibility. While this tool is typically used to create surveys and other forms, by turning each section of the form into a “room” (Vergne, et al., 2020), it easily becomes a virtual escape room experience. Within each room, the student is presented with a problem or puzzle that they must

solve in order to move on to the next portion of the activity. Through response validation, the Google Form can be programmed to only allow the student to move on if they provide the correct answer. Hints can be provided if the student provides an incorrect answer, helping them to successfully complete the task. Images, videos, links, and other resources can be included in the Google Form to enhance the activity (Vergne, et al., 2020). Students can complete the activity collaboratively via a videoconferencing tool such as Zoom or WebEx. In a synchronous online course, the instructor can put students in breakout rooms to complete the activity, instructing one student to share their screen and the other group members to follow along and contribute.

The virtual escape room that we designed was for a second semester intensive course, for both synchronous and asynchronous online formats. This intensive five-credit course covers the third and fourth semesters of Spanish at the college level. The courses are primarily taught by graduate teaching assistants, adjunct instructors, and some full-time instructors. At this institution, we use the digital textbook *Contraseña* (Lord & Rossomondo, 2018), and the specific theme for the escape room was focused on the topic of a textbook unit. We used the escape room to replace one of the unit-final projects.

Activity Development

When we began this project in the fall of 2020, our students had already adapted to virtual learning through Zoom-based classes and a fully digital language program, *Contraseña* (Lord & Rossomondo, 2018). Before creating the virtual escape room, we first had to choose a unit on which to base it. The unit that we chose is titled “¿Cómo hemos reinterpretado la historia?” or “How have we reinterpreted history?” (Lord & Rossomondo, 2018). Our purpose for choosing this specific unit was two-fold. First, the topic of the unit, understanding literature and literary works and using historical context to further comprehension, is quite complex, as is

the summative assessment included in the textbook. Second, this unit would take place near the end of the semester, so the escape room would also serve as a fun and engaging way for students to reset and recharge as the semester's end approached. After selecting the unit, we worked backwards to align the objectives of the escape room with the unit objectives. In this unit, students read and interpret *El eclipse* by Augusto Monterroso and identify main ideas in the text. They also recreate the shortest story in Spanish, identify common literary terms, and describe actions that have or had happened in the past. To guide our activity development, we also created a storyline for the escape room that included humorous commentary to lead the students through the activity.

Lastly, we named our escape room "Escape from the Mayan Temple." It consisted of seven activities, ranging from listening comprehension to vocabulary and grammar recognition and production. Most students completed the escape room activity in pairs or small groups. After reading introductory information that explained that they ended up in the temple after falling through the stone when they climbed a pyramid they were not supposed to climb, students were ready to begin the challenges. Each challenge included a visual element, such as an image of a wall with a clue on it. For the first challenge, students were asked to select the lies from three two-truths-and-a-lie groupings of statements. This aligned with a style of activity they often completed in class. Then, they had to decode Mayan hieroglyphs to find the word "Tikal," which is the name of the temple they needed to escape.

Next, students were asked to match literary terms from the unit with their respective definitions. Afterwards, they had to put the storyline of *El eclipse* in chronological order. Then, students had to recreate the microcuento *El dinosaurio* by Augusto Monterroso, using clues in an image we provided. Next, they were asked to decode the dates of the next solar and lunar

eclipses using symbols from the Mayan numbering system. Finally, they had to fill out a crossword puzzle with the past participle of irregular verbs that were included in a riddle. After completing the crossword, they could see some letters were highlighted in blue within the puzzle. Students had to unscramble the letters to form the word “eclipse,” which was then used as the password for a “final mission,” or post-test activity in Canvas, our course management system, at the conclusion of the escape room.

For their “final mission,” students were asked to write a paragraph responding to the question of what they *had done* to escape the temple, using the present perfect in Spanish. The completion of a paragraph at the end of the escape room added a task that involved higher-order thinking. While the challenges within the escape room certainly addressed unit goals, many challenges focused on lower-order thinking skills, and we wanted students to create with the language as well since this was a unit-final activity. For the same reason, we also wanted students to submit the “final mission” assignment individually. We opted for a short post-test with a written paragraph since students were familiar with paragraph-length writing assignments by this point, and the prompt allowed us to assess their use of the grammar and vocabulary from the relevant unit.

Implementation & Feedback

Before implementing the escape room, we sent it to several friends and family members for feedback. Friend and family feedback was helpful, as our testers were not familiar with the content of the unit addressed by the escape room, and their Spanish-language abilities varied. Using their feedback, we were able to assess the extent to which our activities required specific knowledge from the unit, and whether the different puzzles could or could not be solved without using target language skills from class. We then sent a draft of the escape room for testing and

feedback from instructors in our program. Their feedback helped us determine potential pitfalls and opportunities for advanced mitigation of challenges as the escape room was implemented with students. Based on instructor feedback, we created an instructor tip sheet with common challenges students might encounter, and tips to best support them in those challenges to ensure that students were able to focus on content from the unit rather than get stuck in a needlessly difficult puzzle sequence.

Additionally, we received helpful feedback from students who completed the escape room. Overall, their responses were very positive. Students mentioned that they liked the teamwork aspect of the activity and the fact that it was like a puzzle, with many positive comments about the crossword challenge in particular. Several students recommended changing the word scrambles or adding more hints in those challenges. Some students even compared their experience in our virtual escape room to their prior experiences playing mystery games on their computers or completing in-person escape rooms with friends before the pandemic. Finally, we were happy to see that on their regular end-of-unit reflection regarding their ability to complete unit objectives, most students selected the responses “Yes, I can do this well,” and “I can do it with a few mistakes.”

After reflecting upon our experience and future possibilities, we know that we want to continue to do escape room activities with our students in the future. While this particular iteration was a fun way to break the monotony and drive engagement in an online classroom during the COVID-19 pandemic, we would also like to introduce escape rooms in future face-to-face contexts. We are currently brainstorming ways to increase instructor involvement in an in-person classroom: perhaps the instructor could provide certain clues or passwords to move forward, or act as a guiding voice and provide instructions before beginning the activity.

Teamwork also seemed to be an important factor in success in this activity. Students noted that they enjoyed working in groups, and students who worked alone seemed to experience more difficulty with specific challenges such as the word scrambles. In future classes, we may present group work as required, rather than optional.

Conclusion

Virtual escape rooms provide a unique and engaging way for students to interact with the target language. Unlike escape rooms used in face-to-face contexts, which require a variety of materials, virtual escape rooms are free to make and to implement and can be completed during a synchronous class or as an asynchronous assignment. As previous studies and our own experience have found, these activities do require a lot of effort and preparation beforehand; however, that effort brings great benefits. In our experience, a virtual escape room was not only enjoyable and beneficial to students, but it also provided students with an opportunity to use the language in a new and creative way through gamification and led to increased motivation and engagement.

The escape room activity we have described has been in use for four semesters, with continual modification to incorporate student and instructor feedback, including adding hints to word scrambles and updating or removing activities that become out of date, such as the activity where students decoded the dates of upcoming lunar and solar eclipses. We have also created another, simpler virtual escape room to use with our first-semester students. We plan to continue to use these and other virtual escape rooms in future classes as an engaging CALL resource that students will enjoy, and that will challenge them to use the language in new and different ways.

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