EscapeIF: Low-Resource Escape Games for Classrooms

Escape Rooms are cooperative puzzle-based games where a team of players works together to solve problems and escape from a room before time runs out. As these games have grown in popularity over the last few years, educators have looked to these puzzle-based cooperative games as models for classroom activities.

The most direct application of escape rooms in classrooms is to turn the classroom into an escape room. This is typically done with a "pop-up" escape room, where the teacher creates challenges and puzzles and brings them into the room. The biggest problem with this model is class size - escape rooms are designed for small teams, and using this model directly will result in most students looking on while a few students work on the challenges.



Another approach has been explored in-depth by <u>Breakout EDU</u>, which replaces the room with a locked box and a set of small puzzles. Typically, the class is broken up into small groups, and each group has a matching locked box and puzzles. This allows more students to work on the challenges, but can result in the teacher being overwhelmed creating many copies of a game and managing too many boxes and padlocks.



A way to avoid the locks and boxes is by creating a paper-based escape game. Inspired by puzzle hunts, these games provide each team with an envelope containing a set of puzzles. As the teams solve the puzzles, they get clues to solve a larger meta-puzzle. Upon completing the meta-puzzle, then they are awarded with another packet of challenges. While this requires fewer resources than the escape room or breakout boxes, this does result in the use of considerable amounts of paper and time in creating many identical packets.



Another way to create an escape game for a classroom is to create a digital escape game. This can be easily done through Google Forms or Twine, and rather than have something physical, the players enter their answers into the program. If they are correct, then they are directed to the next challenge. The mEducation Alliance created a digital Escape Game as part of their 2021 Symposium, and you can try that here:

https://medalliance.itch.io/escape-the-symposium-2

Dr. Scott Nicholson is a professor of Game Design at Wilfrid Laurier University in Brantford. Ontario, Canada and is an escape room specialist. He worked with a team of his students to design the escape rooms for the 2017 and 2019 <u>Red Bull Mind Gamers Escape Room World</u> <u>Championships</u>, and has created educational escape games for museums around the world. Dr. Scott Nicholson and Liz Cable <u>wrote a book</u> to guide teachers in creating games inspired by escape rooms that explore each of these different forms of escape games. Dr. Nicholson also created this short video for the mEducation Alliance on this topic: <u>https://www.youtube.com/watch?y=zl2z9XzPaMc</u>

The problem with all of these methods is that they require a significant amount of resources. The mEducation challenged Dr. Nicholson to see if he could develop an escape game for a low-resource classroom where the only thing available was a chalkboard, and in response, he has developed the <u>EscapelF game system</u>. This game system will allow a teacher to develop and run escape games that require nothing but a chalkboard in a classroom, and once created, the games will require very little preparation time to run.

EscapelF Basics

The core concept of EscapeIF is that the entire class is working together to make decisions and solve challenges. The teacher will present the class with a situation, the class will break up into small groups and discuss the options, and then all students will vote on what to do. When the class reaches a challenge, they will break up into small groups and work on the puzzles or problems. The game is presented as a script for the teacher to read. <u>Here is a sample game script</u>.

To help you better understand the concept, here is more information about EscapeIF presented using the format of the EscapeIF game script. Start with Paragraph 1, and then when you reach some choices, move to the paragraph that the script refers you to. You won't read these scripts straight through; instead, you will jump around following the directions.

1. Introduction:

Welcome to EscapelF! I'm Scott, and will be leading you through this introduction.

Have you ever read a Choose Your Own Adventure Book before?

- No, this is new to me (Go to Entry 2)
- Yes, I have seen these before (Go to Entry 3)

2. New to CYOA:

That's OK! Choose Your Own Adventure books were first popular in the 1980s. The idea of those books is that the reader would read the book, and then hit a point where they would make a choice. Based on their choice, they would go to another page, just like you are doing here.

If you were running this game in the classroom, then you would have read what is in bold out loud, and had the students vote. After the vote, you then move to the paragraph related to what the students chose.

Now that you understand the basics, do you want to learn about a more advanced version of EscapelF, or do you want to stay with the basics?

- Tell me about EscapelF Advanced! (Go to Entry 3)
- This version of EscapelF is just fine for me. Tell me more! (Go to Entry 4)

2. EscapelF Advanced:

If you already have familiarity with Choose Your Own Adventures, then you understand how this will work. For teachers that want to use an activity that is more free-form, like a roleplaying game, there is EscapeIF Advanced. In EscapeIF Advanced, the students are not presented with choices. Instead, students are selected to say what they want to do. They could say something like "Go to the office" or "Pick up the branch" or "Use the mirror to reflect the sun's light into the map of the city to open the secret passage". The EscapelF Advanced rules allow the teacher to take an EscapelF script and make it a more open-ended activity. You can find more about Escapelf Advanced here: https://docs.google.com/document/d/1fMdjm6tcNb34goly-RJm8X4xlanqCV4DYiydn0E3uy 0/edit#heading=h.kv6vlfmi3pdz

Both EscapelF and EscapelF Advanced use Challenges. To learn more about Challenges, go to Entry 4. (*Go to Entry 4*)

4. Challenges in EscapelF:

The narrative components of EscapeIF allow the teacher to set up the story and the characters, and might help with the learning outcomes. Typically, however, the learning outcomes will be reached through Challenges. During a Challenge, the students are broken up into small groups and asked to take on a problem or puzzle. This is where the learning outcomes are explored in-depth, and the teacher has flexibility in how they run these challenges. The teacher will present the problems on the blackboard, the students will work on them, and then share the answers. The Challenges in EscapeIF are similar to traditional classroom activities, but the larger narrative and game structure helps to bring context to these activities and more fully engage students.

What would you like to learn about now?

- Customizing EscapelF (Go to Entry 5)
- The Importance of Reflection (Go to Entry 6)
- Student-Created EscapelF Games (Go to Entry 7)

5. Customizing EscapelF:

One of the powerful aspects of EscapelF is that the teacher can customize the game. As the game is a script without physical or digital assets that are created ahead of time, the teacher can easily change the game to make it more relevant to the players. If the game is written about dinosaurs, but the students are more interested in robots, the teacher can just replace the dinosaurs with robots or even dinosaur robots! If the class has come up with a new idea, the teacher can run with that idea and the students will never know. The teacher is in control of the game.

What would you like to learn about now?

- The Importance of Reflection (Go to Entry 6)
- Student-Created EscapelF Games (Go to Entry 7)
- Learning More about EscapelF (Go to Entry 8)

6. Reflection in EscapeIF:

For all learning games, the most important part of the activity is reflection. The students need time to reflect upon what they have learned, to connect the learning to other things learned in class, and to reflect upon how the content can be used in the real world. This

can be done through reflection questions, where the teacher asks the students to discuss something in small groups or as an entire class, and then share their ideas with the class. Reflection is always more powerful when the students come up with the a-has about what they have learned instead of being told what they should have learned.

Reflection:

EscapelF works best with learning outcomes that have a real-world application. Take 2 minutes now and make a list of the learning outcomes that you may teach that have real-world implications that might be great starting points for EscapelF.

What would you like to learn about now?

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7. Student-Created EscapeIF Games:

Since EscapelF doesn't require programming, cardboard, or other resources to create, once the students have played an EscapelF game, they can create an EscapelF game! Learning to create a branching narrative story is a valuable step in learning how to code, as the core concept of EscapelF shared concepts with programming. There will be a guide available soon through the mEducation Alliance for students on how to create EscapelF games, but for now, there is a Guide for Teachers at

https://docs.google.com/document/d/1Xgsuv-6Kglfou8HrvkBkf414iZuuy4qaj1oenZYdaTs/ edit

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8. Learning More about EscapeIF:

Congratulations! You have reached the end of the EscapelF Demonstration! You now have a basic idea of how EscapelF scripts are structured. You can now Choose Your Own Adventure as to where you'd like to go from here:

- To see a sample EscapelF game, visit here:

https://docs.google.com/document/d/1jbVXIH_rJkpg4LLV0r-vybe2vU-nsrQeVvlkK8Kfgil/e dit

- To learn more about the EscapeIF system, visit here: <u>https://docs.google.com/document/d/1fMdjm6tcNb34goly-RJm8X4xlanqCV4DYiydn0E3uy</u> <u>0/edit#</u> - To join a Facebook group that Dr. Nicholson is running as he continues developing EscapelF, visit here:

https://www.facebook.com/groups/212330870692492

- To reach Dr. Nicholson about EscapelF, you can contact him at <u>scott@scottnicholson.com</u>.