Online escape games in education

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Abstract

Escape games are used to diversify teaching, seems really enjoyable for children, but at the same time educates in a playful way. You can serve as a repetition, to discover new substances, but also as an incentive to search for information independently. Online escape games can be connected to various objects, without problems, even in several at once. They are usually based on a story that involves completing tasks. The right solutions are provided by clues that are used in the end, for example by composing a password or solving a cipher. The goal is to "escape" from the game, it can easily be at a certain time. The biggest advantage is that the games are fun and engaging, even if it's homework. Such a "school by play".

Keywords: escape game, fun teaching, practice, online education

Introduction

The pandemic brought a lot of online teaching and with it the need to work more with attention. Especially children do not keep it for a long time and especially at home by mobile phone or computer especially not. Escape games are one of the ways to engage children and give them lessons that will entertain them. Several works are also devoted to escape games usable in education, for example Room escape at class: Escape games activities to facilitate the motivation and learning in computer science in which they see the main problem as a lack of motivation: „One of the problems identified in the Degree of Computer Engineering of the Universitat Autònoma de Barcelona that also affects other studies is the lack of student motivation. This lack of motivation directly influences their study performance and their average mark. In this paper, we intend to amend this situation by designing and conducting a special Room Escape recreational activity."(Borrego et al; 2017; https://dialnet.unirioja.es/servlet/articulo?codigo=6119702).

The principle of escape games

Online escape games are one of the ways to use information technology in teaching. These are most often story games, where it can happen that the situation occurs, and its task is to escape. It can be an escape from locked spaces, the search for someone or something, a trip somewhere, but also anything else.

The most important points of the game are tasks. You can link to a specific subject, but also link several subjects to each other. Escape games can be used in virtually all objects, just create an engaging story, and make tasks. For the game itself, a presentation on a Google account is enough, and individual tasks are then added to the slide in the presentation.

For example, LearningApps can be used for these, which is a page that is free, and it is possible to find already created tasks from others in it, just search by subject. Finished tasks can be edited or you can simply create your own.The Flippity page is also suitable not only for tasks. In addition, the most common solution for escapes – locks – is made in it. For them, the goal is to find the correct code and unlock them, which is the end of the game. This site is

available for free.

After unlocking the lock, it is still possible to set up such an online bulletin board. This is called Padlet, and they can also write messages, so children need to write that they have resolved. Finally, the Bitly page, which is used to shorten links, can also be useful. Although presentations on Google generate links automatically, they are very long and annoying.

The individual tasks are then placed directly in the escape route, usually it is necessary to click on a certain object or a specific place to access them. The tasks can be diverse, they can contain examples, word tasks, addition to the text, assignment,… It is also possible to have children search for, for example, on the Internet or in workbooks or textbooks.

The solution to the task should then provide some clue. It can be help on what to do next, a letter in the final cipher, a number in the final code or an example,… For smaller children who may not even be able to read, the tasks can be narrated and sufficiently pictorial, for example the shape or color can be the right solution.

The game itself can take place in one room, where everything will be together or will appear gradually, or in several rooms. Here it depends only on the imagination and creativity of the person who creates the game. You can also create a maze with dozens of rooms, you just need to think about the fact that the game is not exaggerated, too long or complicated, so that children keep their attention, and it doesn't stop entertaining them.

After completing all the tasks comes the final assignment, which may include saving the password, solving the cipher, counting the example, or answering the puzzle. For locks, it is usually possible to set help in case someone doesn't really know. In addition to the number one at school or a task, the reward for the correct decipherment can also be a nice video, a cheerful song, a funny picture or, for example, a completed coloring book… but mainly the joy of escaping and playing.

The game

The game focuses on practicing math, memory, and logical thinking. It contains tasks where examples are combined with results using puzzles, word problems or, for example, counting with sorting on the number axis and according to the size of decimal numbers. There is also a memory game, where the practice of counting relates to memory. Individual letters as well as numbers are obtained for the correct solution. In the end, it is necessary to compose a word from the letters and count the numbers correctly.

The game can be used as a non-traditional homework to practice, but also as a repetition at school or to confiscate faster students. It is also possible to use individual tasks, which takes less time than the whole game.
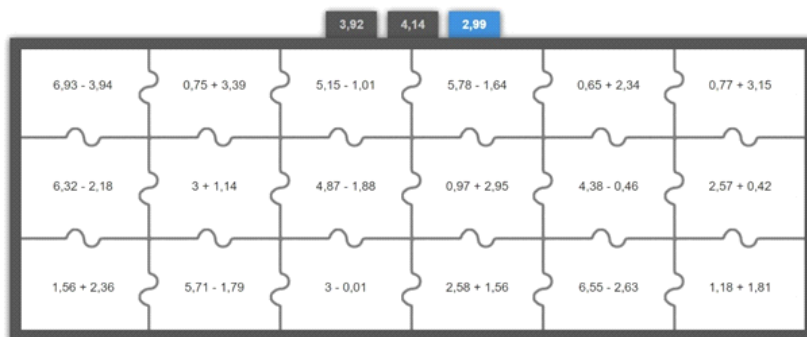

Figure 1: Puzzle task

As for the feedback, not only did the children like the game, the youngest were fascinated by the story itself, the older ones also thought about it and practiced counting. Just some tasks could be shorter.
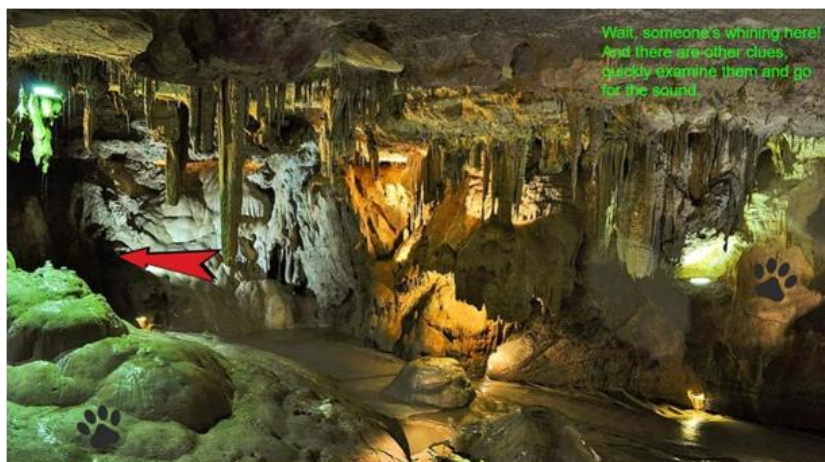

Figure 2: Task room

Use in education

Escape games are perfect for homework because it's something that keeps kids entertained but also helps them review the material covered. But they can also be used directly at school, students can solve them independently, it can be group work, when the whole class solves a more complex game together, but also work in groups, which supports cooperation.

It is also possible to play outside, for example during physical education. In such a case, for example, QR codes placed on trees or anywhere else can be useful, which will give students a task and their solution will tell them the location of the next station.

Conclusion

I perceive the value of escape games mainly in their fun, which allows children to teach something new or to strengthen the curriculum in a non-violent way. The uses can be diverse, they can be used in most subjects, usually in several at once.

Various free games can be found at https://www.techlearning.com/news/best-free-virtual-escape-rooms-for-schools.

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