



ESCAPE ROOM CREATION GUIDE

Chapter 4. Practical advice – St. Kliment

1. Managing difficulty

1.1. Barriers to educational escape rooms

- *Current educational system*

Continuous changes in the national curricula, priorities related to teaching and methodology in the learning process, changes in the strategies of educational institutions are objective obstacles to the actual implementation of educational escape rooms in school.

- *Attitudes*

Traditional attitudes about teaching methods and teachers' resistance to innovative elements in pedagogical practice and classroom experimentation would be another barrier to the implementation of an escape room.

Students' attitudes are a very important factor for the realization of innovations. The internal resistance (explicit or implicit) of the participants in the educational process - principals, teachers and students is a very serious challenge to overcome.

- *Timing*

Each new endeavor, each new idea and methodological development is associated with investing a lot of personal time and effort related to the development of the idea, planning activities and implementation of the idea. Legal restrictions related to the coverage of the curriculum in class and the acquisition of certain knowledge, skills and competencies, which require strict adherence to certain pedagogical methods and limited time for different disciplines can also be a barrier to integrating the Escape Room into the real learning process.

- *Support from other teachers*

In some cases, the development and implementation of an escape room involves the participation of a team of teachers. They should share common ideas and have the same views on teaching methods. The support of all participating teachers is an important factor for practical implementation.

1.2. Decision on the type of escape room

The team of teachers before developing the scenario must decide on **how to implement the activities** and **the number of participants** to solve each task - small groups of students (up to 10), whole class (divided in groups of 4-5 students), single participants, digitally set tasks).

1.2. First meeting of the teachers involved in the creation and implementation of the escape room

It is really easy to create an exciting and fun Escape Room that involves finding clues and solving puzzles pertaining to content, but it is a different thing entirely to use solid instructional strategies that match the activity to clear learning outcomes. While the game should be fun, the puzzles, clues, and game strategy should be based on sound pedagogical approaches such as recall of prior knowledge, evaluating information, making connections, etc.

The team must decide on the **main idea** and **topic** for the educational task. All tasks and activities must be **in accordance with the curriculum** of the included subjects. Tasks can **be diagnostic** in nature for students' knowledge **before learning a new**

topic or area of study. Some of the activities can present new information, new scientific concepts or new ideas to students. Other activities may focus on **self-directed learning** or require the **use of already acquired knowledge and skills from previous lessons**. The team should also consider **ways to assess students' progress** and develop criteria for assessing that progress. Appropriate tests should also be developed to assess students' educational progress objectively. The expected results must be clearly and concretely defined so that the students achieve the goals set by the activities in the game.

1.4. Next meeting of teachers

At subsequent meetings, the team must identify and coordinate the **educational content** and **determine the topics** to be included. They strive to select **challenging and interesting tasks**.

The teachers **establish the difficulty of the tasks** taking into account the **level of the students**. That happens after they have analyzed the students' needs and their learning styles. Teachers set **tasks of varying difficulty**, considering the age group and the individual abilities of students and the requirements of the curriculum. The selected tasks and activities should be fully consistent with the curriculum.

They determine the criteria for evaluating the different stages of the game, as well as the **number of tasks according to the duration** of the game. Teachers determine the relationship between the different types and number of assignments in the game process.

1.5. Design the escape room

The team must **decide on the duration** of the game, the **number of participating groups**, the **number of participants in the groups**. The distribution by groups can be done **after studying the needs of the participants**.

Teachers prepare **scenarios** of the game and the **relevant parts** (fragments) of the game. **All parts** of the game **must be consistent and synchronized** and **have a complete finish and ultimate goal**.

The team **designs the physical space** and prepares scenes for the various activities. The team decides **how to achieve game balance** - a range of different types of puzzles; a range of different difficulties of puzzles; lots of different things for people to do; a variety of different types of locks. The students may inadvertently destroy a visual, a riddle or a clue. **Make spares** in case you need to replace them, or if you are running the game for multiple classes at the same time.

1.6. Practical considerations when testing the game

Once the team has planned the game and prepared the puzzles that form the game, they have to bring them all together. After all the work you put into creating your game, you really do not want the clues not to work or something not to add up in the game. Re-read your explanation of the game, check all riddles and hints to ensure that your game is ready to go!

Test your game with multiple audiences before deploying it for students. You will find that some puzzles take longer than you expected, others shorter, and still others are unsolvable as written--a multi-level playtest strategy, with revisions between each new audience, is key to success.

Playtesting at this stage will enable them to discover whether they have the **right balance of playability and learning**. The game should be also tested for **accessibility to a wide range of people** - people with disabilities, allergies, or phobias. The **safety of the game** for all participants is also very important and it should be considered during the testing.

2. Supporting the players

2.1. Briefing rules of the game

To support participants, teachers **develop rules** and present them in the form of a story before the start of the game. They can do that orally, digitally or put it on the wall of the room as a poster. The teachers **introduce the format** of the escape room and **orient**

the students to the narrative/scenario briefly. Get acquainted with the rules of conduct, **difficulties in unlocking or unusual locks**.

Everyone should be acquainted with the rules for maintaining **health and safety issues**, which includes **acceptable behaviour in the room** and what to do in **emergency cases**.

2.2. Communication

You never know how people are going to react and perform in this type of learning environment the first time. Group dysfunction is a real thing! What do you do if the game was more difficult than you expected and learners fail to complete on time?

You should develop **a system to control what is happening during the game**.

Communicating with the players - the teacher can be **present in the room** at the time of the game (straightforward communication) or be **watching from a hidden place** outside using a telephone, walkie-talkie, or texting via a tablet or smartphone.

Teachers **give hints and clues** when necessary to **reduce the difficulty** - decides on how to give the hints (on request or when they think they are needed); the number of clues; straight or cryptic clues.

During the game, the teacher is not teaching and therefore is free to observe student learning unhindered. The teacher can identify which students are participating, which students are getting stuck **on what and can provide more guidance to those that need it**. The teacher should be watching, interacting and taking notes on student learning and accomplishment during the game.

3. Supporting group dynamics

It is extremely important to find **a balance between the teacher's guidance and the participants' feeling of autonomy** during the escape room gameplay.

Teachers must **ensure the active participation of all participants**. When the whole class is divided into groups of 4-5 students **playing the game in the same room at the same time, confined** learning spaces within the larger room should be created.

The **use of different digital devices** is recommended in order to **foster teamwork** and **collaborative learning**.

4. Managing the time limit

The distribution of playing time is of great importance for the practicality of its use. If the game itself is 60 minutes, then 15 minutes should be provided for being acquainted with the rules and the scenario before it starts, 10 minutes for debate after the end and time for cleaning and tidying up the space. All of these needs need to be considered carefully for the game to be implemented effectively in the classroom.

5. Advice on how to verify the fulfillment of learning objectives and the acquisition of knowledge.

- Testing the game for playability
- Consider the degree to which the game is achieving its intended learning outcomes
- Self-evaluation against the learning outcomes is a useful exercise
- Self-check the escape room before testing

The game should be tested to see if it is appropriate and reproducible and if it meets the set goals and expected results. The self-assessment of the participants for the achieved educational goals is also a good tool for assessing the game. A self-check can be done before testing.

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6. The importance of debriefing

The power of the escape room experience often lies in the debrief. Debriefing as a reflection on learning. This is one of the most important aspects. Students can become so enmeshed in breaking out, that they may not always grasp everything they should have learned. Throughout the students' participation in the escape room, the debriefing stage is their only opportunity for reflection; without reflection, experience cannot lead to long-term learning. Always include some type of post-activity review and/or assessment to ensure that the main learning points were recognized and understood. By groups, students will have to assess two aspects - students will have to value the escape room itself and they will have to evaluate themselves as a group. Students must be aware that what a person in a group does might affect the rest of their partners.

The teachers can design de-briefing points beforehand or within the game itself by letting students identify review points, by making them present questions or reflections as the final task for escape.

The teachers should set aside at least 10-15 minutes to allow students to talk about the experience. It is recommended having students explain each of the puzzles, and after discussing what teachers observed. It is important to point to times when teachers saw communication really fall apart, or when they thought students were on the same page. This is a great way to have students understand where their strengths and gaps lie.