

OUTDOOR ESCAPE GAMES



HOW TO CREATE OUTDOOR ESCAPE GAMES
WITH THEMATIC ON TRADITIONAL FAIRY TALES AND MYTHS
A STEP-BY-STEP GUIDE

ART
ESCAPE



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Introduction



Youth workers through non-formal learning aims to increase the creativity and innovation of young people through their experimental nature, participatory approaches and learning. Since the world is changing at a furious pace, this also means that there is a demand for new ways and methods of engaging young people in developing skills and preserving legends and myths.

Traditional myths and fairy tales comprise a topic that to this day, remains popular among youth and due to its out-of-the-ordinary thematic is expected to trigger the inquisitive nature that is naturally present in young participants. These themes bring more creativity, help young people and youth workers to explore the cultural aspects of their own national and European identity and naturally bring together the youth work and creativity sectors. A key element to a successful escape room that uses this type of thematic is to keep participants engaged at all times.

In this guide you will discover and learn:

- What is the difference between escape games Vs educational escape games;
- How to create your own outdoor escape game with the topic of traditional fairy tales and myths;
- What the key elements the escape game includes and what you need to pay attention to when creating your game;
- Why it is important to make a game on the theme of fairy tales and myths and how to adapt them to your city;
- Practical advice, resources and platforms to help you create your game.

This Guide was developed within the “Art Escape” project by a consortium of youth workers from Belgium, Ireland, Cyprus, Greece, Portugal and Finland. The project goal was to promote using the educational potential of outdoor escape rooms based on traditional fairy tales and myths to enhance youth creativity and promote European cultural heritage. “Art Escape ” project was implemented under the Key Action 2 of the Erasmus+ program.

Find more information about the project on our Facebook page

<https://www.facebook.com/artescape.eu>

This online course guides learners through the process of creation of outdoor escape games based on cultural heritage. It contains tools and practical activities to design a game with regards to learning goals and specific target groups.

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Chapter 1

USING ESCAPE GAME IN AN EDUCATIONAL CONTEXT

This chapter introduces the concept of an escape game and analysis of using escape games in an educational context. This guide is created to help youth work practitioners develop their educational escape games outdoors, so escape games compared to educational escape games are being illustrated.



1.1 Escape games Vs educational escape games

The escape room is a game experience that challenges participants to get out of a room where they are locked in (or if the same concept is implemented outdoors, we refer to the same concept as an escape game). In order to succeed, they must overcome a varied set of tests and challenges, solving a diverse set of puzzles, in order to find the key to exit the door, having a time limit (usually for escape rooms it is 60 minutes) to escape and almost always around a driving narrative.

Taking into account the definition of escape room, it is easy to see that it is in the world of entertainment that its concept appears, however, later on, it is adopted in education, with the necessary adaptations to the curricular contents.

Over time, schools have felt the need to transform and reinvent themselves in order to find strategies that promote student engagement in curricular activities. "Simulations, games and projects are already used in different contexts and, recently, the escape room concept has been applied to education" (MOURA, 2019).

There are more and more escape game experiences in the educational context, appearing all over the place, designed and created by teachers from different subjects and levels of education. Formal education and play are not on opposite sides, on the contrary, play and learning have always been interconnected. The more interest in play, the more one plays and learns, and the more knowledge one can acquire, because of the ability to thrill that play provides. As Smith (2019) points out, the learning process involves cognitive, emotional, and social processes, and there is a link between emotions and cognitive function, so emotionally positive lessons help improve learning. Since emotion is a key element of learning, bringing a gamification experience into the classroom, through the development of an ERE, is to provide lessons that support autonomy, foster interest and participation, by virtue of the high emotional level.



There are many reasons to think that an Educational Escape Game is a good strategy to work on any curricular content, inside and outside the classroom:

- Encourages pedagogical activity and puts students into action;
- Contributes to the assimilation of the school program contents, in that the students receive an immediate answer when they unravel a mystery;
- Provides collaboration and teamwork, since it is a collective game, in which students are faced with problems to solve and will only achieve the final solution by trial and error;
- Improves communication because throughout the game students have to communicate, exchange ideas, structure their speech, so they are developing their verbal skills;
- Improves organizational skills, since on the one hand they have to learn how to research and organize information, and on the other hand students can design their own escape games and participate in the organization of the room where the activity will take place;
- It invokes the creativity of the students, since it requires the formulation of several hypotheses to decode the various riddles that appear throughout the game;
- Develops deductive thinking, as it equips students with the ability to transfer content and deduce strategies to solve challenges;
- Increases resilience and concentration, as the limited time to solve the game increases the pressure and triggers emotions;
- Helps develop soft skills, as they have to learn to work under pressure, a skill much appreciated in the working environment.

Currently and more often, teachers are faced with unmotivated, inattentive and unproductive classes, especially in the areas of exact sciences. In fact, this lack of student engagement in school is often due to the methods applied for the exposure of content (OLIVEIRA, 2013), because the students do not find immediate applicability of these contents transmitted in the traditional classroom. Therefore, the escape game is an innovative educational tool, as it can stimulate and arouse students' curiosity, involving them in school activities.

There are several studies demonstrating the effectiveness of the implementation of escape games in the school context.

The qualitative descriptive study conducted by Hermanns et al. (2017) to evaluate the Escape concept in the field of medicine revealed high student engagement in learning, development of communicative skills and problem solving while learning the subject content and applying it. In the same year, there was another study in the English subject, with secondary school students, which demonstrated that the educational escape is an excellent stimulant for the engagement of students in curricular activities. In 2018, Borrego et al revealed excellent results from a teaching experiment based on an escape room, applied to higher education computer science students.

Within the non-formal education field, concepts of an educational escape game and research on the subject, done within formal education context, help us develop impactful programs for the youth, and adapt them to the needs of youth work.



Chapter 2

BUILDING BLOCKS FOR ESCAPE GAME DEVELOPMENT

This chapter includes the main steps of escape game development. It introduces how to identify the target group, how to set learning goals, how to set time limits for a game based on locations, and touches upon testing and development stages.



2.1 Target group

Define your target group before you begin coming up with puzzles and scenarios for the group. The goal is to find the balance spot between too easy and too challenging, taking into consideration skills and knowledge of players. Who is the game for? Adults, young people, and children have a different level of language proficiency, which means adapting language difficulty in formulating the task and storytelling. What is the age of participants? Duration of the game should correspond to the ability of different age groups to focus and solve puzzles. Other important questions to answer before starting are: Will there be an adult with youngsters? Do participants have any special needs and how can you cater to them? What language do they speak? What are their reading skills?

2.2 Learning goals

Now that you know who is going to play the game, decide what it is that you want participants to learn. Write down learning goals – that would be the base for tasks or puzzles for your game. Assign one learning goal to one task.



TIP!

Formulating **SMART** learning goals will shape the outline of the game. Let us take learning goals set by the “Remember all” outdoors escape game based on the Karelian-Finnish Epic Kalevala. The epic is a compilation of 50 runes, essentially a long poem, which has tales of world creation, magic, fight, family, revenge, and more. A learning goal of “introducing Kalevala Epic to players” would be a weak goal example. A **SMART** goal example would be:

Specific: learn about the main conflict of the epic.

Measurable: we introduce one rune as a sequence of tasks linked to the story events throughout the game.

Achievable: players will learn about the main characters, and the focal event of the epic by completing the game.

Relevant: the game will be fun and involve players as game characters.

Time-Bound: the game will take 60 minutes.

Remember to allow the first task to be about learning how to play the game. First task should be easy to accomplish and get an “easy win” to hook on the game and explain the rules, gameplay, timing, platform of the game. Easy start and transition to the learning content of the game will help establish a game flow, taking the group effortlessly on the journey. Tasks can get progressively harder, but too difficult or time-consuming tasks will inhibit the game flow, resulting in lower satisfaction and involvement of players.

In entertaining escape rooms the joy of completing the last task is opening the final door to freedom. When the game is over, participants leave feedback about what went right and wrong, what was difficult or unclear, how the game can be improved, what was the best part of the game. In educational escape rooms the last task should encourage reflection and dialogue within the group over learning outcomes, alongside the general feedback. It can be a part of the game that lets participants escape, or it can be a question for the final discussion with the group leader or teacher.

2.3 Group size

The number of participants who should enter an escape game is related to the size of the room/space used for the game, the length of time available for the game, the level of difficulty of the challenges and the need for teamwork required. The size of the group can affect the layout of the game. Small groups of up to 6 players can play a linear game, while for bigger groups, like a school class, a non-linear game would be a better fit.

A linear game means that in order to advance in the game, the players have to complete one task after another, solving puzzles consecutively.

In a linear game, each puzzle is a key to the next one. In a non-linear game there are multiple puzzles available at the same time, and the group can divide into smaller teams to tackle challenges simultaneously. Solving all the challenges allows players to complete the game, but there is no order in which the challenges should be solved.

2.4 Leader or no leader of the game?

The main function of the game leader is to contextualize the participants in the escape Game, placing them in the game and informing them about its rules. In most cases, this role is performed by the youth worker in charge. In addition, it is the leader's job to provide previously established tips to the participants when requested. At any point in the game when participants are unable to progress in any challenge, they may request an additional tip from the leader. After the leader delivers an additional tip, a penalty time may be deducted from the players. The penalty time is determined by the length of the game and the number of challenges to be solved. Therefore, the penalty time (if any) should be adjusted according to the adaptations of the game.

2.5 Timing

Here is when your previous decisions come into play – check what is your target group and how much time it is reasonable to have for the activity. Outdoors games can be affected by the weather, too. What is the reasonable duration of the game that you can organize?



In general, most escape games are played within a 60-minute limit. Depending on the target group and learning goals, you can develop games from 30 to 90 minutes. On average each task should take between 2-7 minutes for participants to solve. If the task is too easy, players will lose interest in the game. If the task is too hard, it will affect the game flow and overall satisfaction of achievement. If your outdoors area is not restricted by visual physical borders, think how you will define it in advance, so players do not venture on a 20-minute walk around the block.

One of the exciting elements of any escape game is the risk of running out of time. What happens in your game if players run out of time? How do they know if the time is up? If the game has a leader, the leader can be the one watching the clock or playing a character who determines what happens.

If the game is played without a leader, participants need to be reminded of the time pressure within tasks. Players can set timers on their phones in the beginning of the game. In the middle of the game, remind them in one of the tasks that time pressure is still on, and what happens after they run out of time.

Alternatively, they can put on a sound which will be playing in the background on their phone, with reminders or sounds at certain periods of time.

2.6 Location

Escape games outdoors can be tricky in terms of establishing a gaming area: it is not a room or a building in which walls determine the space. In outdoor games the area can be as small as a school yard or a football field - places with determined borders, or as big as the whole town or region. If the gaming area is not restricted by borders or fences, how can you manage it and communicate the borders to the group?

The simplest solution is having a leader or instructor explain the rules of the game, and communicate the gaming area to the group. It can be done by showing the area during introduction to the game, or the group can receive a map as a part of the gaming experience, or, if there are role-playing characters in the game, they can keep the group from wandering too far away during the course of the game.

But what if there is no leader of the game? If you are working on an outdoor escape game, chances are, the game is based on an online platform. There are platforms online, which you can use to upload puzzles and clues, media and quizzes, related to the game. Some of the platforms use GPS of the user, opening tasks and clues as they approach a certain spot, they also contain the map of the area, which helps players navigate. Other applications allow uploading a map of the location, and the gaming area can be highlighted on the map. The choice is yours!

2.7 Development process and testing

When testing your game, start with the basic functioning model of the game and see what works and what does not. That means that with first test groups, it is enough to have tasks on the platform you are using in a simple form of a text and pictures, allow players' imagination to do the work of creating the ambiance and focus on functionality: check if locations are selected well, if clues are hidden in good places or if the location should be adjusted. Confirm that puzzles allow participants to reach learning goals, before you upgrade the game.

Once you are satisfied with your game's contents and learning outcomes, move on to upgrades: add videos or audio tracks. Some platforms allow you to upload video and audio files directly, other ones will only allow embedding links.

Videos with subtitles in native language or the English language allow to open the game to new target groups. If your game was well-received by the local players and you would like to make it available for international players, think how you can make the game accessible for them as well.

Audio files can help if you work with people with visual impairment, reading difficulties, or small children. Text of clues or back story can be recorded in advance by the game organizer and inserted to the game.

Audio file with time ticking or warning about time limitations can be inserted in the middle of the game to raise the tension and remind participants about the clock.

Making animation for the game can be an activity in itself: invite players from test groups to design animated backstory or an epic final scene of successful escape after the game. A final video for the victorious players will boost the feeling of achievement of the team.

Reflection time: make time and effort to include reflection at the end of the game. Reflection questions can be asked in a video or animation, alternatively you can use audio or feedback forms on an online survey platform of your choice.



Chapter 3

STORYTELLING AND SCENARIO OF THE GAME

This chapter focuses on the creation of a storyline for educational escape games and how to connect myths and history with the game. It includes concrete steps for building the narrative and adapting the game to the needs of players. Finally, the chapter describes the key elements of an escape game and game flow tips.



3.1 Adapting tradition and history to the modern players and demands

Keeping the fantasy and the interest of young people alive is an important element to have in the creation of escape games, especially when this is connected to tradition, myths and history. Usually, young generations are struggling to keep old myths and traditional practices alive since every generation follows its trends. What if there was a way to make these myths, history and traditions attractive to younger generations by adapting them to a more modern script for them to follow and finally keep them alive?

Myths, history and traditions are powerful tools of storytelling that usually are used to create games. There are various versions of games that were inspired by those tools and they still inspire young people and more importantly keep all these elements alive. In general, games that got their influence from myths develop the curiosity of the player and this is an essential characteristic to have along with the entertainment.

Games often follow the same pattern and characters in their stories as the ones we find in myths, history and traditions. With the same logic when we have to create a game and adapt it to the needs of a myth we usually have to follow a strategy so the player has the motivation to continue playing, learning and exploring. The creation of a game depends on the creativity of the creator and the elements that they want to include. For instance, there are many things that one should take into account when adapting a story into a game. The theme, the characters, the plot, the symbols, the motivation, and the beginning and end of the story, are a few of the things that play a significant role when adapting it into a game. The narrative of the myth or story should be kept as it is, as we want players to learn a myth or a historical event slowly fading and keep it alive. They could be variations of that but the main story should be kept the same. This is happening with the characters also. When adapting it into a game, and especially an escape room it's all about role-playing. You assign players roles based on the characters of the story each one of them has a character and some unique remarks. Symbols are also important to be used in the games as this attracts the players to make a connection with some parts of the game. For example, the use of symbols will help the players have a more intimate connection with the game and be more motivated to finish it and eventually learn from it.

Adaptations are important, especially when our young audience nowadays has a variety of options, therefore the material that needs to be created with inspiration from myths and traditions should also be updated on the needs of the players. One of the first steps to adapting a myth or a historical event into a game is to pick a concept, it should be something that the creator should follow from the beginning until the end of the creation of the game. The concept is the core of the game as everything will depend on it, all the symbols, the characteristics, the plot and the narration. The variety of genres in the games is important as it keeps the gamer alert to new aspects of the story.

Gathering your information before starting to create the game is one of the most important steps. The creator needs to have all information gathered around before starting to test the game. This will help with the plot of the game and the success it will have in the end.

After finding the concept and the information of the project, the creator needs to come up with building the game. Many variables should be taken into account while doing this. For example, how will the set-up be, and what materials do we need to make the atmosphere more realistic but at the same time attractive and educational? The development of the game is based on all these factors to achieve its purpose and attract young people.

Prototypes can help you find discrepancies and other issues early on in the design process(1). Making a prototype helps the creator to follow a logical storyline, and the characters' motivation and keep track of what is happening in the story. Games should make sense and it is important to have a timeline that is based on what you want to achieve for the gamer/learner.

The above are some of the actions that we can follow in order to follow the narrative that the creator wants to create in order to keep the myths, history and traditions alive. It is important to have a concept that is based on something that the creator tries to keep it alive through the ages, and the game will help it to bring it back to life. That is why you need to clearly and thoroughly research the myths and legends of the city or village where the quest game will be held. Usually, if the myth is famous in that area, you will be able to find monuments, buildings, landmarks, and even various crafts (candies in the shape of some characters, an antique clothing store, or a unique craftsman). If there are such places in your area, then you should add them to the route along which the participants will go.



Thanks to this, you will be able to reveal more about your story of the legend, the participants will see with their eyes certain heroes or things from the myth and will learn better about the history of the city. In addition to this, the city may preserve not one legend, but several, and they may even be related to each other. Therefore, you can combine them in one game and make the participants even more interested. Of course, if it suits you and is suitable for the route. Nevertheless, it is necessary to choose one main plot line that will be followed by the participants of the game's quests.

Escape games have topics of famous myths and legends that will garner more interest and activity. Lastly, these myths and legends may enhance the experience of visitors. The tales add a fun and engaging element to sites that may be memorable to certain visitors.

3.2 Storytelling and scenario of the game to make it compelling

Story is story, by and large. Action is character and structure is fundamental. The emphasis is on puzzles. The writer must ask themselves

- How do the puzzles fit into the story?
- How can I tell a story that is deep, but not wide, because of the one-hour time frame?
- Am I willing to write a story that delivers plot points in easily digestible bits that continually drive the action?

It's all about seamless integration of character, story, and puzzle.



10 Steps for writing escape game narratives

1. Integrate time goals with the narrative
2. Create a clean narrative that drives the action toward the goals

Escape game players are hyper-focused on achieving the goal of escaping, finding a key artifact, or solving a mystery/completing a required final action. So your storyline must be simple enough that this goal does not get lost in a mess of confusing narrative.

3. Create “Hooks” to hang the puzzles

Ideally, the puzzles and stories are developed together. They are initial meetings centered on a genre or theme that allows the narrative “hooks” (plot points tying directly to a puzzle or puzzles) to organically emerge.

If the puzzles are already decided, study them closely, asking yourself:

- How do they work?
- What situations do they inspire?
- How can your story make the puzzles more fun, important, and challenging?
- What mysteries can solving these puzzles illuminate?

The answers will indicate just where your hooks should be.

牆角數枝梅
凌寒獨自開
遙知不是雪
為有暗香來



4. Immerse the players in the narrative

Find as many ways as you can to immerse the players in the story beyond solving the puzzles and either escaping or accomplishing another goal. Have those complex characters communicate their wants and needs through the puzzles and any audio or written messages integrated into the experience.

5. Set up circumstances that produce emotions

Create plot points that vary the mood and set up moral dilemmas or other decision points for the players outside their primary goal.

6. Integrate historic and geographic context

Historical tourism is at an all-time high, so this is a top-shelf marketing strategy. We get players that wouldn't normally try an escape game just so they can learn more about the area. Historic and geographic context also provides a doorway to deep immersion and a unified and life-like production.

7. Come up with a little story and characters

The escape game must always have a plot. You have to invent a story for how the characters ended up in their current predicament and what happens when they find a way out of the escape room.

8. Come up with riddles

Riddles and puzzles are an element that makes escape games so interesting. The players have to find a way out of, but only the one who is smartest will find the key that lets them complete the game. The puzzles can have different themes.

9. Wow effect (unexpected plot twists)

It is always more interesting to have a story that does not go linearly. When there are sudden new clues that change the story, it makes for a much more exciting narrative. For example, if the players find a clue that shows there is a different murder suspect, then the whole story gets more interesting. Such wow moments make the puzzles in the game even more interesting to play.

10. Come up with an end of the story

The end to the story is one of the most important parts, since it leaves an impression that the players finish with. This depends on what effect you want to cause. If the game is directed at kids, then it would be great to have a happy end, with all the characters making friends and living happily ever after. And for other games you may want to have a more depressing and frightful end, especially if the story is about monsters, zombies or other dark topics.



TIP!

Game flow - how to keep the group engaged

To make an engaging educational escape room experience, keep these tips in mind:

- Do your research about the topic from the target group's perspective
- Observe and listen to the target group
- Create a system that will allow for autonomy of decision-making
- Create space for social interaction in the game
- Enhance your escape outdoor with different types of fun

3.3 The key elements of creating escape game

“A game is a system in which players engage in an abstract challenge, defined by rules, interactivity and feedback that results in a quantifiable outcome often eliciting an emotional reaction.”

We have to understand that escape games are one kind of game in general. So before creating your own, let us review the key elements of the game. This will help you understand the structure of your game and what may be missing for a perfect result.

Let's look at each element of the definition:

3.3.1 System

A set of interconnected elements occur within the “space” of the game. A score is related to behaviors and activities which, in turn, are related to strategy or movement of pieces. The system aspect is the idea that each part of a game impacts and is integrated with other parts of the game. Scores are linked to actions and actions are limited by rules.

3.3.2 Players

Games involve a person interacting with game content. This happens in first person shooters, board games and games like Tetris, someone is playing the game and they are the player. Later we'll refer to the players of games as “learners.” The act of playing a game often results in learning and learners are our target audience for gamification of instruction. But, for now, in this context—defining a game—we'll stick with the concept of player.



3.3.3 Abstract

Games typically involve an abstraction of reality and typically take place in a narrowly defined “game space.” This means that a game contains elements of a realistic situation or the essence of the situation but is not an exact replica. This of the game Monopoly which mimics some of the essence of real estate transactions and business dealings but is not an accurate portrayal of those transactions.

3.3.4 Challenge

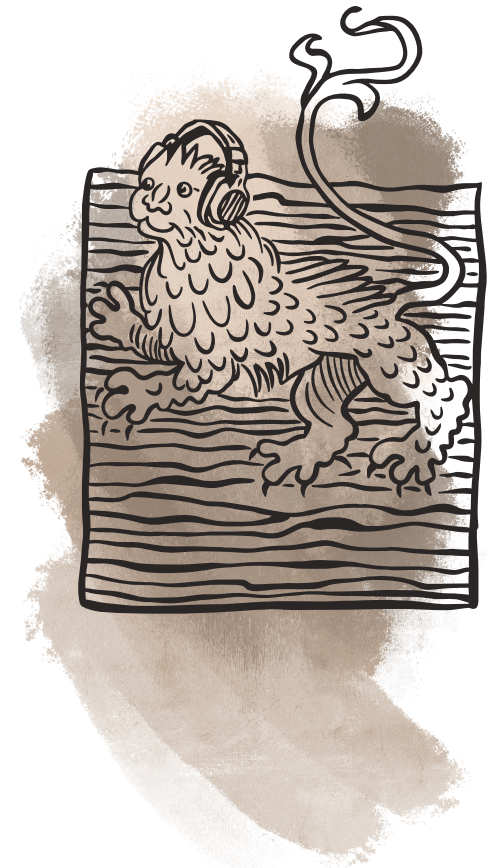
Games challenge players to achieve goals and outcomes that are not simple or straight forward. For example, even a simple game like tic-tac-toe is a challenge when you play against another person who is of equal knowledge of the game. A game becomes boring when the challenge no longer exists. But even the challenge involved with the card game of solitaire provides enough challenge that the player continues to try to achieve the winning state within the game.

3.3.5 Rules

The rules of the game define the game. They are the structure that allows the artificial construct to occur. They define the sequence of play, the winning state and what is “fair” and what is not “fair” within the confines of the game environment.

3.3.6 Interactivity

Games involve interactions. Players interact with one another, with the game system and with the content presented during the game. Interactivity is a large part of games.



3.3.7 Feedback

A hallmark of games is the feedback they provide to players. Feedback within a game is typically instant, direct and clear. Players are able to take in the feedback and attempt corrections or changes based on both the positive feedback they receive as well as negative feedback.

3.3.8 Quantifiable Outcome

Games are designed so that the winning state is concrete. The result of a well designed game is that the player clearly knows when they have won or lost. There is no ambiguity. There is a score, level or winning state (checkmate) that defines a clear outcome. This is one element that distinguishes games from a state of “play” which has no defined end state or quantifiable outcome. This is also one of the traits that make games ideal for instructional settings.

3.3.9 Emotional Reaction

Games typically involve emotion. From the “thrill of victory to the agony of defeat,” a wide range of emotions enter into games. The feeling of completing a game in many cases is exhilarating as is the actual playing of the game. But at times frustration, anger and sadness can be part of a game as well. Games, more than most human interactions, evoke strong emotions on many levels. Together these disparate elements combine to make an event that is larger than the individual elements. A player gets caught up in playing a game because the instant feedback and constant interaction is related to the challenge of the game which is defined by the rules which all work within the system to provoke an emotional reaction and finally result in a quantifiable outcome which is an abstract version of a larger system.



Chapter 4

PUZZLES AND PLATFORMS TO USE IN YOUR GAME

This chapter contains concrete examples of puzzles and enigmas you can use in your educational escape games, with usage options for each type of a puzzle and a hint for resources to use. Here you will find an overview of digital platforms with pros and cons to help you select a suitable platform for your game. Finally, we collected some resources to help you build your game with useful digital tools to make your game even more engaging and fun.



4.1 PUZZLES: EXAMPLES TO ENSURE LEARNING, GROUP WORK

1. PHOTO PUZZLES

CONCEPT	Use a photo to identify a hint or a solution to a puzzle.
USAGE OPTIONS	A zoomed in photo of a part of a bigger object can be used to guide players to the next clue. When playing outside, a part of a building or a unique texture or color of a statue could be used to test the attention of players. Another possibility is to take a photo of a window with a reflection in it, to guide players to the next clue. Or by using a photo editor, white out or hide a part of a photo of a building where the clue is hidden.
RESOURCES	Phone camera, free online photo editors or applications.

2. JIGSAW PUZZLES

CONCEPT	Convert a photo, map or piece of writing into a custom jigsaw puzzle for a hint or a task.
USAGE OPTIONS	Players can scan or click a link to the puzzle which can be used as a clue or as a key to a clue. It can be, for example, a missing piece of a map, a word or a numerical code for unlocking the next task, it can be a photo of the next destination in the game.
RESOURCES	Free online resources like jigsawplanet.net can be used for custom-made puzzles, with options to make different difficulty levels and shapes.

3. CIPHER

CONCEPT	Create a cipher to conceal a key to your clue. Create a cipher for numbers, words or whole sentences.
USAGE OPTIONS	Cipher can be used throughout the game, challenging players to collect a letter or a number from every task to complete the final task - a keyword or a number to open the final lock, or it can be used for one task in the game.
RESOURCES	You can use a variety of cipher wheels online and cut out a decoder if your game entails usage of tools other than a mobile device. Otherwise, you can find pictograms, rune symbols, morse code, number sequences, binary codes, and other sources of inspiration, or make your own and match it to the alphabet.

4. LETTER COUNT PUZZLE

CONCEPT	Hide a message or a key word in a text and identify a number sequence for players to find the message.
USAGE OPTIONS	A long text or a poem can be used to hide a message with a clue. It may look like a cutout from a newspaper or a diary, a book or a website. The text should be long enough to include all of the words of a hidden message, so it is only possible to identify them by matching them with numbers. On the side of the text or in the background you can use numbers which identify the row and the word number for the hidden message.
RESOURCES	Make your own text and hide numbers of the sequence in photo editors or online resources like <i>canva.com</i> or <i>piktochart.com</i> .

5. MAZE

CONCEPT	A maze is a path or collection of paths, typically from an entrance to a goal.
USAGE OPTIONS	Create an online maze with blocks of missions and questions. Optional: Edit walls, maybe remove some if you're not concerned about a single-solution maze, or add some to make closed-off sections, etc. Click Start testing in the top menu. Copy and Share the maze URL with people to get results.
RESOURCES	Free online resources like this: <i>https://www.mazegenerator.net/</i>

6. WORD SEARCH PUZZLE GENERATOR

CONCEPT	The objective of this puzzle is to find and mark all the words hidden inside the box. This word game consists of the letters of words placed in a grid, which usually has a rectangular or square shape.
USAGE OPTIONS	The objective of the game is to consult with a list of words supplied with the grid, and find all the words on that list. One can methodically look through each row horizontally and vertically as one strategy. Another strategy is to focus on finding words on the grid and then locating them on the list (working in reverse order). Once the words are circled on the grid, they must be marked off on the list.
RESOURCES	Make your own Word Search Puzzle here .

7. LOCATION COORDINATES AND MATHEMATICS

CONCEPT	To find a place's coordinates, you need to solve mathematical tasks to find each number separately.
USAGE OPTIONS	As a hint or a riddle to find the next location, you need to have the coordinates to find it on the maps. Therefore, it is necessary to divide the coordinates into separate numbers and create one mathematical task for each.
RESOURCES	Using the generator, you can create different types of tasks or create them on your own.



8. SENTENCE BRICKS

CONCEPT	Place the bricks in the correct position to rebuild the wall. If you do this, you also find out what was written on the wall.
USAGE OPTIONS	The sentence is broken down into separate bricks. There are 3 letters (including spaces, commas, dots etc.) written on every brick. The goal is to build up the wall again in the correct order. Then it will reveal the sentence. You can type your sentence in the textbox or type one or more keywords. The website will search in the database for sayings with your keywords. The sayings are displayed in the box below. Then copy and paste the saying of your choice in the sentence textbox.
RESOURCES	Make your own online tasks here .



4.2 PLATFORMS FOR IMPLEMENTATION

An outdoors escape game can be challenging to manage, since it is not a room and the game space is not visibly limited. It may be challenging to hide physical clues around a busy street in the city centre. To help players navigate, and to make the game accessible without physical tools, consider using a digital platform for your game.



4.2.1 *Google maps*

Allows setting markers tied to GPS, where clues can be hidden. Users need a link to access a map with markers, developed by the organizer and play the game based on that platform.

Pros: free of charge, easy to set markers, clear gaming area, unlimited number of users and tasks, well-known platform for most users.

Cons: puzzles cannot be uploaded on the map, clues should be hidden physically, which complicates game organizing. Does not include a possibility to recognise learning experiences.

4.2.2 *Action Bound*

Pros: GPS-tied markers for clues and puzzles, easy to design, global platform, has many types of activities to offer, and may be used free of charge in certain cases.

Cons: Participants need to download the App, does not include a possibility to recognise learning experiences.

4.2.3 Geocaching

Pros: GPS-tied markers for clues and puzzles, easy to design, global platform, free of charge.

Cons: requires puzzles cannot be uploaded on the map, clues should be hidden physically, which complicates game organizing.

4.2.4 Seppo.io

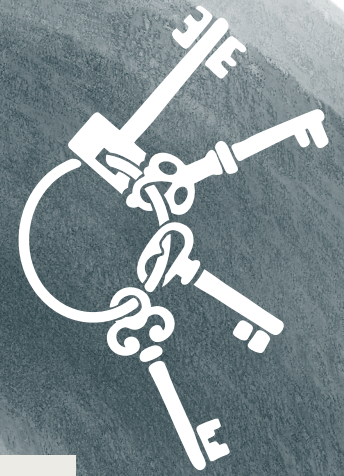
Pros: GPS-tied markers for clues and puzzles, easy to design, allows multiple levels, has leaderboard, allows uploading media and links, checks answers in real time.

Cons: at the time of writing of this guide has limited availability for licensing internationally.

4.2.5 Cities of Learning

Pros: awards learning badges to players, allows uploading media and links, good visibility featuring dozens of countries.

Cons: may have too many offers on the map, may lack some of the puzzle solving activities.



4.3 Practical tips

- Video making platforms: Inshot (free app)
- Audio making platforms: recorder on a phone, OBS (free for PC or Mac).

Zencastr

- Survey platforms: Google Forms (free), Survey Monkey (limited number of questions and respondents free), Webropol (paid subscription), Zeff (paid subscription).



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