



CREATIVE LEARNING ENVIRONMENTS
КРЕАТИВНЕ НАУЧНИВЕ СРЕДИШТА



EDUESC@PEROOM



MANUAL REPORT FOR
EDUCATORS



Co-funded by the
Erasmus+ Programme
of the European Union

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1. INTRODUCTION

This document has been developed in a Strategic Partnership project called “Looking at Learning” (L@L) which has been funded by the Latvian National Agency of the Erasmus+ Youth programme. This document will give an overview of how the intellectual output of this project, the educational tool “Eduesc@peroom,” was developed aiming for innovation in education. This document has been developed together with a step-by-step tutorial on building educational escape rooms and a toolkit which contains examples of completed educational escape rooms.

We wish our readers to be inspired by this document and develop their own educational escape rooms in their learning environments.



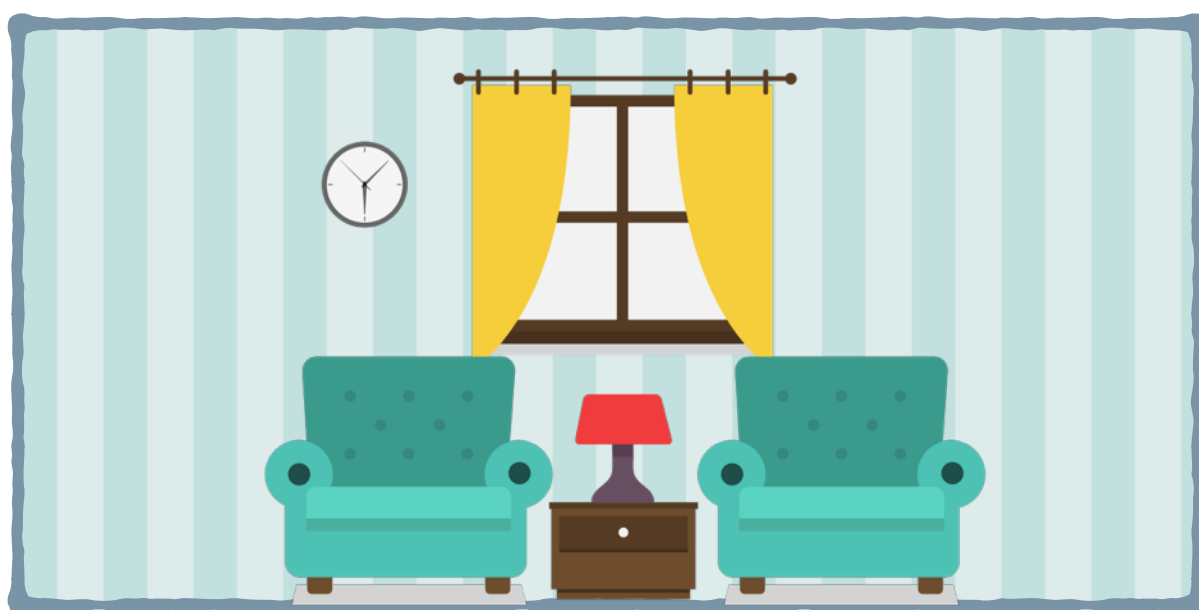
2. DEVELOPMENT OF THE TOOL: THE EDUESC@PEROOM

The escape room is an adventurous and exciting environment where a group of people need to fulfil a task: escaping from the room. Could this game concept be used for educational purposes? If so, what makes an escape room educational?

The L@L-project was dedicated to researching this question and developing this innovative educational tool based on the existing escape room concept.

2.1 L@L-Project “Looking at learning”:

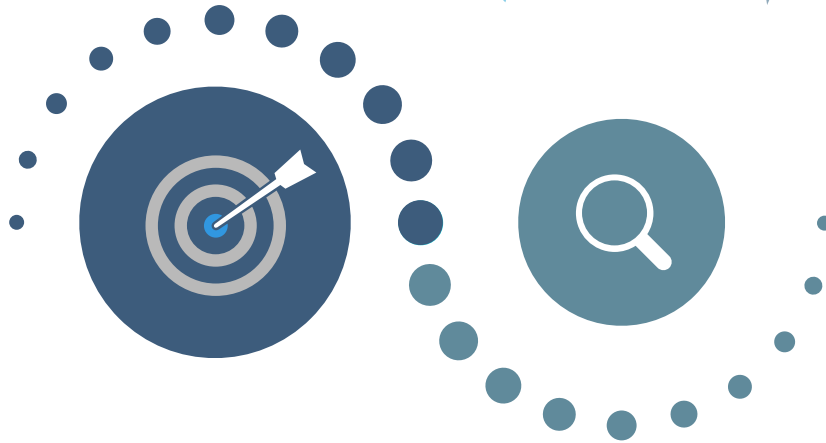
The frame of the development of this educational tool is a KA2 Strategic Partnership project within the Erasmus+ Youth: Looking at Learning [L@L]. The Strategic Partnership project involved non-formal and formal partners in Latvia, Netherlands and Spain on the topic of creative learning environments. The project looked into the learning needs of learners and educators as well as the outcomes and conditions of creative learning environments.



The project represented a significant change to other learning-related projects, mainly because it focused on the factors that accompany the learning process and not just the actors in the process.

The project aimed to develop an innovative educational tool according to the conditions necessary for creative learning environments. The Eduesc@peroom is one of three intellectual outputs, together with a state of the art and long-term research on the topic of creative learning environments. Information on the project and the intellectual outputs can be found on our website:

www.lookingatlearning.eu



2.2 Aim and objectives:

The project aimed to develop a practical and innovative educational tool based on escape rooms to be used in a broad range of formal and non-formal educational fields.

The specific objectives of the tool are:

- @ To understand the learning needs of young people and understand how educational escape rooms encourage 'natural' and self-directed learning.**
- @ To encourage cooperation between formal and non-formal education on the topic of learning and learning environments.**
- @ To set up transnational training to explore gamification and unconventional environments to provoke new perceptions about self-directed learning.**
- @ To explore new educational methodology and to create an innovative educational tool for a broad range of young people, including those with fewer opportunities.**
- @ To support participants to identify their own natural way of learning and explore how creativity and environment can provoke changes in learning efficiency.**

2.3 Development of Eduesc@peroom:

The basic idea of the Eduesc@peroom was born before the L@L-project started.

The core team of this tool were: manager and country coordinator **Gabi Steinprinz** (Youth Exchange Service-NL) and country coordinators **Rūta Kronberga** (Humana People to People in Latvia-LV) and **Ignacio Salgado** (Promesas- ES).

Core team decided to explore the possibilities of the tool. To bring in more expertise, they invited experts on educational tools, gamification and social art to the team:

@ **ES: Javi Quilez** - Scout, international trainer, expert in gamification

@ **LV: Andris Čeksters** - advisor, expert at innovation for education

@ **NL: Giacomo Cardoni** - artist, art-therapist, volunteer youth worker

After brainstorming possible ideas for the development of an innovative educational tool that would be in line with the conditions the project defined for creative learning environments and a 4-day preparation meeting, the Eduesc@peroom began to take shape. The main question during the whole process was: “what makes the Eduesc@peroom educational?”

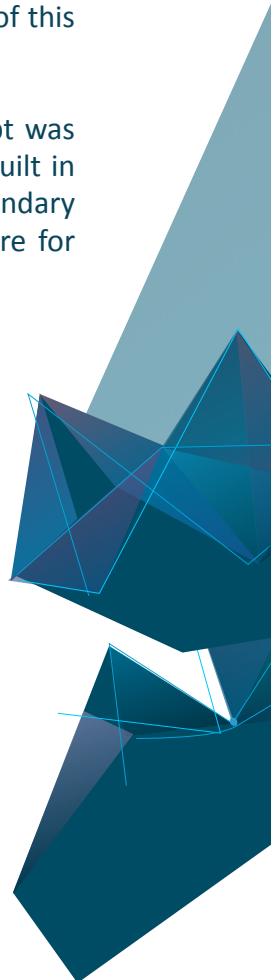
The team along with external experts visited several existing escape rooms and discussed both the physical space and the potential of educational elements. Educators from all partner groups and participants from the training courses in this project also visited escape rooms to get familiar with the escape room concept and the potential it had for education. All in all, about 20 different regular escape rooms were visited and analysed.

The development of the tool was a very creative process, which was needed to make it innovative. The team tried to be as creative and open as possible to the great potential of this tool. The team created guidelines on developing Eduesc@perooms.

During a Training Course with educators from various educational fields, the concept was further developed by the educational practitioners and four Eduesc@perooms were built in Stede Broec, Netherlands in four different settings: an elementary school, a special secondary school for young people with learning difficulties, a youth centre and a day care centre for young people with disabilities.

After the training course, educators implemented their knowledge and experiences in their own local practices. Eleven more Eduesc@perooms have been built, again in a broad variety of educational settings, schools, kindergartens, cultural centres, etc.

The results for educators and learners have been very positive and educators are further developing the concept of implementing Eduesc@perooms in their educational fields, involving more of their colleagues and other educators. The research of this project underlines the positive results of the Eduesc@perooms implemented in this project.





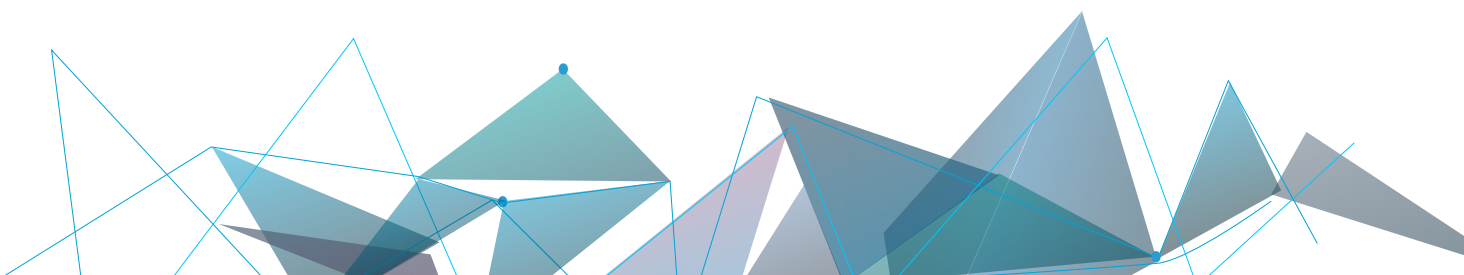
2.4 Documentation of the results:

The aim of the development of this educational tool was to create documentation for educators in various educational fields to understand the tool and be inspired to implement this educational tool in their own educational settings. Therefore the project established three documents about Eduesca@perooms:

- @ **MANUAL:** *A description of the development of the educational tool Eduesca@peroom.*
- @ **TUTORIAL:** *A step-by-step guide for educators how to make an Eduesca@peroom.*
- @ **TOOLKIT:** *A collection of good practices, examples of local Eduesca@perooms made during the project in all three participating countries in various fields of education.*

All of these documents were presented on the Multiplier events of the L@L-project and have been disseminated within all the networks of the organizations that participated in the project. Furthermore, all documents are available to download from our website:

www.lookingatlearning.eu



3. CONCEPT OF THE EDUESC@PEROOM

The idea of an educational escape room came up while creating the L@L project after having participated in a regular escape room, which is a game played all over the world and it is very popular among young people. The idea of the escape room is to escape a room in a certain time limit (usually one hour) by fulfilling tasks and discovering links, objects, hints, codes, etc. Tasks, puzzles and riddles and links are connected, sometimes in parallel, sometimes linear, with one clue leading to the next task.

The regular escape room usually has a narrative: a story where the group has to solve a problem and save the world from something bad happening. Topics usually are taken from adventure games, including murders, spies, missing persons, secret intelligence, bombs, biological weapons, inventions, etc. All of these topics are interesting to young people.

The escape room is always a cooperative activity, focusing on diversity in the group and using the potential of all members of the group. Communication, leadership, cooperation are natural learning elements of escape rooms.

Based on the usual escape room concept, the following questions arose:

- @ Can we use this game concept for educational purposes? Can an escape room be a creative learning environment?**
- @ What makes an escape room educational and for which educational environments is it useful? What are the learning outcomes? Are these in line with the mission and vision of the educational institutions or organisations; does it fit the educational conditions?**
- @ Are escape rooms in educational settings realistic, looking at financial and human resources, time investment, etc.?**

The L@L-project decided to research these questions and develop this innovative educational tool in a broad range of educational environments, from elementary and secondary schools to youth centres and day care centres for people with disabilities and kinder gardens.

3.1 Eduesc@peroom as a creative learning environment:

The L@L project aimed to innovate by developing new creative learning environments in both formal and non-formal education settings. As the main source of innovation, the project proposed the design and development of creative learning environments (both in terms of physical spaces and other conditions) according to the needs of individual learners, students or participants in line with the needs of facilitators' (youth workers, teachers, readers, ect.) processes.

As part of the project, the participants defined conditions of creative learning environments during a seminar of the topic. During the development of the educational tool, the following conditions were taken into consideration:

- @ Eduesca@perooms are learner-centred – based on learners' needs and giving responsibility to the learner.**
- @ Eduesca@perooms encourage learners to explore and allow them to fail, using their curiosity and creativity.**
- @ Eduesca@perooms encourage learners to be active and to look for their own answers, using their own competences and learning styles.**
- @ Eduesca@perooms are an environment where the educator is a supporter of learning by monitoring and interacting, but only when learners ask for it.**
- @ Eduesca@perooms use diverse (creative) materials and support creativity.**
- @ Eduesca@perooms give space for different learning styles.**

3.2 The educational elements of the Eduesc@peroom:

The following question became the core-question for the development: "what makes an escape room educational?" What is the difference from usual escape rooms?

In non-formal education, gamification is a well-known concept. It is a new way to make learning playful and connect it to the way young people think, using what naturally interests them. The educational escape room uses the core design of an escape room but brings in the educational element, linking it with interests of young people. People are curious by nature and the educational escape room is a perfect setting for working with this curiosity and using it for learning.

3.3 Suitable educational fields to build Eduesc@peroom:

During the process, educators of various educational fields were invited to explore the possibilities of building Eduesc@perooms. The main focus point was to analyse how the Eduesc@peroom could serve as an educational tool and determine whether the possible learning outcomes in line with the mission and vision of educational institutes or organisations; in other words, “does it fit the educational conditions?”

In the development of the tool, all educators involved from both formal and non-formal education field initially were open to the idea of exploring the possibility of using escape rooms in their educational settings.

During local activities, Eduesca@perooms have been built in:

- @ A youth centre
- @ Elementary schools
- @ Secondary schools, both regular schools and special needs schools.
- @ A day care centre for young people with disabilities
- @ A circus school
- @ A university
- @ A cultural centre (castle)
- @ A kindergarten/ pre-school

All educators managed to adapt the concept of the Eduesc@peroom to their own context for their own learners. The conclusion of the development of this educational tool was that Eduesc@perooms are suitable for all educational settings and are suitable for a broad variety of learners regarding age, intellectual abilities, countries, backgrounds. The main condition for making them suitable was to adapt the approach and construction of the room to the needs and capacities of the learners and the educational settings.

3.4 Resources to build Eduesc@perooms:

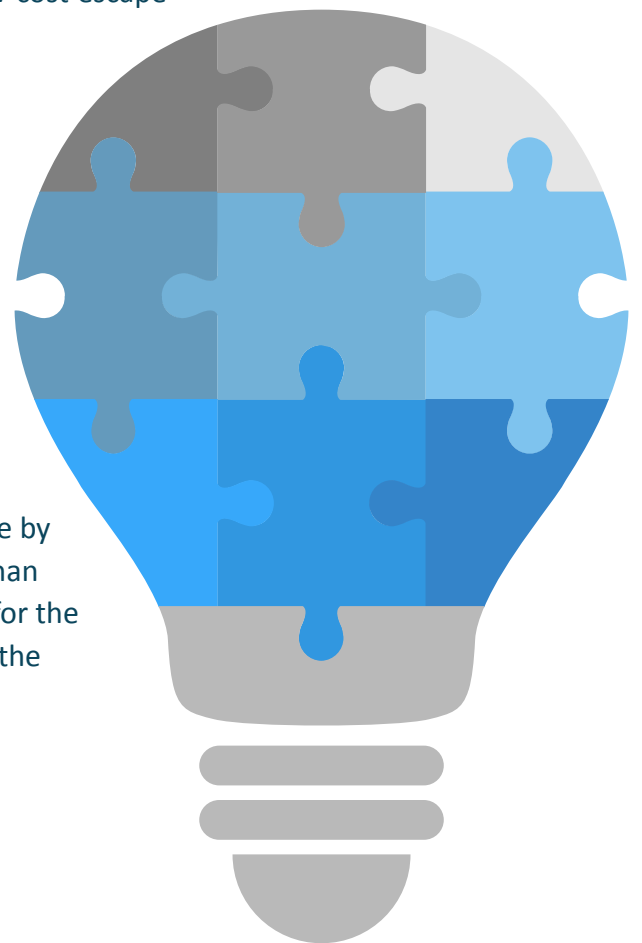
One of the main concerns was whether an educational organization would have enough resources to build escape rooms. Do schools, NGO's, youth centres, cultural and community centres have enough human and financial resources to create Eduesc@perooms?

Participating in regular escape rooms is quite expensive in general. These rooms are built with a large variety of materials, some being specific and scientific ones; magnets, locks, electrical equipment, lasers or black lights, etc. They often use a complex monitoring and communication system. For the development of the tool, it was essential to explore the possibility of making low-cost escape rooms. Surprisingly, educators have managed to build low-cost Eduesc@perooms, using on average not more than 20-50 euro.

Educators used their creativity in finding useful materials, using second-hand materials or just borrowing materials.

Many educators used cheap bicycle locks. Monitoring seemed to be quite easily done by setting up a skype connection between the monitor and the escape room. Basic material can be cheap and it is possible to build low-cost escape rooms which are affordable for all educational settings.

In terms of human resources, the challenge is greater. The time and energy required to design and build an escape room are quite a demanding, especially when one looks at it as 'a few-hours activity' for a limited number of learners. Many educators have stated after building their escape rooms that it was worth the effort as the learning outcomes were very impressive. To make an escape room worthwhile, it seems important for educators to understand the 'interest' by witness the learning outcomes of their learners. That can only be done by piloting and try it out. Some educators developed more than one escape room and they stated that it took much time for the first time, but it was significantly less time-consuming for the following time(s).



4. EDUESC@PEROOM – EDUCATIONAL ELEMENTES

When developing the Eduesc@peroom, the focus was very much on the educational element of this tool. Both the concept created by the team and the practices developed by educators contributed to the educational identify of the Eduesc@peroom.

4.1 Educational approach:

The educator should focus on the added educational values of each task, with the exit being just a complementary goal. When the creator of the room thinks about tasks and puzzles, they need to think about how those tasks will lead to learning objectives, not only the room's exit.

The Eduesc@peroom is a tool that educators can use in their work in order to:

- @ Provide alternative and exciting ways for learning new knowledge, skills or attitude.
- @ Text existing knowledge/skills/understanding/growth level.
- @ Link knowledge to a multisensorial, effective, active and/or practical memories.

4.2 The intention to create a learning space:

The Eduesc@peroom is built to learn, with various but specific learning objectives:

- @ To learn something concrete (subject, topic, empathy, social skills, knowledge).
- @ To increase self-esteem and awareness, social interaction.
- @ To understand what role best fits in the team.
- @ To open the mind and look at things and situations from different perspective.
- @ To use what is already known for a different purpose.
- @ To apply existing knowledge or skills.
- @ To create awareness of the attitude and behaviour of learners and the effect of that on themselves and others in the group.

4.3 The educator as supporter of learning:

- @ The learn The role of the educator should be supporting and coaching, but not leading and providing straightforward guidance in difficult situations.
- @ Mistakes are an essential part of process, so teams should not be interrupted when they are doing something wrong or going in the wrong direction unless they request assistance.

4.4 Methodology for development:

The Eduesc@peroom aims to utilize learners' potential by addressing different skills and competences. Tasks should respond to different learning styles, qualities and personalities. Elements that contribute to learning, understanding, remembering, creating awareness and personal growth are:

- @ **Multisensorial learning tasks (feeling, touching, sounds, taste, etc.)**
- @ **Use of pictures.**
- @ **Use of pieces of text and information in order to understand it and come up with the answer.**
- @ **Use of quotations/ facts and need to structure them and put in order.**
- @ **Logical thinking tasks.**
- @ **Creative thinking tasks.**
- @ **Chemical, biological, physical relate tasks.**
- @ **Lateral thinking tasks that force the participant to understand and escape from their own box.**
- @ **Use the escape room out of timeframe: The educator can ask to read something or understand something before learners use the escape room. Also, students could finish the escape room another time, when it is allowed to find solutions or information for specific tasks in which they were involved in the escape room and continue the activity afterwards with the result.**
- @ **Possible tasks that are not mandatory for solving the room and exit, but those tasks are exciting and useful for learning objectives.**
- @ **Variety of tasks:**
 - @ Tasks that are oriented to use individual talents of team members.
 - @ Tasks that are done only when the team works together.
 - @ Tasks that are used for exploration rather than getting done/solving particular case (collateral learning not linked to the end of the game).
 - @ Tasks that creates another task by being done.
 - @ Tasks that modifies the room during the activity. The room always changes after each team, and the final solution is also a bit different for each team.
 - @ Tasks that continue outside of Eduesc@peroom.
 - @ Possibility of Advanced tasks: Educator initially creates Eduesc@peroom and let participants experience it. Participants use their experience in order to create new Eduesc@peroom, go through a lot of different material, information and use of it in order to create meaningful learning experience for new participants. By creating Eduesc@peroom, participants learn even much more than just by participating in it.

4.5 Reflecting on the learning:

One of the conclusions concerning what makes the Eduesc@peroom an educational escape room is that there should be space for reflecting upon the experience, as it significantly contributes to the learning. In regular escape rooms there is no space for that. In the development of the Eduesca@peroom, this element of reflection has been built in. The possibility for participants to reflect on the experience, question what happened, give and/or receive feedback and become aware of their learning is a highly educational element of the Eduesc@peroom in the form of debriefing room. This debriefing room could provide space to:

- @ Share participation experience.**
- @ Evaluate the individual results and applied solutions for each task in order to create common understanding of the whole process.**
- @ Evaluate participants to see if they have reached learning objectives, where it is possible.**
- @ Share different solutions for each task among participants.**
- @ End the story of the escape room and give meaning to whole learning process.**

4.6 Time concept of the Eduesc@peroom:

- @ *A time limit is not mandatory; it depends on learning goals and could be adapted to the tasks, learners' needs and learners' level of concentration.***
- @ *Time can be stretched to multiple sessions or days in order to avoid negative effects of time pressure in the process.***

5. CONCLUSION

In the experience of educators involved in the L@L-project, the Eduesc@peroom has an impressive potential to be used in educational settings for learning purposes. The research done with the participants also proves very high number of positive indicators. On average over 80% of participants felt “positive,” “responsible,” “inspired” and “interested” during the learning experience in Eduesc@perooms.

Building educational escape rooms requires time and human resource investment, but it also brings educators and learners very good learning outcomes. Educators mentioned “It is so interesting and exciting to do, it is a new approach to my work as teacher; I forget the time invested, I just feel the excitement.” Building Eduesc@perooms brings a new dimension to educators’ work and educational approach.

Educators working with disabled children and young people found new learning potentials for their clients. By making an Eduesc@peroom about farm animals, they all were surprised about how well the young people could link the different elements of the Eduesc@peroom, and found the learners to be more knowledgeable and skilled than expected. Educators could be confronted with new and more knowledge or skills in their pupils, students and young people than expected. This could strengthen the relationship with their learners and create more self-esteem in learners.

Building an Eduesc@peroom for the first time is not so easy; it is time consuming and learning outcomes are uncertain. But in all the Eduesc@perooms built during this project, educators were positive about the Eduesc@peroom they built and about the learning outcomes for both educators and learners. Educators involved advise other educators on how to try the method out and explore the potential of this educational tool.

To support educators, the core team of this educational tool has prepared this report, a step-by-step tutorial and a toolkit, which contains good practices of Eduesc@perooms in a broad variety of educational settings, in both formal and non-formal education. All of these documents and the Research documents can be downloaded for free via:

We would like to thank our readers of this document and we wish all educators good luck and joy in the exploration of the Eduesc@peroom!

www.lookingatlearning.eu

Gabi Steinprinz – manager, country coordinator Netherlands

Rūta Kronberga – country coordinator Latvia

Ignacio Salgado - country coordinator Spain

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