

AN ACTIONABLE GUIDE TO CREATING EDUCATIONAL ESCAPE ROOMS

Handbook



TITLE

An Actionable Guide to Creating Educational Escape Rooms: Handbook

EDITORS

Audronė Daubarienė, Asta Daunorienė, Kamila Anna Dzierzak, Nimer Ziadmanesh, Andreas Korntved Mortensen, Sara Baldo, & Marta Ferreira Dias

AUTHORS

Pérez, J. G., Padillo, D. P. R., Lobo, M. D. O., Trigueros, I. R., Alcarria, A. L., Díaz, P. R., Meireles, G., Gomes, I., Zinovyeva, A., Hayward, C., Amorim, M., Reuter, J., Encarnação, R., Madaleno, M., Vieira, E., Magueta, D., Amjadi, H., Tercanli, H., Martina, R., and Webb, K.

ILUSTRATTOR

David León de la Torre

PUBLISHER

UA Editora | Universidade de Aveiro
1st Edition – March 2022

ISBN: 978-972-789-746-9

DOI: <https://doi.org/10.48528/am21-xy71>

The UNLOCK project – Creativity through game-based learning at higher education – aims to equip HEIs to design, set and facilitate escape room games in their learning experiences, to foster the creativity and other entrepreneurial skills of HEI's students.

The UNLOCK project will provide the context, process and tools based on a new and innovative learning approach that stimulates entrepreneurial skills in both students and educators, aiming at strengthening employability, creativity and new professional paths.

UNLOCK

CONTENTS

INTRODUCTION	4
THEORY	13
INSTITUTIONAL SUPPORT	20
PRACTICAL CONTEXT	25
NARRATIVE	30
PUZZLE DESIGN	35
EVALUATION	41
ASSESSMENT	47
COMMUNITY	50
THE END	55
APPENDIX	57



FH MÜNSTER
University of Applied Sciences



ADVANCIS

bespoke

INTRODUCTION

Welcome to Unlock Handbook, a short guide that provides educators with an add-on to the MOOC. In this Handbook, we invite you to explore the key takeaways from the landscape of Educational Escape Rooms. We'll look at how to design, set up and facilitate EERs in a pedagogical context.

Why the handbook?

CONNECTION BETWEEN MOOC & HANDBOOK

At the UNLOCK project we have created the **MOOC** (Massive Open Online Course) on Educational Escape Rooms. To ease the learning processes we have decided to develop the Handbook as a **summary of the key learnings** presented in the MOOC. The aim is to help educators to **revisit their learnings**, which they have gained from the MOOC.

MAIN FOCUS OF THE CONTENT

We would like the Handbook to **provide key takeaways from each module** and **synthesise that knowledge** for educators to revisit. The Handbook will primarily focus on key learnings, but also expert knowledge and process will be presented in easily digestible content that guides the academic process.

TARGET AUDIENCES

The Handbook is targeting a **broad audience**. It can be used as a guide for **MOOC participants** to access the content in a short bite-format rather than embarking on the entire journey, as well by **communities** interested in implementing more game-based approaches to pedagogical contexts.

How to use the handbook?

Before you get started, we would like to give you a short introduction to how to use the Handbook.

The modules of the Handbook consists of different formats. Some modules might present **expert quotes** to emphasize a key learning, and some might present case studies to show the key learnings in practice. You will also stumble upon **puzzles** to solve for inspiration and gamification of your journey. Each module ends with a **reflection space** with questions to help you reflect both generally and about specific content in relation to the chapter.

Furthermore, on each page there is a **general text box** (transparent color) and a **grey text box**. The grey box contains an additional elaboration on the key learning from the module. See the example below.

Four core strategies in designing a narrative based EER include: Taking experience as the focal point; utilizing the “Ask Why” concept; integrating meaningful challenges; and avoiding cognitive dissonance. There are six major principles you can consider in designing your narrative based EER. These principles are:

Transparent box - **the main content**

Your approach to creating a narrative design for your EER does not have to be “all or nothing”. Based on the extent of your commitment to the above principles, and availability of your resources, you can create different levels of immersiveness in your EERs.

Grey box - **the key points**

Meet your guides

Throughout the Handbook three MOOC characters will guide you through your learning journey.

Meet Mo'Nique, Irvin and the Dean, who are also part of Higher Educational Institution, to be precise the University of Learnovania.

They have learnt the gamification approach first hand, so they will be here to ask you reflective questions and help you reinforce your key learnings of the Handbook.



Terminology

In order to smoothen your reading experience we have created a short terminology guide to make sure you are familiar with all definitions mentioned in the Handbook.

Educational Escape Room: Live-action team-based game where players discover clues, solve puzzles, and solve tasks in one or more rooms in order to accomplish a specific goal;

Game-based learning: Type of gameplay with defined learning outcomes;

Gamification: Use of game elements, such as incentive systems, to motivate players to engage in tasks;

Higher Education Institutions: Universities and colleges but also various professional schools that provide preparation in such fields as law, theology, medicine, business, music, and art.

Intended Learning Outcomes: are statements about what a student will achieve upon successful completion of a unit of study.

Welcome to the handbook

This module will introduce you to the world of **Educational Escape Rooms (EER)**, which can provide an engaging way for students to interact with content, focusing on making meaningful connections for learning and fostering creativity among HEI students.

This module sets the scene for EERs and provides an overall understanding of what they are and how they can contribute to teaching and learning.

Throughout the Handbook, you will be introduced to key takeaways from MOOC Modules that will teach you how to integrate game-based learning into your teaching practice.

What is an EERs?

“An escape room is a live-action team-based game where players discover clues, solve puzzles, and solve tasks in one or more rooms to accomplish a specific goal (usually escaping from the room) in a limited amount of time.”

Scott Nicholson, 2015

Nicholson, an expert within the Escape Room and EER landscape, showcases the key elements that have to be applied to establish EERs within your teaching. In a nutshell, ER and EERs require **teamwork, communication, initiative, and higher-order skills** (e.g. **critical thinking, attention to detail, and rational thinking**) to apply a wide range of knowledge and the appropriate methods under time pressure.

While designing an EER, it is crucial to keep in mind the educational learning objectives that students have to fulfil and consider the key elements mentioned above.

Why use EERs?

If you are wondering why you should integrate EERs into your teaching, we would like to present you with key findings and benefits for doing so!

Although the research regarding EERs is still in its infancy, robust arguments already showcase its strengths.

- Games in education are an effective tool for learning in and across different domains;
- Games in education can provide players with tools that may promote creativity;
- Escape rooms, as games for pedagogical purposes, promote a set of transversal skills for students, that are acknowledged as critical for easing the transition to the labour market.

Although it might not seem easy at first to integrate the EERs into teaching, there are many benefits to doing so! Make sure you keep that in mind while challenges arise during your process of designing your own EER.

Reflection space

What are your main motivations for integrating EERs in your classroom?

How do you see yourself applying the EERs in the future? Do you feel encouraged to do so?



THEORY

You will be introduced to the core concepts that shape the design and use of educational escape rooms. We will discuss the theories about learning, including the role of gamification in learning, constructivism and social development theory, and present a pedagogical framework specific to implementing EERs in education.

Theoretical underpinnings

In this module, we emphasize the alignment between the learning objectives and teaching activities; the so called constructive alignment. The major takeaways are the versatile learning objectives and the educators' competences to be able to constructive align the objectives with the EER.

Educational escape rooms are versatile. It doesn't matter which learning objectives are addressed, as long as there is a suitable alignment with the EER.

Key EER elements

“There are three major EER design elements emphasized, being (i) gamification, (ii) intended learning outcomes, and (iii) pedagogical elements”

Tercanli et al, 2021

Educational escape rooms contain gamification elements that support students in realizing the learning objectives when interacting with the puzzles in the game. Sound design choices based on constructivism and social development theory are required to determine the fit between the gamification elements and learning objectives. The EER pedagogical framework describes the knowledge, skills, and attitudes that educators can use to make these design decisions.

Educational escape rooms can address many learning objectives. Constructive alignment is necessary between the learning objectives, EERs as teaching activities, and the assessments.

Learning aims and educator competences

Below you will see a short list taken from the myriad of learning objectives associated with the use of EERs and a brief summary of the 22 educator competences relevant to EERs.

- Critical thinking;
- Introduce or reinforce content;
- Asses learning;
- Apply practical skills;
- Pedagogical: assessment, mentoring;
- Technical: design thinking, digital;
- Social: creativity, team work;
- Institutional: tools and resources.

Which learning aims would you like to focus on when you use an EER? Which competences do you think play the biggest role in successfully implementing an EER?

Case: “Escape the Classroom”¹

“The final exam has been stolen! There is only one copy of the final exam, but this copy is in a safe with a contraption. Can the players dismantle the contraption, crack the code of the safe, and get their hands on the last copy of the exam so the examination can continue?”

The Escape The Classroom was an EER for preparing for a biology exam. It had a simple setup and it used materials that already existed in the biology classroom as props and the basis of the puzzles. The goal was to engage the students with the subject content in a challenging and fun way, thus the content became the core focus of the puzzles and activities. At the end of the EER, students would have a clear idea of what they would be required to know for the final exam as well as insight into their own level of understanding of those concepts.

Prominent design elements of Escape the Classroom that overlap with pedagogical practice are cooperation, competition, challenge, strategy, communication, discovery, rewards, and instant feedback.

¹To read the entire case, visit our case study report:

https://www.un-lock.eu/uploads/2/0/8/6/20866568/3._unlock_part_3_case_study_report.pdf p.95

Aims and competences puzzle

Here are some more aims and competences for EERs. Can you find all 10 terms?

You can find the answer in the Appendix.



Reflection space

As a beginner with EERs, which learning aims might you want to start with?

After experimenting with a few EERs, which learning aims would you choose to challenge yourself and your students?

In terms of competences, where are your next areas for growth?



INSTITUTIONAL SUPPORT

In this module, you will be introduced to the importance of the institutional support in **Educational Escape Rooms**.

Human, physical and financial resources are involved in the creation and implementation of the EERs. Particularities such as **teacher cooperation, time management, university guidelines and support, appropriate environments and necessary tools** must to be considered in this process.

Why do you need institutional support?

Lack of institutional support is identified as one of the limitations preventing educators from using EERs. Educators report lack of time, other support materials, and personal and technological resources as limitations that hinder them from using EERs.

In addition to these factors, the lack of acceptance by fellow educators and the lack of support by the institution with openness to new activities is pointed out, eventually demotivating the enthusiasts who initiate these activities in the institution.

In this module we will focus on the importance of human resources, colleagues, networking, students and other stakeholders and the financial resources that may be involved in this process.

How to engage people and raise funds?

In order to get others on board you might need to convince them of the positive impacts of EER methodology. In addition to financial resources, you will need other tools in the development and implementation of the EERs.

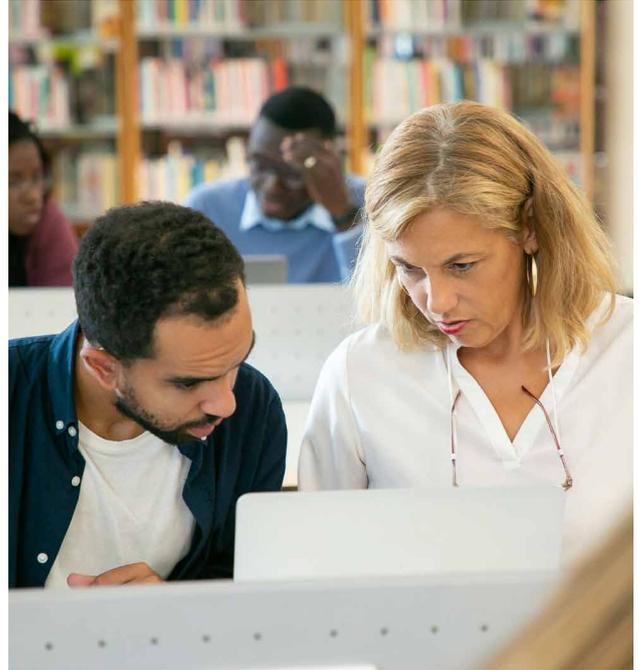
- Make a stakeholder map to promote your idea among other colleagues and superiors
- Will you need a physical space, or will you make a digital escape room? Is having a permanent space a viable option for your institution?
- It is important to list and visualise all the tools needed at the planning stage. This will smoothen the execution
- Depending on your ambitions, costs may vary a lot. Make a project budget with all the costs involved.

The main idea of this module is to make you think carefully about the EER you want to create, understand the importance of networking and think about the budget for your Escape Room.

Case: The Rotterdam school of management²

In an EER at the Rotterdam School of Management (RSM), where the main goal was to create sustainable development goals, many actors were involved in order to create the EER.

The **students** took care of the design, and the materials. **Non-educational staff** helped in the construction. **The marketing team** created the content on the web to promote the Escape Room. **The IT department** installed the software and took care of payments. **About 80% of the materials** were collected by the RSM community, and the financing and the physical space for the EER were a courtesy from **the Dean of RSM**.



As you can see, having the support from the members of your institution, either colleagues, superiors or even students, can allow you to build a successful EER. This will allow you to have more time, as you will have help from your institution, and to save resources.

² To read the entire case, visit our case study report

https://www.un-lock.eu/uploads/2/0/8/6/20866568/3._unlock_part_3_case_study_report.pdf p.113

Reflection space

How can you successfully implement EER dynamics in your institution?

What is your plan to get your colleagues and superiors to help you promote and implement EERs in the classroom?



PRACTICAL CONTEXT

Let's get down to work! In this module, we will give a practical review of the elements strictly necessary to create a basic EER. This may help you to devise your own EER, so that you can develop your idea throughout the rest of the modules.

How to get started with the practicalities

Before we go any further into the theory of EERs, let's start by fleshing out the idea you may have about your first EER. This will serve to test your knowledge of the subject and to apply it, so that you can end up with a real idea of EER, which you can refine in the rest of the modules.

When creating an EER, you have to make a lot of decisions to make sure the EER serves as a real learning tool and not just as a playful activity. On the next page we compile some tips that may help you.

In this section we will summarize the most relevant content of the MOOC module PRACTICAL CONTEXT, focusing the information on a concrete example.

Practical tips

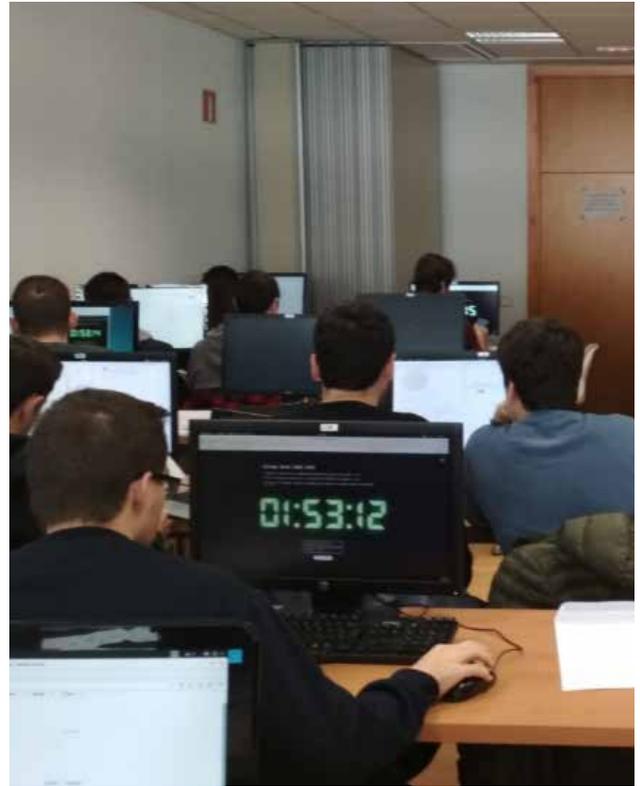
These are the tips we have considered most important:

- Level of difficulty: High level means a more challenging and enjoyable experience, but must be in line with the competencies of the students.
- EER type: Physical EERs are more immersive, and promote social skills and teamwork, but they are usually more costly and more difficult to analyze than Digital EERs.
- Team size: Larger teams promote social skills and teamwork, but only in heterogeneous groups and in EERs where the work can be shared out.
- Structure: Linear structure to introduce complex concepts. Non-linear structure for larger and more experienced teams.

Try to keep these tips in mind while analyzing the following case study as an example.

Case: Deactivating the contraption³

Now that you know the basic tips, it's time to look at an inspirational example of a hybrid EER. In “Deactivate The Bomb” which was conducted in a Computer Science course at the Technical University of Madrid, the students were tasked with defusing a “bomb” on campus. In order to do so, they had to complete a deactivation software by applying techniques they were taught in class and decrypt clues left by a kidnapped professor. The aim of the conducted educational escape room was to reinforce the most important concepts covered in the programming course through a fun activity.



The format of this EER is not only adapted to the subject content, but also to the teachers' learning objectives. There are many ways to design a good EER, but only one that optimizes your preferences. Sometimes finding the way is a difficult path, but it's worth it, as the authors of this example demonstrate.

³ To read the entire case, visit our case study report:

https://www.un-lock.eu/uploads/2/0/8/6/20866568/3._unlock_part_3_case_study_report.pdf p. 164

Reflection space

Regarding the case study you have seen already: try to identify the context in which it has been conducted, and whether the authors have chosen an appropriate typology of EER based on the tips we have presented as bullet points.

What's the best way to implement the best practices from other EERs into your own creations?



NARRATIVE

An imminent virus outbreak, a kidnapped professor, a bomb placed in the chemical laboratory. Why not create an **EER storyline** for your students for an immersive learning experience, with a plot relevant to your **teaching objectives**?

In this module we will focus on **EER narrative design**, to help you understand, identify, and apply concepts and its elements **as a means of creating an immersive learning experience**.

EER Narrative design

In the module Narrative Design we highlight the importance of a meaningful storyline in the EERs, and describe a set of strategic principles to take into consideration when creating one.

We then take a closer look at a few selected EER cases from the UNLOCK project case study report, and analyse their narrative designs based on the principles we established earlier.

The module showcases different levels of EER narrative immersion achieved by educators, in diverse teaching and learning contexts.

Principles of EER narrative design

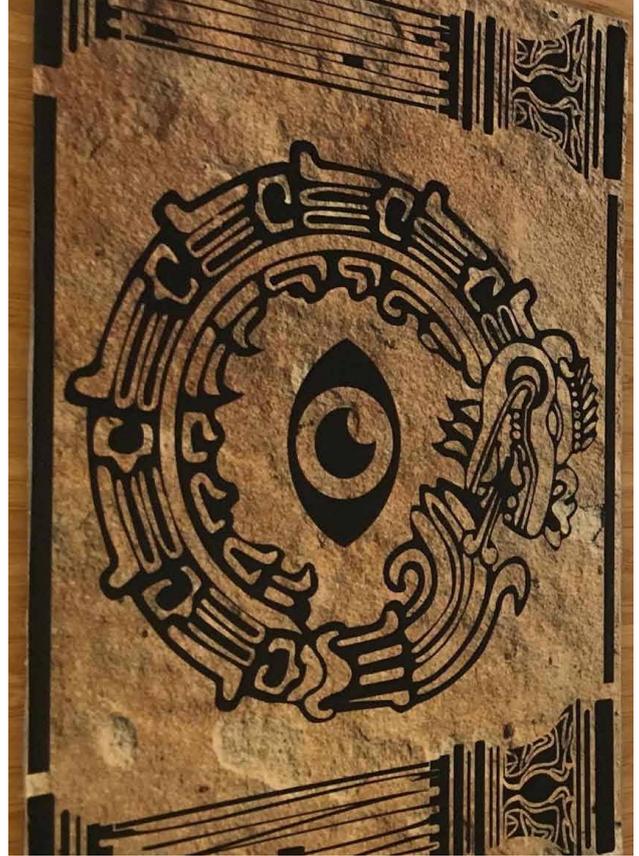
Four core strategies in designing a narrative-based EER include: Taking experience as the focal point; utilizing the “Ask Why” concept; integrating meaningful challenges; and avoiding cognitive dissonance. There are six major principles you can consider in designing your narrative-based EER. These principles are:

- Using an intended learning outcome (ILO)/ subject aligned genre
- Selecting a setting in which the EER takes place
- Creating a narrative with clear participant role and goal assignment
- Ensuring consistency of puzzles with setting and genre
- Integrating time goals
- Presenting well-calibrated challenges

Your approach to creating a narrative design for your EER does not have to be “all or nothing”. Based on the extent of your commitment to the above principles, and availability of your resources, you can create different levels of immersiveness in your EERs.

Case: The serpent cult⁴

“THE SERPENT CULT” is a student-developed EER centered around a cultist narrative. The players took the role as “disciples” seeking admission into the Serpent Cult and had to “prove worthy” to become members. The gamemasters acted as members of the cult and were wearing cowls. All players drank poison (water in a snap glass mixed with green fruit color) before the start and were given one hour to find the antidote — based on the premise that worthy disciples would be able to solve the EER and unworthy would die.



- **Students developed** their own narrative
- The **narrative played an active role** in the EER as timeframe, puzzle equipment and gamemaster role.

The EER was played as part of a philosophy of science course at a HEI. The narrative created the basis for the involvement of reflections on theories of science studies, and what is considered as valid knowledge in various scientific theoretical directions. The narrative supported the educational purpose.

⁴To read the entire case, visit our case study report

https://www.un-lock.eu/uploads/2/0/8/6/20866568/3_unlock_part_3_case_study_report.pdf p.30

Reflection space

Do you consider narrative design an important element of your EER development processes? If yes, why?

*How and to what extent you can apply narrative design principles in your EERs?
How do you think you can overcome potential challenges in doing so?*



PUZZLE DESIGN

Puzzles are the **backbone** of Educational Escape Rooms! This module will show you how to design different types of puzzles that address your **learning outcomes** and help you achieve them!

Introducing to puzzles

In this module, you will learn how to **define your Intended Learning Outcomes (ILO)**, explore the **levels of complexity** and **types of puzzles**, and learn about **puzzle components**.

It is also important that you learn to **define clear indications** for **clues** and **hints** related to a specific puzzle and derive **clear instructions** for each puzzle.

The module aims at developing your knowledge and skills in the field of puzzle design, allowing you to put into practice what you have learned from the other modules.

Puzzle type

“In educational escape rooms the focus is on learning that can take place in different ways. One approach is causal, rational learning where sustained patterns, rules, repetition, mechanisms and conventions are essential (...) and another approach focuses on experimentation, evaluation and assessment”

Järveläinen & Paavilainen- Mäntymäki, 2019

There is a wide array of puzzles you can choose from to create an EER. Therefore, it's crucial that you understand the type of activity you want to put in practice when selecting the best puzzle for the challenge, in accordance with the learning goals you want to address. When designing your puzzles, consider whether they should focus on cognitive skills, force/speed, dexterity, or teamwork.

Getting acquainted with the different dimensions addressed in different puzzles, allows you to make an informed decision when designing your puzzles.

Navigating the world of puzzles

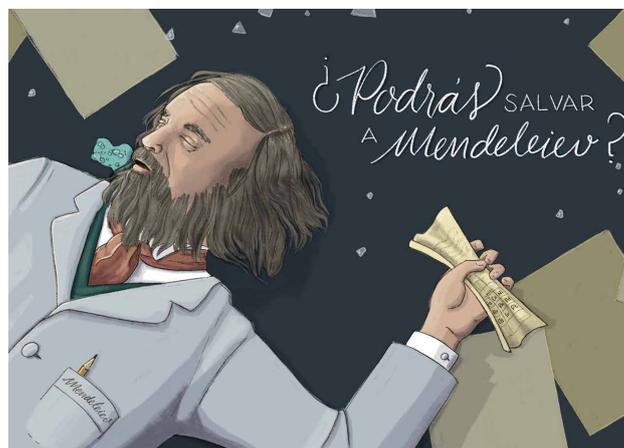
When navigating the world of puzzles it is important that you do it with a clear intention of: understanding the differences in puzzles to use them for different purposes; and grasping their potential for the construction of narrative that can build up your EER.

- Define goals and ILOs for EER puzzles
- Understand different levels of complexity in learning when working with puzzles
- Discriminate different puzzle structures and components
- Define clear indications for clues and hints related to a specific puzzle
- Derive clear instructions for each puzzle

One of the core activities in designing EERs is the puzzle design, as puzzles are meant to be the exact learning experience for the “players”. Addressing the main topics of puzzle design, allows you to match your choices with your learning goals.

Case: “Al Rescate de Mendeléyev”⁵

In this EER entitled “Al rescate de Mendeléyev” (“Rescuing Mendeléyev”), the players must travel back in time in order to save Mendeléyev’s life, who has been poisoned. To find the antidote that can save the famous chemist and inventor, they will have to solve different puzzles related to basic Chemistry.



The EER was designed to help students acquire specific competencies in Chemistry, as well as soft skills such as group work and creativity. Simultaneously, the students would learn to value the work associated with scientific discovery.

The challenge presented to you with this case study is to be able to analyse this EER taking into account the knowledge about puzzle design you have acquired throughout the module, giving you the opportunity to reflect on a real experience on creating a set of puzzles directly related to the knowledge of Chemistry.

⁵ To read the entire case, visit our case study report

https://www.un-lock.eu/uploads/2/0/8/6/20866568/3_unlock_part_3_case_study_report.pdf p.155

Reflection space

How would you summarise the key points in puzzle design, in the context of creating an EER?

Do you think that physical puzzles would be adequate to use in an EER focussing on introducing the subject of social media marketing? Explain your reasons.



EVALUATION

You have designed a EER relevant to your teaching objectives with an immersive learning experience for your students with plenty of help from your colleagues; congrats! Now it's time to **evaluate the conducted work to ultimately improve the EER creation process and thus the educational outcomes.**

In this module we will focus on the desired elements of an **evaluation framework** to assess the EER.

How to evaluate your EER?

In the module of Evaluation, we highlight the importance of assessing the EER's learning outcomes' achievement; the experience of educators, staff and students involved; and the potential of opening the EER to a broader audience.

We, also, summarise the key aspects of evaluating the (1) process, (2) experiences and needs, (3) and learning outcomes for optimum improvement potential.

This section emphasises the main principles to keep in mind in evaluating the processes of EER creation and implementation for meeting the desired learning objectives.

Evaluating the process

In evaluating the process of designing and creating a physical, digital, or hybrid EER, you should consider whether the **developed framework**, the **chosen activities** and **pilot-testing elements** accommodate the EER's learning objectives achievement, and how the process could be improved. During the framework's evaluation, you should consider the following:

- Was it appropriate for delivering the course' learning outcomes?
- Did it allow for inclusion of innovative pedagogy?
- Was it adaptive to deal with unexpected changes?
- Were the chosen activities appropriate for the EER's allocated time and chosen audience?
- How much time, physical, human and financial resources did it require?

These questions highlight what framework and resource improvements could be applied to the EER creation process if it was to be repeated. The provided case studies can also inform the evaluation process.

Evaluating the experience

You should reflect on the experiences and needs of the (1) **learning designers**, (2) **educators** and (3) **support staff** involved in the EER's creation and pilot-testing, but also of the (4) **students** that took part in the EER. To obtain feedback from them all, consider organising focus group discussions. When organising and moderating the discussion focus on:

- The format, physical requirements and consistency of the focus groups
- Student questions around overall activity organisation; instructions' clarity; puzzles' complexity; EER's mode of delivery; levels of engagement; and effectiveness of communication during the EER
- Educators and staff questions around process' effectiveness; preparation and implementation's complexity; and effectiveness of communication and potential skill & attitude gaps

The all-around questions to educators, learning designers, supporting staff and students highlight everyone's experiences in creating and participating, respectively, in the EER, allowing further improvement.

Evaluating the learning outcomes

When evaluating learning outcomes, you should consider what skills, knowledge and competences you want students to obtain. The evaluation of learning outcomes may be based on:

- Subject-related learning objectives, e.g., subject-related content and skills, knowledge and/or competencies, covering all learning outcomes
- Learning outcomes based on the "other" learning objectives, e.g., transferable skills and knowledge of competences beyond the classroom, such as creativity, communication skills and planning and self-management

Pinning down the EER's educational outcomes allows evaluating whether the EER met the audience's needs, and whether the EER can be provided to an extended audience with similar learning needs.

Reflection space



Do the summarised elements of process, experience and learning outcomes evaluation ease the creation of evaluation forms for educators, staff and students? If not, why not?

ASSESSMENT

Puzzles are the **backbone** of Educational Escape Rooms! This module will show you how to design different types of puzzles that address your **learning outcomes** and help you achieve them!

Another form of assessment

In the UNLOCK MOOC, the **Assessment** module will be the final stage of your learning journey.

You will be invited to test your knowledge on what you have learned in this MOOC, not just by doing a traditional test, but also by escaping a digital escape room. Further, you will be asked to fill out a feedback survey about the MOOC. Finally, you will receive a certificate about your successful graduation from the UNLOCK MOOC course on designing and applying escape room games for pedagogical purposes.

We believe in learning by doing, why we encourage you to try the digital escape room about EERs, which will give you insights and inspiration on how to implement GBL methodology in your own teaching and to understand what it is like to be a student participating in an EER.

Reflection space

When implementing Educational Escape Rooms into your course, what assessment challenges do you envisage?

How your experience of participating in educational escape rooms could help you better assess your students' achievements in the course with EERs?



COMMUNITY

We hope you enjoyed the key learnings of the UNLOCK Handbook. In the following module, you will be introduced to the UNLOCK Community to help you share your experiences of working with a game-based approach in a pedagogical context.

Welcome to the community

We would like to invite you to stay in touch with our community, where you can share and read about similar experiences and recommendations to get inspired and up to date with the ever-changing landscape of EERs.

Our community is growing every day with a growing interest in Educational Escape Rooms.

Feel free to reach out and get in touch!

Similarly, as institutional support, the community can play an important role in encouraging you in implementing, testing and improving your EERs.

Unlock expert community

Our community consists of a significant number of experts, who have joined our venture by sharing their ideas, experiences, and friendly critics.

Here we present just a few of the renowned academics who have been supporting UNLOCK project.

- **Vilmantė Kumpikaitė-Valiūnienė** is a Professor of Human Resource Management at KTU; where she implements Digital Escape Rooms in her teaching practices;
- **Thomas Vigild** specialises in game psychology, play, journalism, board games, toys, game design, technology, escape rooms, gadgets, apps, game culture and indie games. He teaches at Folk High School Vallekilde.
- **Adelina Moura** is a forerunner in the development and implementation of Educational Escape Rooms with VET students, using co-creation frameworks and participative methodologies to enhance the learning experience of the students.

Receiving expert feedback and commentary can be a great way of gaining more experience in the territory of game-based learning. Our community of experts is happy to share their knowledge and expertise with you.

Unlock community puzzle

INSTRUCTIONS

In the following space, there are 21 words hidden. Together they create a motivational call to action that concludes the Handbook. Have fun discovering the message!

Be aware that words are placed ↓↑→←↔

As well as some of them are in reversed order.

Tip: Words “your” and “and” can be used twice.

W	X	B	S	F	B	L	E	A	R	N	I	N	G	L	D	V	M	C	K	U	K	A
L	Y	D	V	K	Y	D	E	S	A	B	E	M	A	G	E	Q	P	I	I	Z	N	N
X	G	T	E	I	I	D	S	Y	T	I	N	U	M	M	O	C	P	C	I	A	O	D
M	T	S	O	D	K	L	A	N	D	Y	T	O	W	N	V	Q	Z	Y	S	I	I	X
V	V	E	F	Z	U	H	L	Z	Y	F	C	O	C	S	D	G	F	V	J	A	T	S
E	C	T	M	G	V	C	D	S	H	O	O	V	C	R	F	Y	Z	Y	T	Z	C	E
C	R	L	I	W	J	A	A	P	L	R	O	O	M	S	E	O	E	M	I	T	A	W
M	T	U	L	N	E	U	E	T	J	W	T	M	R	Z	S	A	B	L	B	T	E	G
N	H	W	Y	E	T	K	L	T	I	B	P	O	R	Q	I	E	T	X	K	Y	N	X
R	R	W	M	Y	S	O	F	U	F	O	D	C	X	F	H	T	Z	I	T	N	I	L
I	X	F	V	O	U	C	P	A	C	P	N	T	X	H	I	M	S	W	N	K	U	A
S	W	Y	O	U	R	P	A	G	W	E	A	A	F	Q	F	Z	P	J	D	G	M	X
W	H	F	K	R	D	D	N	P	Q	I	V	A	L	F	P	T	M	I	L	G	O	F
M	E	H	K	P	X	M	K	T	E	B	T	V	E	K	C	O	L	N	U	Y	H	P
B	M	V	J	R	L	N	D	W	P	S	A	H	V	F	O	Q	L	Y	K	X	M	S
D	I	G	N	I	G	A	G	N	E	O	R	O	F	K	M	N	B	R	D	B	W	Z

The answers to the puzzle can be found in the Appendix on page 89.

Reflection space

What could be your motivation to engage with the UNLOCK Community?

How could the community enhance and support your EER learnings best?



THE END

Thank you for your attention! We hope you are now equipped and ready to have a go at EERs in your teaching. If you would like a more thorough walkthrough in using EERs, we encourage you to try the UNLOCK MOOC to dig deeper into the key learnings.

Get familiar with our work

The UNLOCK project is three years of extensive research into game-based learning and the use of EERs in teaching.

That's why we would like to invite you to have a look at variety of reports that conveyed knowledge within that theme.

- [The Literature Review](#) providing an overview of the status-quo of the EERs in higher education sector.
- [Case Study Report](#) which offers detailed presentation and analysis of 37 international case studies around EERs.
- [Educators knowledge, Attitudes and Skills. A Pedagogical Framework for Facilitating Educational Escape Rooms](#) with the objective of understanding the new role of educators when facilitating game-based learning

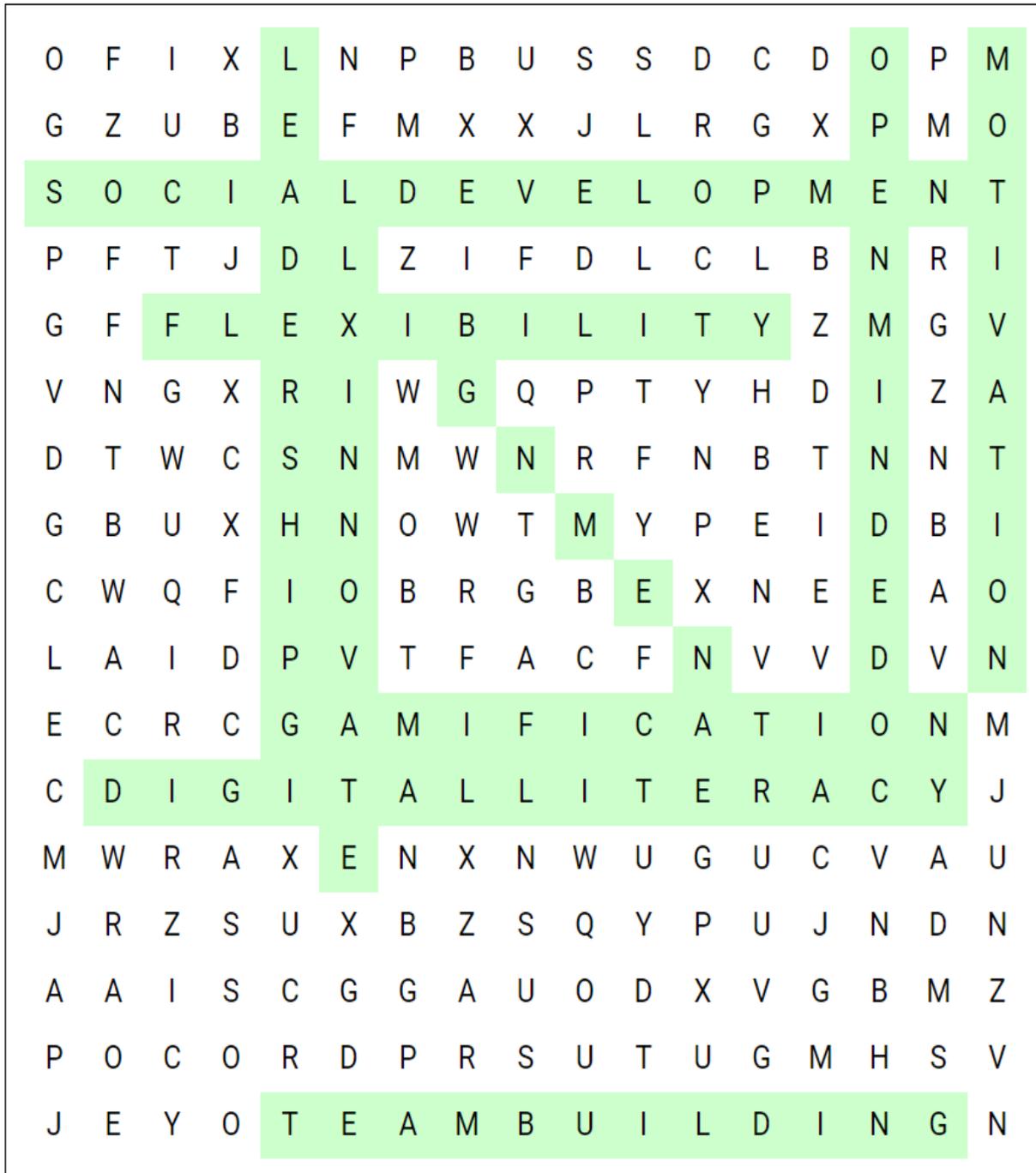
To get to know more visit our website WWW.UN-LOCK.EU!

APPENDIX

Here you'll find all the answers to the presented puzzles and riddles.

Aims and competences puzzle

The answer to the riddle Aims and Competences from the Theory chapter.



Unlock community puzzle

ANSWER

The call to action is: "IT'S TIME FOR CREATING YOUR OWN EDUCATIONAL ESCAPE ROOMS AND ENGAGING WITH UNLOCK COMMUNITY. TEST YOUR GAME-BASED LEARNING SKILLS AND GET INTO ACTION"

UNLOCK COMMUNITY PUZZLE

```

. . . S . . L E A R N I N G . . . . . . . . . A
. . . . K . D E S A B E M A G . . . . . . . . N N
. . T E . I . . Y T I N U M M O C . . . . . . O D
. . S . D . L A N D . . O W N . . . . . . . . I .
. . E . . . U . L . . . . . C . . . . . . . . T .
. . T . . . C . S . . . . . R . . . . . . . . C .
. . . I . . . A . . R O O M S E . E M I T A .
. . . . N . . . T . . . . . . . . A . . . T E G
. . . . E T . . . I . . . . . I . T . . . . .
. . . . Y S O . . . O . . . . . T . I . . . . .
. . . . O . C . . . . N . . . . . S . N . . . .
. . Y O U R . A . W . . A . . . . . . . . G . .
. . . . R . . . P . I . . L . . . . . . . . . .
. . . . . . . . E . T . . K C O L N U . . . .
. . . . . . . . . . . H . . . . . . . . . .
. . G N I G A G N E . R O F . . . . . . . . . .

```

Word directions and start points are formatted: (Direction, X, Y)

ACTION (N,22,7)

AND (S,23,1)

COMMUNITY (W,17,3)

CREATING (SE,14,5)

EDUCATIONAL (SE,4,3)

ENGAGING (W,10,16)

ESCAPE (SE,5,9)

FOR (W,14,16)

GAME-BASED (W,15,2)

GET (W,23,8)

INTO (SE,4,7)

IT'S (SE,16,9)

LEARNING (E,7,1)

OWN (E,13,4)

ROOMS (E,11,7)

SKILLS (SE,4,1)

TEST (N,3,6)

TIME (W,21,7)

UNLOCK (W,20,14)

WITH (SE,10,12)

YOUR (S,5,10)

UNLOCK

Handbook

www.un-lock.eu

This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-nd/4.0/> or send a letter to Creative Commons, PO Box 1866, Mountain View, CA 94042, USA.

UNLOCK is a KA2 Cooperation and Innovation for good practices for higher education 2020 -2022 project. Agreement No. 612645-EPP-1-2019-1-PT-EPPKA2-KA

Funded by:



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

The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

UNLOCK is a project carried out, under the leadership of University of Aveiro, by a strategic partnership between eight partner European organisations.



FH MÜNSTER
University of Applied Sciences



ADVANCIS

bespoke