



# Escape to Stay - make VET your first choice

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**Intellectual Output 1** 

### **Preparation for White Paper**

"What makes vocational training attractive?" Improving the image of VET with effective educational
Escape rooms

### **National Report Portugal**

**Prepared by CEPROF - Centros Escolares de Ensino Profissional** 



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#### Introduction

This National Report was written within the scope of the "Escape to stay – Make VET your first choice" project, which has the objective of informing young people about the career opportunities offered by work-based learning (WBL), as an alternative to university studies.

Throughout the project, the consortium of partners wants to demonstrate the positive effects that Escape Rooms and gamification can have on students of Vocational Education and Training (VET) and their learning process. But what exactly is an Escape Room? And can this type of activity be a part of a learning process? "An Escape Room is a gaming experience that challenges participants to leave a room where they are locked. To accomplish that, they must overcome a varied set of tests and challenges, in order to find the exit door key. Escape Room experiences in an educational context are becoming more numerous, but not many are rigorously documented. What has been observed is that practices based on Escape Room games can be part of a classroom management strategy, in different school contexts." (Moura and Santos 2020, p. 179).

Almeida and Cruz (2019) go a little bit further in order to explain what the implementation of Escape Rooms in the classroom entails. "Due to the fact that this type of activities requires teamwork and the development of communication and critical thinking practices, we easily consider its implementation in educational contexts, mainly if we take into account the importance the didatics of gamification has been gaining in the last decade, which is verified in the quantity and quality of studies that have been published (...)." (Almeida and Cruz 2019, p. 6-7).

In chapter 2 of this report, we explain how the research was conducted and what methods were used.

In chapter 3, we have the first part of results of a Desk Research in which the focus was to research documents that were written about the scenario of Vocational orientation and guidance in Portugal.

In chapter 4, we present the second half of the Desk Research, and this time our focus was the topic of Escape Rooms for educational purposes and their implementation in schools in Portugal. As is the case with the first part, the majority of the articles consulted are comprised in the period between the years of 2016 and 2020, to ensure a more up to date information.

Chapter 5 is the the more extensive one in this Report, as it contains the results of a Focus Group that was conducted with national experts from several areas connected to the scope of the "Escape to stay" project. This activity was held in January 2021, so it contains an up-to-date information about topics such as the implemenation of Escape Rooms in the Portuguese classrooms, their purpose, the viability of a portable game and the age groups that could benefit the most from this process.

Together, chapters 3, 4 and 5 answer all the questions that the consortium of the project agreed upon before the beginning of the research. Individually, a chapter does not answer all the specific questions, but this is complemented by information contained in the other two chapters.





In chapter 6, we write 10 recommendations based upon the information on the previous chapters of the National Report.

In the last chapter, we refer to the notion that VET education is seen as only a second choice and the prejudice some people have against students who graduate from VET schools.





### 2. Data collection: explanation of the methodology

To complete the National Report, CEPROF conducted a thorough research comprised of a Desk Research and a Focus Group. Naturally, both tasks had two different methodologies that were followed in order to get results, and these chapter explains both of them, by answering two questions: "How was the research performed?" and "Who and how many participants contributed?".

For the Desk Research, Google and Google Scholar were the two main channels where CEPROF researched information. Since the Report must be based on articles and papers written about the portuguese reality of Escape Rooms, our main keywords/expressions were "Escape Rooms", "Escape Rooms Portugal" and "Escape Rooms Portugal Educação (Educação = Education). CEPROF did not get a lot results that were directly connected to the Portuguese reality, but we managed to find scientific papers and other articles that shed light on the subject. And while we were doing so, we found several articles written by a portuguese Professor, called Adelina Moura, who is a specialist in Escape Rooms in Portugal. Once we thought we had a good amount of material, we started writing the State of the Art concerning Escape Rooms in the educational sector in Portugal, keeping in mind the topics of discussions and questions that were proposed by the coordinators of the project.

The second phase of the process of information gathering was the Focus Group, a task that reunited five experts from different areas that gave their input on Escape Rooms, vocational education and guidance and education in general: three people from the education sector, one person from the psychology sector and one CEO of an Escape Rooms Company in Lisbon, Portugal. Due to our present context because of the pandemic, the Focus Group was held online, during a Skype Meeting. CEPROF had a list of topics and questions to propose to the participants, but these were not asked in order. Instead, a moderator asked a first question, let each participant give his/her input for how long they wanted, and then it was proposed a topic of discussion that was directly related to the previous one or that a participant had touched upon. The moderator never intervened to give his input; his participation had the sole objective of conducting the Focus Group, proposing the topics of discussion and redirecting the discussion, if needed.

The Focus Group lasted two and a half hours, approximately. As time went by, some participants had to leave the discussion due to personal and professional reasons, but all major topics were covered and every participant had a chance to discuss each one. After the end of the activity, CEPROF gathered all information and sectorised it, according to the topics proposed by the coordinators.





#### 3. Desk Research, Part 1: Vocational orientation and guidance

3.1 VET: An overview, its acceptance and advantages, and professions in demand (in general, and particularly of technical and ICT areas)

Vocational Educayion and Training (VET) schools first appeared in Portugal in 1989, and the main goal at the time was to execute technical high school education (CEDEFOP 1999, p. 46). VET education is manifested in the country in two different ways: in private schools that are entirely dedicated to VET education and in public schools of general education that also offer VET courses. Nowdays, there are four main features that we can attribute to VET education in the Portuguese context:

- "Permeability (horizontal and vertical) between different VET programmes and between general education and VET programmes.
- All VET programmes grant double certification: an education certificate and a professional qualification.
- Participation in upper secondary education has significantly increased, since 2005.
- Early leaving from education and training has been steadily decreasing, since 2008." (CEDEFOP 2019).

At the end of their course, VET students must go through an apprenticeship programme, that includes 40% of work-based learning (WBL), and upon successful completion they are double certified, because they are granted a professional qualification and a 12<sup>th</sup> grade school diploma at EQF level 4 (CEDEFOP 2019); this diploma is of a higher level than the one granted to students who complete general education. The diploma and the apprenticeship programme are two of the main aims of VET education, because it signals students have been engaged in intense contact with the labour market and are qualified for it – these are the advantages pointed out by most authors.

When VET schools first appeared in Portugal, 2088 students enrolled in VET courses, and, apart from a few exceptions, that number has been growing ever since (PORDATA 2020). From 2006 until 2010, we had the biggest periods of increase from year to year, with variations of 23.000 students, until that growth became more steadied (PORDATA 2020). From 2010 (107.266 students enrolled) on, there have been periods of increase and periods of decrease, and in 2019, there were 115.981 students enrolled in VET courses in Portugal, 1.718 less than in 2014, the year with the highest number of students enrolled to date (PORDATA 2020). Azevedo (2018) states that VET education is the choice of 37% of young people in the country.

When it comes to professions, Organisation for Economic Cooperation and Development – OECD (2015) states that the offering of VET courses was increased so it could cover career opportunities in areas such as renewable energies, electronics and automation, information and communication technologies (ICT). In 2016, OECD reported that 60% of the students graduates from VET coursed were from areas related to services, sciences, engineering and transformation industry (OECD 2016).

Araújo (2017) refers that the various institutions in Portugal that deal with VET education are comitted in continuously developing this education system, by doing two things: "Increasing its attractivness and ensuring that the training keeps meeting the needs of the job market." (Araújo 2017).





Azevedo (2018), in an article pointing out the fact that VET education in Portugal was celebrating its 30th anniversary, does not write specifically about the jobs that are more in demand, but instead touches on the subject of the skills that are required by the professional working world, and the conclusion is very simple: soft skills are now much more requested than hard skills. The author lists eight relevant soft skills and its different implications: "(i) Communication - know how to listen/active listening, know how to explain, know how to express yourself, (...); (ii) Confidence and entrepreneurship — Self-esteem, autonomy, selfconfidence, ability to build/plan your life, know how to idealize, (...); (iii) Planing and problem resolution - identify problems and think about them, know how to organize, plan, learn to research, anlyze, think critically, make decisions, (...); (iv) Relationship with others – collaborate, make a team, respect what is different, stablish positive relationships, manage conflicts, empathy, respect shedules, respect the teachers, (...); (v) Criativity - Imagine different ways to do things, learn in different contexts, undertake, innovate and create, be open to new ideas; (vi) Resilience and determination - autodiscipline, know how to react to pressure, auto-motivation, concentration, be persistent, (...) auto-control, know how to deal with frustration; (vii) Emotions Management – self-assessment, be able to reflect, express feelings adequate to various situations, meet commitments; (viii) Health and hygiene - eat properly, have hygiene habits, know how to presente yourself, know risk behavious and their consequences." (Azevedo 2018, p. 127).

CEDEFOP (2019) underpins the fact that portuguese institutions and programmes, like the Operational Programme for Human Capital (*Programa Operacional Capital Humano* – POCH), give incentives, like scholarships and allowances, to potential students with low income. There are five incentives:

- "a scholarship received by learners during the WBL period (subject to learner's attendance);
- study material (Bolsa de material de estudo);
- travel allowance;
- accommodation subsidies for learners living more than 50km away from the VET provider premises;
- food/ meals subsidies." (CEDEFOP 2019).

The aforementioned Operational Programme for Human Capital is considered to be "the most relevant funding for VET programmes and VET providers" (CEDEFOP 2019) and is complemented by actions of the Operational Programme for Employment and Social Inclusion (*Programa Operacional Inclusão Social e Emprego* – POISE) (CEDEFOP 2019). "These operational programmes fall under Portugal 2020 (...), a partnership agreement adopted between Portugal and the European Commission, which brings together the work of the five European structural and investment funds, including ESF." (CEDEFOP 2019).

### 3.2 Common understanding of vocational guidance and orientation and its target groups

The authors that were consulted for this report have a common understanding that an education that is more inclined to vocational guidance has a concrete goal, and that is the preparation of students for the adult life and for the professional working world.

Azevedo (2018) writes that VET education was a "wave of fresh air" that fell over the education sector in the 80s. "Its innovative profile was acknowledged by all and its success, over





the decades, being carried on the back by many dozens of Portuguese civil society institutions and supported by sucessive political leaderships, has caused its course type to be extended to the network of secondary schools throughout the country." (Azevedo 2018, p. 130-131, translation from portuguese). The author affirms that VET schools have some innovation traits, but that their success, achieved resorting to what he calls questionable politic measures<sup>1</sup>, has contributed to the fact that the innovative model of VET education has been losing its aura of hope (Azevedo 2018, p. 131).

While describing VET education and what possibilities students can retrieve from it, Coimbra (2008) and Rummert & Alves (2010) (cited in Martins et al. 2018, p. 7) also end up giving a description of the students enrolled in these courses: "In Portugal as in Brasil, VET education is an educational path mainly attended by socioeconomically disadvantaged youth with a history of school failure who seek in this type of course a second training opportunity, and this may be a significant turning point for young people who are in a phase of transition to adulthood.".

Azevedo (2019) points out the fact that in 2019 there are still people who have prejudice against graduates from VET schools. "The implicit thought that fills the head of many directors, teachers and trainers, is still in the past, in the period before the formulation and execution of this policy of education, attached to the glorification of the high school model of teaching and learning." (Azevedo 2019, p. 13-14).

#### 3.3 National policy responses on vocational orientation and guidance

The policy agenda of VET education in Portugal is intertwined with the profile of the students enrolled in this type of education. CEDEFOP (2019) outlines the six main challenges of that agenda:

- "further reducing early leaving from education and training and discourage the entry of unqualified young people into the labour market;
- increasing adult educational attainment by widening access to learning through modularisation;
- improving tutor support to learners and reasserting the value of transferable skills in the curricula, in order to tackle education and training failure;
- modernising learning provision through new teaching methods and wider variety of VET courses leading to competence-based qualifications;
- offering initial and continuing VET provision in line with labour market requirements;
- upskilling vulnerable groups and promoting their socio-professional integration." (CEDEFOP 2019).

According to CEDEFOP (2019), this policy agenda contributed to an increase in upper secondary VET programmes, ensuring that VET programmes lead to double certification.

<sup>&</sup>lt;sup>1</sup> The author mentions the quick and uncontrolled extension of VET courses to other secondary schools.





# 4. Desk Research, Part 2: Escape rooms for educational purposes

### 4.1 State of play of Escape Rooms in education in Portugal: their purpose, key aspects focused and game modes.

The articles consulted for this chapter report experiences with Escape Rooms for students from two different educational sectors in Portugal. What is transversal to all experiences is the fact that all games were held in an offline manner, meaning that they were not played online<sup>2</sup>, in a computer. In general, the state of the art of Escape Rooms in Portugal tells us that these methods are not widely used, but are starting to be more present in classrooms.

Pereira et al. (2019) write about an experience with 25 children in the 3<sup>rd</sup> grade of the 1<sup>st</sup> Cycle of Basic Education (CBE) their teacher and two teacher trainees. The focus of this activity was not only the students' behaviour inside the classroom, but also outside of it, as it sought to "combine knowledge, skills and attitudes in order to motivate the students in the learning process and make them active participants in society (Pereira et al. 2019, p. 1011)."

Almeida and Cruz (2019) recount an experience, titled "Escape2Educate"<sup>3</sup>, with students in the 2<sup>nd</sup> and the 3<sup>rd</sup> grade of the 1<sup>st</sup> CBE that were learning English. And the title reveals that the authors had in mind a will to escape from the traditional pedagogical approaches they feel are inadequate for the 21<sup>st</sup> century (Almeida and Cruz 2019). "The challenges were designed having in mind the English Curriculum Goals and the content that the English teacher stated that had been covered in his classes up to that point." (Almeida and Cruz 2019, p. 11).

The activity held by Moura and Santos (2020) had the participation of 44 students in the 11<sup>th</sup> grade of VET education and of 60 students in the 7<sup>th</sup> grade of the 3<sup>rd</sup> CBE. Moura and Santos describe their activity as "a learner practice developed during the study of the novel 'Amor de Perdição' by Camilo Castelo Branco, a required reading of the Portuguese Language 11<sup>th</sup> Year syllabus." (Moura and Santos 2020, p. 182). "With this activity, we wanted to promote in students the motivation for action, to facilitate immersion in learning and to help learn how to think." (Moura and Santos 2020, p. 182). The authors state their belief in the fact that the Escape Room strategy they adopted can motivate students to read more about Camilo Castelo Branco and his work. For the students in the 7<sup>th</sup> grade, Moura and Santos (2020) created a game that "integrated Mathematics and Portuguese subjects, as its name suggests, in the curriculum of the 7<sup>th</sup> school year, and was included in the School Library Activities Plan." (Moura and Santos 2020, p. 185).

# 4.2 Ideas for possible storylines and riddles/puzzles: short description, including necessary materials

A study by Nicholson (2005), cited in Almeida and Cruz (2019), lists some of the most recurrent themes and narratives:

<sup>&</sup>lt;sup>3</sup> This experience was within the scope of the Bachelor's Degree in Languages and Foreign Cultures, of the School of Education of the Polytechnic Institute of Porto.





<sup>&</sup>lt;sup>2</sup> Online escape games are more related to Escape Rooms companies, like the one we are discussing in chapter on the Focus Group;

#### **Themes Narratives** Cartoons Help create something (a cure, an School antidote, a potion, etc) Deactivate an explosive artifact **Fantasy** Escape from somewhere (prison, Laboratory dungeon, site ready to explode, etc) Set in a certain time or era (current Investigate a crime (murder or time or a moment in the past or future) robbery, for exemple) Free someone who has been Futuristic technology kidnapped or missing Set in a season or within festive themes (Summer, Christmas, Take part in an espionage mission Halloween, Easter, etc) Militar Terror (Zombies, Vampires, etc)

Regarding the impact and the importance the narratives have on the game, Almeida and Cruz have this to say: "it has to be taken into account that this [the narrative] is the creation of the context and the story that justifies every challenge through which the players are going to go through and overcome. Its objective is to make the experience more attractive, interesting, immersive and memorable, contributing for a true and genuine involvement of the students, in such a way that they end up contributing to the story proposed by the designer of the 'Escape Room'." (Almeida and Cruz 2019, p. 7-8). The authors are of the opinion the students should be experiencing the narrative even before entering the room where the game is going to be played, saying that this increases their antecipation to win the game.

Pereira et al. (2019) underpin an aspect that was implemented in their game and that also enhances the sense of adventure and makes the children feel more immersed: "For the realization of the *Escape Room*, there was the selection of a *PowerPoint*, a user-friendly tool for the children, but with some sound and transition effects to create an adventurous atmosphere, such as videos and narratives about the theme that was explored." (Pereira et al. 2019, p. 1010).

Moura and Santos (2020) also resorted to a specific methodology in order to make the students more familiar with the game: "we started by creating a motivational video to introduce students to the Escape Room concept and prepared them for the learning and understanding aims." (Moura and Santos 2020, p. 182). For the game itself, the authors used a variety of materials that could very well be used in portable game: "We used different materials such as highlight different codes (Morse, binary, ASCII), Egyptian script, QR codes, puzzles, crosswords, etc. (...). We also bought two digital padlocks and two wooden safes to simulate a real escape room and make the activity more challenging. (Moura and Santos 2020, p. 183).

A game implemented by Cruz (2019)<sup>4</sup>, under the "Escape 2 Educate" project, was called "Helping Gumball to Escape" and it was based on a cartoon broadcast by Cartoon Network channel, and had the participation of 43 student between the ags of 8 and 10. The following is a description of the game: "Focusing on this cartoon narrative, students are going to save Gumball, a famous cartoon character, and his family from being locked forever inside the room. In this way the children, while helping Gumball, have to flee from the "Escape Room" that the villain prepared for them, and to do this job they have the help of the challenges' creator (one

<sup>&</sup>lt;sup>4</sup> The same author as in Almeida and Cruz (2019);





of the teachers incorporated this character), who has got the role of a spy who pretends to be the villain's helper, but in fact is only gathering evidence to incriminate him." (Cruz 2019, p. 28). In this game, there was material used that could be adapted for a mobile/portable version<sup>5</sup>: "(...) a lot of different objects were used within this escape room, namely: a safe, a key, bottles of water with hidden plurilingual messages (English, Spanish, Portuguese), a map of Europe with codes, among other items." (Cruz 2019, p. 28).

<sup>&</sup>lt;sup>5</sup> Mário Cruz refers to this topic in the Focus Group.





### 5. Results of the Focus Group

#### 5.1 Brief presentation of the participants:

**Jorge Correia** has a background in Engineering and is the CEO (Chief Executive Officer) of *Puzzle Room*, a company dedicated to Escape Rooms founded in December of the year 2014, making it one of the first to appear in the city of Lisbon, the capital of Portugal. Puzzle Room is multifaceted in the sense that it offers games for all age groups and sectors (schoools, corporative companies, etc.).

Adelina Moura, PhD, is a Professor working in the sector of VET education since 1989. She currently teaches Portuguese and French in Carlos Amarante High School (with offering of VET courses), in Braga, in the North of Portugal. Since 2018, she started implementing Escape Rooms strategies with her students of Portuguese and also has some experiments outside of the classroom.

**Raquel Marques** is a teacher of English and German in the VET School of Cortegaça, a town situated on the coast of Portugal. Apart from her teaching duties, she also accumulates the role of Pedagogical Director of the school.

**Teresa Oliveira Martins** is a Psychologist in Externato Oliveira Martins (EOM/SPEL), located around 10 kilometers North of Cortegaça. She is also the director of the Office for Psychology Support and Orientation of SPEL – Sociedade Promotora de Estabelecimentos de Ensino Lda. She has more than 15 years of experience as an educational psychologist and clinical psychologist.

**Mário Cruz, PhD,** is a Professor at the Polytechnic Institute of Porto, established in 1985 in Portugal's second bigest city. He exercises functions mainly in the School of Education and teaches foreign languages at the level of the Bachelor's Degree in Foreign Languages and Cultures. Mário also coordinates the Master's Degree in Teaching English in the 1<sup>st</sup> Cycle of Basic Education, coordinates Teacher Training and coordinates projects related to Ramification, including one about RPG (role-playing game).

The topics of discussion are presented in the order they were discussed, but the same does not apply to the order of participation.

All five participants were present at the beginning of the Focus Group, but as time went on, some had to leave because of other duties.

From 5.2 to 5.9, the discussion was about topics that the consortium of the Escape2Stay project had prepared. From 5.10, it was an open discussion about topics chosen by the moderator and the participants.

### 5.2 Experience with Escape Rooms (in a professional or entertainment context)

Of all the participants, only Teresa and Raquel have no experience with Escape Rooms in both contexts but stated that they were eager to learn more about the subject and the point of view of other people more experienced to see other ways that this gamification process can be implemented in classrooms.

Adelina's first experience was when she resorted to Escape Rooms to teach her 12<sup>th</sup> graders the poetry of Fernando Pessoa, a method she used because she says that it is difficult to motivate students of VET schools to study poetry and literature. Her students liked the





initiative and her introductory video so much that they proposed to create the rooms themselves. This resulted in seven different examples created by seven different groups, and each group taught the class that had the same theme as their created game. Adelina found her students to be more participative in class and able to answer questions from the manual about the subjects their games had touched upon. Because of the success, she decided to expand this method to other classes and to teach another big name of portuguese literature, Camilo Castelo Branco.

Digital escape rooms are a variant of the traditional game, and Adelina saw her students create the narrative and enigmas for a game inside this category within the scope of an eTwinning<sup>6</sup> project, with partners from Spain, Italy and Poland.

Adelina also has experience of implementing this type of gamified education with her younger students, ranging from six to ten years old. The objective of the game was to show the children the way to reach the library's online catalog.

In his first experience, and the only one at a personal level, Mário participated in a financed European project, coordinated by Porto Exit Games<sup>7</sup>, and he liked it so much that he started thinking about this kind of game in the educational contexts that he is involved in; he has orientated Master's students in the idealization of projects for children in the first cycle (7-10 years old). Mário also teaches Spanish and every year he designs processes linked to Escape Rooms, but he changes his methodology depending on the students' age: if he is working with the younger ones, he designs them, but the older students design the rooms themselves from scratch, because they have already gone through the experience of playing the game, and sometimes they do that for the younger students.

Jorge played his first game in Lisbon in 2014, the year Escape Rooms appeared in Portugal. But even before the activity, he says that he became interested about it, and three months after his participation, Puzzle Room was born (12/2014). The company has developed four interior games, but they are also keen on trying news experiments which became reality, like a street game with a focus on teambuilding, a concept that was idealized due to the Covid-19 pandemic; to compliment the game, they created an online platform that was later used for online games.

Puzzle Room are sought out by corporative companies and their games are used for training, teambuilding, and human resources practices, like recruitment actions. Jorge says that other companies resort to this method because they want to break new ground in the hiring process. "There is nothing better that to put a group of people that do not know each other in a room and see what dynamics emerge from that." (J. Correia, personal communiction, January 18, 2021). But they do not work solely with adults, as they organize events and birthday parties for children.

<sup>&</sup>lt;sup>7</sup> One of the most well known Escape Room companies in Portugal





<sup>&</sup>lt;sup>6</sup> eTwinning is "the community for schools in Europe" (eTwinning Homepage). Retrieved from https://www.etwinning.net/en/pub/index.htm

#### 5.3 Ways Escape Rooms can contribute to education, mainly VET education

Regarding this topic, every participant agrees that students can benefit a lot from playing Escape Rooms in educational contexts and they state reasons as to why that is, especially in the case of VET students.

Teresa mentions studies that present the case for the positive impact of gamification, essentially to work on soft skills. The psychologist states that, because Escape Rooms are enriching from a pedagogical standpoint, they could be transported to the classroom and cause emotional impact on VET students, who can develop their soft skills while playing. "I am aware that these games are a moment of personal recognition for the participants, and they serve to incorporate academic knowledge and to develop personal and interpersonal skills." (T. O. Martins, personal communication, January 18, 2021).

One of the mains challenges teachers face in VET education is the apathy and passivity of the students, and Raquel thinks that Escape Rooms are a way to end that, and to make them discover new things and learn autonomously. The pedagogical director says it is a big challenge for the teachers to prepare their VET students for an internship, for the professional working world, but Escape Rooms enable their pupils to develop soft skills. Raquel explains the main questions that VET students are faced with: "How do I work as a team? How do I receive orders, be autonomous and carry on with my activities?' – Escape Rooms make them react to different situations and discourage them to go about with a predetermined mindset." (R. Marques, personal communication, January 18, 2021).

"We can create very important and memorable learning situations, and that is what I am worried about. When I create something, I know the students are going to like it, and they tell me they are never going to forget these classes." (A. Moura, personal communication, January 18, 2021). Adelina reveals that some of her students remembered the lessons better when those were taught with a new learning experience and a gamified process.

Adelina says that when her students are developing an Escape Room, with a strategy adapted to each target audience, they are the constructors of learning and they do their own research of the contente. "We need to start surprising our students even more. Because the surprise sticks longer in the brain than simply going to the classroom for a normal class." (A. Moura, personal communication, January 18, 2021). The Professor has young students developing a game for the first time and they will need more of her assistance simply because they are not used to the process. To instill this gamified process in a younger age group is, for Adelina, a way to teach them some values: "We can train several skills, but we can also teach them values, which is very important. And values are learnt in action, by putting things to practice, like solidarity, listening to fellow colleagues and emotional management." (A. Moura, personal communication, January 18, 2021).

In Mário's opinion, a gamified approach to teaching, like an Escape Room, helps develop skills that are important in the 21<sup>st</sup> century, like critical thinking, collaboration, communication, criativity and problem solving. The teacher says that students have difficulties developing collaborative practices and stresses the importance of teamworking skills, which he considers to be one of the most important for the current job market, and that is possible to develop leadership skills while playing escape games: "I recall a student that was very shy, with very little participation in class, but she became a leader in the Escape Room she had created." (M. Cruz, personal communication, January 18, 2021).





For Jorge, there are two positive aspects that come with the implementation of escape games, which he considers to be transversal to professional and educational sectors, in the classroom. The first one is the ability to touch things. "Over time, with the digitalization and the computers, we lost the idea of touching, and that is something that is understood in the first time someone enters an Escape Room. They are not used to it, they are afraid to touch things. This is an interesting thing about it." (J. Correia, personal communication, January 18, 2021). The CEO thinks that picking people, students or not, and putting them in an unfamiliar setting is the first step to break what he calls "people's code", an action he thinks is powerful for human resources.

The second positive aspect of Escape Rooms Jorge mentioned is their disruptive factor, when compared to the traditional teaching norms: "The more disruptive the way we approach a group of students, the closer we probably can get to them." (J. Correia, personal communication, January 18, 2021). In his view, Escape Rooms add good value to education because they provide a guiding thread upon which to start designing a story, and an otherwise boring subject suddenly becomes more interesting when framed within this process of gamification; this is important, also due to the fact that, in his view, it is getting harder and harder to make someone pay attention, something that can be countered with an Escape Room.

Jorge is not of the opinion that games in general are bad or good, because it is just a way of interpreting the games. Nonetheless, in the case of escape games, he does not think the completely digital ones are as effective as the traditional ones.

### 5.4 The age groups that benefit the most from VET education with incorporated gamification

In general, the participants agree that the older students at the high school level are the ones who benefit the most from a VET education with gamification. Mario states that escape games have practical effects at a professionalization level, one of the aims of this type of education, and promote skills such as critical thinking and problema solving. Since VET education prepares for the job market, students develop communication and collaboration, which, says Mario, are the skills that are more in demand.

Mario and Adelina discussed the strangeness that Escape Rooms may provoke in the students, something that is not to be taken as negative. "To provoke a sense of strangeness in the students is the engine of everything – this is valid for educational experiences or not. From this sense of strangeness, the student is going to be engaged in the plot and tasks, and from here we can retrieve everything from them." (M. Cruz, personal communication, January 18, 2021). The Professor of the Polytechnic mentions that there are studies that dignify Escape Rooms as motivators and that they serve as trigger of knowledge.

Judging by her experience, Adelina says that VET students are a very particular audience to motivate, and contrariarly to what happens with students from traditional school, they do not have a determined academic path and pay less attention in class, with or without Escape Rooms.

Referring to the older students that attend high school, Teresa expressed the following notion: "Those are the ones that struggle the most with motivational issues and are more





orientated towards what they want in the future. I believe, for this group of students, it has great impact." (T. O. Martins, personal communication, January 18, 2021)<sup>8</sup>.

Agreeing with Teresa, Raquel affirms that in VET Education, there are students who pose a daily challenge, because they are not motivated, and those that are between the 10<sup>th</sup> and the 12<sup>th</sup> benefit the most from gamification. "Because they will learn, they will feel capable and they will build. It will instill in them self-esteem, which they do not have most of the time. From this point, learning is a continuity." (R. Marques, personal communication, January 18, 2021). The pedagogical director considers that learning without one realizing that he/she is learning is "very effective", "smoother" and decreases the weight of study at home.

Even though he agrees with the rest of the participants, Jorge also affirms that Escape Rooms are effective no matter the age group and that these activities are useful to develop everyone's soft skills<sup>9</sup>, but the degree to which those skills are developed dependes on the age: "It is easier to infer soft skills in people that are older. And by doing that, we can build something more alligned with the path we want to guide our students through." (J. Correia, personal communication, January 18, 2021).

Speaking namely about VET education and its particularities<sup>10</sup>, the CEO<sup>11</sup> expressed the following thought: "Even for these groups of more complicated people, this context works very well and this is why they require our services, because it is one of those activities they are interested in participating. I think this eases the process." (J. Correia, personal communication, January 18, 2021).

### 5.5 Interesting and important skills of the professional working world that could help develop soft skills and could be included in an Escape Room

The objective was for the participants to list skills of the working world, while thinking about their own professional experience. In the end, the five participants ended up drawing inspiration from their personal history and the characteristics of VET students.

Jorge thinks Escape Rooms should train students in three fundamental areas, starting with communication. "Nowdays, communication is the most relevant skill that we can learn and, unfortunately, is the one we learn the less." (J. Correia, personal communication, January 18, 2021). He says that communication is important in an Escape Room because if one participant has an idea, they have to be able to share it clearly with the rest, and if it that does not happen, a good idea runs the risk of losing value.

The second skill the CEO mentions is out-of-the-box thinking, which he regards as one of the most important things people have nowdays and one of the reasons why many businesses are thriving<sup>12</sup>. "Out-of-the-box thinking, in the context of this type of activities, is a seed for what

<sup>&</sup>lt;sup>12</sup> Jorge mentions the fact his company has opted for an out-of-the-box thinking in the middle of the Covid-19 pandemic, and that is why they are still open today, working wiht companies from China and USA;





<sup>&</sup>lt;sup>8</sup> Teresa stated that she was going to the school board in order to encourage training for teachers in the area of Escape Rooms and gamification.

<sup>&</sup>lt;sup>9</sup> As someone coming from the corporative sector, Jorge had this to say about soft skills and their relevance: "More companies are looking for soft skills, because, as they say, soft skills are very hard to acquire, and hard skills are easy to acquire." (J. Correia, personal communication, January 18, 2021);

<sup>&</sup>lt;sup>10</sup> "If we try to teach a student what we want to teach in their language, it will always work better than if we do that in our language. This is like everything else: we like people that speak our language." (J. Correia, personal communication, January 18, 2021);

<sup>&</sup>lt;sup>11</sup> Puzzle Room works *pro bono* with lots of schools and organizations for children in need;

is necessary to do outside of them. More and more, in the workplace, what makes a difference is the out-of-the-box thinking aligned with communication." (J. Correia, personal communication, January 18, 2021).

Because he sees people afraid of touching simple buttons to solve the enigmas, the act of experimenting is the third characteristic Jorge thinks Escape Rooms can help develop, and for him, people can only learn and grow by experimenting. "If we try to do this as soon as possible, this will be the difference maker when, whether in their personal or in their professional lives, they experiment with things and are not afraid of it." (J. Correia, personal communication, January 18, 2021).

For Adelina, writing skills are important both in class and in the working world, and students can work on that skill when they are creating narratives. "When we propose our students to create a narrative for an Escape Room, we are giving them a chance not only to be creative, but also to improve their writing skills. At the same time, they are improving their organization and planning skills." (A. Moura, personal communication, January 18, 2021).

"A lot of our students in VET education prefer not to answer, not do, so as to not face failure. And that is a big obstacle." (R. Marques, personal communication, January 18, 2021). Raquel thinks Escape Rooms can help students overcome the fear of failing a challenge, and that they are always learning from their mistakes, so they must not be afraid of being wrong.

Tolerance can be trained in an Escape Room, states the pedagogical director, who notices that, inside and outside of the classroom, the conflicts arise from the lack of this characteristic. "Accepting that they are wrong and maybe the other opinion is better and that that is not the end of the world, is very difficult for them." (R. Marques, personal communication, January 18, 2021).

Raquel affirms that collaborative work can also be trained. By her experience, because students are afraid of errors and are intolerant, they prefer to be alone, not knowing how to work together to reach a better end.

The act of risking and emotional management, mainly of frustration and the development of preseverance, are characteristics Teresa thinks VET students can work on while playing escape games. "Looking at the students that attend our schools, I think they are very prone to quit easily. We are in this culture of the click, and everything is easy and quick. So, anything that entails a continued commitment or the fact that we error and have to start again, for them it is very frustrating and the large majority quits". (T. O. Martins, personal communication, January 18, 2021).

Mário agrees with the other participants and points out conflicts as a characteristic that students can deal with inside an Escape Room. "Above all, what makes students advance in an Escape Room and in a situation of teaching/learning are the tensions, and I think it works. I have implemented it with my students. The tensions between collaboration and competition help them advance in the resolution of problems and in criativity." (M. Cruz, personal communication, January 18, 2021). The Professor has been developing and implementing a concept that, in his own words, help develop a "dual skill": a mixture between criativity and

Puzzle Room held a remote activity in which more than 1500 participated, tipically corporative clients spread around the world.





critical thinking, something that depends on the tensions that happen between collaboration and competition in the process of experimental teaching and learning processes.

## 5.6 Would it be possible to include in a portable box every material necessary for an Escape Room?

Before the participants discussed this topic, they were proposed the following scenario: the students cannot go to an Escape Room, so the Escape Room has to go to the students. In this situation, one has to create a kit/box that fits every material necessary to create a complete game. Is it possible? And what material are to be included? And while discussing this topic, the participants expressed some of the challenges people can expect if they want to create a portable game.

Mário reveals that he has a kit that he always carries when he wants to implement a game in the optic of a student creator: "And what does the kit consist of? Old mobile phone, a globe, a pen drive, little boxes, bigger ones, safes, flashlights, invisible ink pens, punch cards, old bags with locks." (M. Cruz, personal communication, January 18, 2021). And with this kit, the teacher creates a challenge for his students: they have to create a narrative, a scenario, with the materials they have in front of them.

Altough the participants agree that the materials are important to have a quality Escape Room, they affirm that the narrative itself is even more important than the objects. With that said, Mário says the majority of his students draw inspiration from narratives of television series, but they do it seriously, taking on the role of the characters, which, for the teacher, is an enriching experience. In the end, he is more worried with the environment, because the experience has to be really the most memorable and immersive it can. "You can lack some resources, but you can always create something." (M. Cruz, personal communication, January 18, 2021).

"In education, we do not have a lot of different props. Everything is simple, because the aim is more related to the educational objectives. The students have to be in touch with the subject matter and consolidate knowledge." (A. Moura, personal communication, January 18, 2021). Even with few props, Adelina states that a good game can still be created, and says that her students like invisible ink pens. The Portuguese teacher advises other teachers not to repeat the games with the same students, because then you do not have the element of surprise<sup>13</sup> and students are just going over the same thing they went before<sup>14</sup>.

Jorge's input regarding this topic was praised by some participants, becuse it comes from someone who is from the corporative market and whose company has created a game that "fits in an ark" and that can be set up anywhere. Puzzle Room have held portable games in universities<sup>15</sup> and in hotels where companies hold meetings.

"If you are a making a portable game, what you have to think of is: how can I create a game here that, independently from the story I want to tell, I can fit it inside my box." (J. Correia,

<sup>&</sup>lt;sup>15</sup> Puzzle Room held an activity in an university in Lisbon with the objective of showing the campus to the new students. They spread the dynamics along the most emblematic places of campus, like the cantina, gardens and the reprography, and they played the game by going to the marked places.





<sup>&</sup>lt;sup>13</sup> Adelina stressed the scenario factor, because that can have na element of surprise on the students: a space that was ordinary to them before, suddenly becomes the scenario of a game;

<sup>&</sup>lt;sup>14</sup> Adelina prefers to use the terms "Games of escape" instead of "Escape Rooms", because the game can be played outside of the classroom;

personal communication, January 18, 2021). Jorge points out important aspects that must be considered by anyone wanting to create a portable game:

- 1) they have to level the issue of transportation with the issue of important things that they are going to carry;
  - 2) people have to see what is reusable for various contexts, thus saving material;
- 3) "The dynamics you create need to be interesting enough to a point where they seem like stuff that should not be there." (J. Correia, personal communication, January 18, 2021) with this, Jorge wants to say that the creator has to think of the most spetacular thing he/she can carry so when it is placed in the scenario, the participants will see it as an odd object<sup>16</sup>, as something that normally should not be in a certain place;
- 4) do not make the mistake of making the game so easy to carry that it becomes so simple to play: you can create a game with ten locks, but it will be more of the same<sup>17</sup>;
- 5) when the creator is idealizing the game, he/she has to worry about the limitations of the setting.

Lastly, approaches the concept of "portable game" in a different way, saying that his company has gathered 200 people around the world to play a game at the same time: the game was transported to various corners of the globe.

### 5.7 A VET School or a Training Company wants to implement an Escape Room in its permisses. What would be the best supporting material?

In Mario's view, to better implement an escape game, there has to be a mixture of visual (images and video) and reading (written script with all the necessary steps described) supporting material, and different formats will help because each has different nuances and value, and that way every need is suited.

Adelina agrees with Mário and goes a little further, suggesting a website where a person could include a list of tools, narratives and exemples, which she thinks are important in order to get people involved.

Jorge thinks that any supporting material is helpful, as long as people can communicate what they want to communicate. The CEO also agrees with Adelina's idea of a website and expands on that: "What seems interesting to me is to have the capacity, in some way, to create something that will grow and receive new ideas over time. We're talking about a Universe that will have limitations when it comes to budget, the utilization of the games. Creating a platform, a site, where people involved in these projects could add ideas for games, challanges they faced and how they overcame them – more like an evolutive Wiki, one of the things that could bring more value to everyone." (J. Correia, personal communication, January 18, 2021).

The CEO advises creators to make use of the know-how of people around them who have already playd and set up escape games. And that know-how can also come from people who are experienced in areas that are fundamental to the operation of an institution that wants

<sup>&</sup>lt;sup>16</sup> The CEO affirms that the oddness is related to the disruptive aspect that was mentioned earlier: it is possible to create an escape game in a sheet of paper, but the disruptive aspect of it will be lost; <sup>17</sup> "It is easy for us to have ideas, but to make them reality is harder. (...) Sometimes, students are a harder audience than adults when they see that something is failing." (J. Correia, personal communication, January 18, 2021).



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to implement games, like design or IT experts – this is the "x factor" Jorge points out as the motive some companies thrive and others do not: it is easier to prosper, if we have access to people who are skilled in different areas, especially when it comes to technology, because that way the games become more interesting. "What distinguishes magic from technology is the knowledge we posess about things." (J. Correia, personal communication, January 18, 2021).

# 5.8 If you did not have much time, what story ideas could you tell students for them to develop later?

Both Jorge and Mário agree that it is easier to create narratives for Escape Rooms upon stories from already-existent TV shows and movies. The CEO even reveals that his team prefers it that way: "We, as a team, prefer to design a game based on an existent story, because we know the story we want to tell, and known stories will become easier to explore." (J. Correia, personal communication, January 18, 2021).

Jorge shares he felt like he had entered a movie set when he played his first Escape Room, because he departed his everyday life the moment he walked through the door. For him, this is the kind of sensations that are key and more interesting for escape games, the ones that are contrary to our daily lives, and that everyone would like to take on heroic roles such as 007 and Indiana Jones. The CEO thinks that telling students story ideas based on narratives that are already famous becomes easier, and this also facilitates the job of the people setting up the game.

Based on his experience with his students, Mário states affirms that the most sought out narratives are the ones related to a visual medium, like television series (the sci-fi genre is a hit among students) and videogames. He gives snippets of parts of stories students are attracted to: "It has to do with an antidote that you have to get, an idea of a killing, get a password for a safe to save the world – these are narratives I think the students prefer; you don't need to force them do to it." (M. Cruz, personal communication, January 18, 2021).

### 5.9 Would it be easy to get the necessary material to impement those ideas?

When it comes to the subject of material depth, the participants are of the opinion that, the older the students, the more demanding they become about it and about the subsequent immersion.

"My analysis begins with our desired depth for the project, in pratical terms. If I want to make a sci-fi story, and the farthest I can go is a PC in the room, it is okay. But if I want to have a complicated control panel, it depends. If I have someone next to me skilled in manual labour, and with a cardboard and some cups of coffe, and they can make a dashboard, I can go that way." (J. Correia, personal communication, January 18, 2021). For Jorge, it is not a matter of being easy or hard, but a matter of skills within the people's reach.

"For me, the most important thing is not the material and its quality, but the experience that is created. Immersion is important, but not everything." (M. Cruz, personal communication, January 18, 2021). Although Mário says that the older students are more demanding when it comes to depth of the game, he also says that they are grateful for the person who created the game for them and that errors are a common thing.





#### 5.10 The most interesting stories to develop for an Escape Room

Regarding this topic, the participants discussed the type of narratives they prefer to develop<sup>18</sup>, and they answered having in mind the audience's feedback. And both prefer to build on narratives from TV shows and movies to conquer the audience. "As designers, it is easier for us to connect, because we already have a story to be inspired by, we are not creating from scratch. And people connect more easily to the story we are telling, because they already know it." (J. Correia, personal communication, January 18, 2021). But Jorge points out that, although it is easier to build upon already-existent naratives, it comes with a challenge, because people will have expectations, specially if it is something from grand movies like *Indiana Jones*.

Jorge thinks that games created form scratch are harder to come about, and even if he is doing that, he will try to inspire himself in a movie and see how he can fit the narrative in his creation, with different words.

#### 5.11 The ideal number of people in an Escape Room and what it entails

Mário mentions scientific studies, at education and other levels, that say the ideal number is between four and six players. And he also revealed that when his students are filling an evaluation form, they say when there is more than six, they cannot concentrate so well.

Jorge prefers to discuss this topic both as an owner of an Escape Room company and as an enthusiast of the game. "In practical terms, it is a fact that a team of four, with the focus of completing the game as fast as possible and maximizing the ability to beat the game. And some more efficient teams have only three members. These are the teams that beat records." (J. Correia, personal communication, January 18, 2021).

On the other hand, the CEO<sup>19</sup> affirms that the number of participants can be stretched if the main goal is to have fun: "But, most of the time, you want to do this for pure entertainment, and you want more people, because people want to have fun. And in this situation, it is different. It is not an issue of optimization of the number of people in a team in order to be effective, but it is an otimization for them to have fun. (...) There is the difference of a good team to have a good experince just for the game, and then there is the team dimension when the experience is an experience of fun, and in those situations, teams can be bigger, without losing the genesis of the game" (J. Correia, personal communication, January 18, 2021).

In Jorge's opinion, there are tipically two differences between games that for three, four or six people: the number of things that need to be done in the activity and how the gamemaster(s) can entertain all the people during the 60 minutes. The CEO says it is a matter of game design, because a part of the team will begin on one side of the room, and the other part will be on the opposite end.

### 5.12 The main attractive characteristic of Escape Rooms and the true definition of escape game

Both Jorge and Mário prefer to think of an escape game in a closed room and that is the most attractive aspect of it, but they do not shy away from experimenting new versions of the

<sup>&</sup>lt;sup>19</sup> Jorge's comapany has games for up to ten people, and usually what happens is that those people divide themselves in little groups to solve the game.





<sup>&</sup>lt;sup>18</sup> Mário created an Escape Room and he sent a teaser video to his students without revealing the room they were going to play, so they had to guess, like a riddle;

traditional form<sup>20</sup>. "What we want is to lock people inside a room and provide them with an environement that you cannot recreate at home or at the movies, because you are only watching. You are not inside the action. Being closed makes all the difference" (J. Correia, personal communication, January 18, 2021).

While discussing the fact escape games are better played in a locked room, Jorge recounted one of his experiences that brings up the discussion of what truly is an escape game. "The biggest conference of Escape Rooms happens in the Netherlands, in an old high security prison. The activity always ends with a massive escape game with 300 people playing at the same time, and 80 of them are actors. We are literally locked in the prison and have to find a way to get out of there. Is this an escape game in its genesis? No, it is not. This is an RPG, with actors. There are 32 different ways to escape the prison, 32 different storylines – all of this is possible because before there were the Escape Rooms." (J. Correia, personal communication, January 18, 2021). Jorge also affirms that online games cannot be considered true Escape Rooms, but only escape games.

#### 5.13 The scenario of Escape Rooms in Portugal

The common feeling between the participants is that between 2016 and 2017, there was a big expansion of Escape Rooms in Portugal, after the activity first appeared in the country in 2014; Jorge points out that there was a time when there were 55 Escape Rooms companies functioning in Portugal. Mário states that, in the beginning and at a general level, the expansion was more of traditional Escape Rooms that did not resort to technology.

For educational contexts, Mário affirms there has been an increase in the request of these activities by the teachers, and that there training centres that collaborate with institutions in higher education in order to offer training in the area. With this, the teacher thinks there has been a deconstruction and disruption of the learning process, but other colleagues do not go ahead because they think it will give them a lot of work.

Jorge recounts that after that initial expansion, there was a period of stabilization, and the Covid-19 pandemic is accelerating the disappearance of companies. But he says that the pandemic is not the sole why as to why the number of companies is decreasing: "A lot of these businesses were born because the founders simply liked the game, but then you need to have a company behind this. If this does not happen, businesses do not prosper and that was something we started to verify. All businesses that were founded while solely focusing on the game itself started dying, because businesses were not working and the companies stayed, because they were more capable, had more resources, and work better." (J. Correia, personal communication, January 18, 2021).

The CEO of a company<sup>21</sup> that is surviving the pandemic states that the companies that survive these times will continue doing so in a growth process, but now they will have less players on the market, because it is a sector that is much more difficult to enter that what it was in 2014, when Escape Rooms first appeared in Portugal. In his opinion, the games nowdays rely heavily on technology, and a company cannot just have antique furniture – Jorge calls this "the second generation of the games". "There is an increase in what companies have to offer in terms

<sup>&</sup>lt;sup>21</sup> Jorge reveals that in the two/three months before the pandemic broke out, more and more schools were requesting his company's services.





<sup>&</sup>lt;sup>20</sup> Jorge made an analogy regarding the will to play a different version of an escape game: "This is like when we go to a restaurant. I may prefer meat, but after having it, I am willing to try fish. The same thing happens with Escape Rooms." (J. Correia, personal communication, January 18, 2021).

of immersion and technology, and there was an evolution of the profile of the client, who stopped being happy with just locks, which are now too old. Nowadays, the audience is more demanding." (J. Correia, personal communication, January 18, 2021).

#### 5.14 How the idea of the street game was born

While discussing the first topic of the Focus Group (5.2 Experience with Escape Rooms (in a professional or entertainment context), Jorge told us about the street game that his company created due to the Covid-19 pandemic. We thought that this experience could add great value to this report, so we asked him to expand a little bit more and walk us through the process.

"Firstly, it came from a necessity of space. As we did not have more room, we came with this idea to take advantage of what was around us." (J. Correia, personal communication, January 18, 2021). He and his team thought about how to operate outside of their premises in a way that did not require anything physic. "We came up wih the idea of QR Codes as spots for the challaeges, and on top of this we created a web platform where the story was being told through video and each point in the map was a challenge that had to be solved. And the game starts and finishes in our premises." (J. Correia, personal communication, January 18, 2021).

Jorge says that not everyone likes street games, because it will make them walk, but they have good feedback, although not as good as the feedback from people who play in closed rooms. "A street game is an evolution and is constantly evolving. Were it not for the street game, we would not have the remote activity we have currently. " (J. Correia, personal communication, January 18, 2021).





#### 6. Recommendations in 10 statements

- 1. Invest in VET education, because it is chosen by 37% of the young people in Portugal.
- 2. We should raise the awareness of the students that are considering VET education about the fact that they would be engaged in a very hands-on learning process where the focus is to prepare them for the professional working world.
- 3. While engaged in a sector of education that will heavily train their hard skills, students of VET should know that soft skills are just as important for the labour market, if not more.
- 4. In Portugal, there is proven success of the implementation of Escape Rooms in the classroom, and it should serve as a Good Practice for other teachers that are still undecided about its effectiveness for educational purposes.
- 5. The teachers/creators should build up their students' antecipation by creating videos or noise effects that are connected to the narrative, in order to make the students feel more immersed in the gameplay.
- 6. While creating an Escape Room, a great deal of attention should be directed towards the writing of the narrative, because that is the creation of the context and the story that justifies every challenge of the game.
- 7. Escape Rooms should be idealized in a way that train their VET students' soft skills, because they are going to be enrolled in an internship at the end of the course, and companies value more those than the hard skills.
- 8. Recognize the older VET students as the main target group of an implementation of Escape Rooms in classrooms, beause they are seen as a group with low self-esteem and struggling the most emotionally.
- 9. In an Escape Room, train communication, teamwork, critical and out-of-the-box thinking skills, because those are the four most important the 21<sup>st</sup>.
- 10. Create a platform where the creators and participants of an Escape Room could share their experiences.





### 7. Demystifying the notion of VET as a second choice

In Portugal, there is still a great deal of prejudice towards VET education, its effectiveness and the students themselves. In this final chapter, we will reproduce a quote that was discussed in chapter 3: "The implicit thought that fills the head of many directors, teachers and trainers, is still in the past, in the period before the formulation and execution of this policy of education, attached to the glorification of the high school model of teaching and learning." (Azevedo 2019, p. 13-14). The author writes that VET education has shown that it is a viable path for young people and should not be seen the way it is.

Aside from the 4<sup>th</sup> level double certification (high school and professional certification) and the possibility to develop professional skills in an internship, The National Agency for Qualification and VET Education (in portuguese: Agência Nacional para a Qualificação e o Ensino Profissional – ANQEP) lists other advantages that VET education in Portugal entails: "These courses prepare young people for an easier and more qualified insertion in the job market and allow for the realization of studies at post-high school and college levels." (ANQEP).

The VET courses last for three years, vary between 3100 and 3440 hours, and are comprised of four training components: sociocultural, scientific, technologic and in a Working Environment (ANQEP). The last one is essential to the students career, because it gives them a chance to work in companies during their last year of school and acquire professional skills.

At the end of the course, VET students go through something that is not so different from what Masters' students go through: "These courses culminate with a presentation and defense, in front of a jury, of a project, known as Professional Aptitude Test [in portuguese: Prova de Aptidão Profissional – PAP], in which they demonstrate the skills and knowledge they developed throughout the training." (ANQEP).

In 2017, João Costa, Deputy Minister for Education in Portugal, stated that VET education should not be regarded as a "second path" and that it may even have more value than other sectors, since it grants double certification (Lusa 2017).

We want to conclude with a quote from the Deputy Minister that sums up what a lot of people feel and say when they see VET education being the target of prejudice:

"Portugal still has not got in its head that the 12<sup>th</sup> grade of the pastry course is as valid and worthy as the 12<sup>th</sup> grade of the languages and humanities course. Portugal has to get this in its head and who has to start to get this in the head, in the first place, are the schools." (Lusa 2017).





### <u>Bibliography</u>

- Almeida, J. and Cruz, M. 2019. "Escape 2 Educate': a metodologia 'Escape Room' no ensino de inglês no 1º CEB". Sensos-e 6(2): 3-19. Retrieved February 24, 2021, from https://parc.ipp.pt/index.php/sensos/article/view/3466/1452;
- ANQEP. "Cursos Profissionais". Agência Nacional Para a Qualificação e o Ensino Profissional. Retireved February 25, 2021, from https://www.anqep.gov.pt/np4/cursos\_profissionais.html;
- Araújo, S. 2017. "Aumentar as qualificações em Portugal". OECD Economics Department
  Working Papers No. 1405: p. 1-47. Retrieved February 24, 2021, from
  https://www.oecd-ilibrary.org/docserver/2189065apt.pdf?expires=1614082858&id=id&accname=guest&checksum=ED1683AB2AB559EFE
  2F229CD3AC7A443;
- Azevedo, J. 2018. "Relançar o ensino profissional, trinta anos depois". ELO 25, Revista do Centro de Formação Francisco de Holanda: 125-141; Retrieved February 22, 2021, from https://repositorio.ucp.pt/bitstream/10400.14/25674/1/Relan%C3%A7ar%20o%20ens ino%20profissional.pdf;
- Azevedo, J. 2019. "Políticas públicas: uma arte de promover o bem comum O caso das escolas profissionais e do ensino profissional". In Orvalho, L, Alves J. M. and Azevedo, J. (coordinated). 30 anos de Ensino Profissional: perscrutar as intencionalidades e perspetivar o futuro. Porto: Faculdade de Educação e Psicologia da Universidade Católica Portuguesa. Retrieved February 19th, 2021, from <a href="https://repositorio.ucp.pt/bitstream/10400.14/27587/1/30%20anos%20de%20ensino%20profissional.pdf">https://repositorio.ucp.pt/bitstream/10400.14/27587/1/30%20anos%20de%20ensino%20profissional.pdf</a>;
- CEDEFOP. 1999. O Sistema de Formação Profissional em Portugal. Thessaloniki:
   CEDEFOP Centro Europeu para o Desenvolvimento da Formação Profissional.
   Retrieved January 20th, 2021, from https://www.cedefop.europa.eu/files/7009\_pt.pdf;
- CEDEFOP; Directorate-General of Employment and Industrial Relations (2019). Vocational education and training in Europe: Portugal [From Cedefop; ReferNet. Vocational education and training in Europe database]. Retrieved February 20th, 2021, from https://www.cedefop.europa.eu/en/tools/vet-in-europe/systems/portugal;
- Coimbra, S. M. 2008. "Estudo diferencial de autoeficácia e resiliência na antecipação da vida adulta". PhD thesis. Faculdade de Psicologia e de Ciências da Educação da Universidade do Porto, Porto;
- Cruz, M. 2019. "Escaping from the traditional classroom: The 'Escape Room Methodology' in the Foreign Languages classroom". *Babylonia* 3: 26-29;
- Lusa 2017. "Governo diz que é preciso acabar com o preconceito no ensino profissional".
   Público. Retrieved February 25, 2021, from https://www.publico.pt/2017/03/08/sociedade/noticia/governo-diz-que-e-preciso-acabar-com-o-preconceito-no-ensino-profissional-1764485;
- Martins, L. L. P., Coimbra, S., Fontaine, A. M. and Barrera, S. D. 2018. "Preditores de autoeficácia acadêmica em jovens portugueses e brasileiros cursando ensino profissional". Revista da SPAGESP 19(2): 6-22;
- Moura, A. and Santos, I. L. 2020. "Escape Room in education: Gamify learning to engage studentsand learn maths and languages". In Experiences and perceptions of pedagogical practices with Game-Based Learning & Gamification. Braga: Universidade do Minho. Centro de Investigação em Educação (CIEd);





- Nicholson, S. (2015). Peeking behind the locked door: A survey of Escape Room facilities.
   Retrieved February 24, 2021, from http://scottnicholson.com/pubs/erfacwhite.pdf;
- OCDE 2015. OECD Skills Strategy Diagnostic Report: Portugal 2015, OECD Publishing.
   Retrieved February 23, 2021, from http://www.oecd.org/skills/nationalskillsstrategies/Diagnostic-report-Portugal.pdf;
- OECD 2016. Education at a Glance 2016: OECD Indicators, OECD Publishing, Paris, Retrieved February 23, 2021, from <a href="http://dx.doi.org/10.187/eag-2016-e">http://dx.doi.org/10.187/eag-2016-e</a>;
- Pereira, A. C., Sampaio, E., Quadros-Flores, P. and Mascarenhas, D. 2019. "Outros modos de ensinar a aprender no 1º Ciclo do Ensino Básico: Escape Room". INNODOCT, Valencia: 1007-1016. Retrieved February 21, 2021, from https://riunet.upv.es/bitstream/handle/10251/153244/Pereira?sequence=1;
- PORDATA Base de Dados Portugal Contemorâneo 2020. "Alunos matriculados no ensino secundário: total e por modalidade de ensino.". Retrieved February 21th, 2021, from
  - https://www.pordata.pt/Portugal/Alunos+matriculados+no+ensino+secund%c3%a1rio+total+e+por+modalidade+de+ensino-1042-8431;
- Rummert, S. M., & Alves, N. 2010. "Jovens e adultos trabalhadores pouco escolarizados no Brasil e em Portugal: alvos da mesma lógica de conformidade". Revista Brasileira de Educação, 15(45), 511-528;



