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Entornos virtuales para la educación en tiempos de pandemia: perspectivas metodológicas

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LA EDUCACIÓN EN TIEMPOS DE PANDEMIA:
PERSPECTIVAS METODOLÓGICAS

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UNLOCKING *ANIMAL FARM*: ESCAPE ROOMS AS PEDAGOGICAL TOOLS FOR THE TEACHING OF LITERATURE IN HIGHER EDUCATION

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1. INTRODUCTION

Over the last years educators have tried to get students actively involved in interactive activities through the incorporation of Open Educational Resources (OERs) and technology-enhanced practices following a game-based learning approach (Dichev, Dicheva & Irwin, 2020; Bellés-Calvera, 2018; Clarke, Peel, Arnab, Morini, Keegan & Wood, 2017; Rau, Kennedy, Oxtoby, Bollom, & Moore, 2017). Some of them have addressed the design of customised gamified initiatives to boost learners' motivation (Dichev, Dicheva & Irwin, 2020), while others have been devoted the development of writing, reading, speaking, and listening abilities (Gharehblagh & Nasri, 2020; Sejdiu, 2017; González Otero, 2016, Jalaluddin, 2016). For instance, the integration of Voki within learning programmes has reported positive outcomes in English pronunciation (Bellés-Calvera & Bellés-Fortuño, 2018a). Tools such as Kahoot, Quizlet, Socrative and Bombay TV have also proven to be valuable for the retention of vocabulary (Vurdien, 2020; Montaner-Villalba, 2018; Bellés-Fortuño & Martínez-Hernández, 2019; Bellés-Calvera & Bellés-Fortuño, 2018b). Furthermore, such gamification tools have shown higher student engagement in formative and summative assessments (Ab. Rahman, Ahmad & Hashim, 2018).

Despite their novelty in education, escape rooms have sparked educators' interest as a gamification technique in educational settings (Villar,

2018; Kinio et al., 2019). Originally, these initiatives had been conceived as an entertainment resource for families, friends or even co-workers (Brusi & Cornellà, 2020). When transferred to education, the value of these alternative pedagogies lies in the assessment of content comprehension as well as in the learning of team-work and critical thinking skills (López-Pernas, Gordillo, Barnas & Quemada, 2019; McFadden & Samantha, 2018) in different domains, such as Geology, Programming or Medicine (Brusi & Cornellà, 2020; López-Pernas et al., 2019; Kinio et al., 2019). However, it is the field of literature that has caught our attention as it has often been undervalued in foreign language instruction (Baumbach, Grabes & Nünning, 2009). Even though past research has revolved around comprehension problems and dull teaching strategies leading to boring literature lessons (Sidhu, 2003), it is inextricably intertwined with language and culture (Carter & Long, 1991). Indeed, literature can be regarded as a promising source encompassing the dissemination of cultural, personal growth and linguistic knowledge in the English as a Foreign Language classroom (Hişmanoğlu, 2005; Carter & Long, 1991).

Building on the crisis generated by the COVID-19 pandemic, new learning scenarios have emerged. The teaching procedures implemented in the classroom setting need to be adapted to online environments that prevent students and faculty members from the transmission dynamics of the virus. Such digital learning has not only had an impact on students' performance (Gopal, Singh & Aggarwal, 2021), but also on teachers' perceptions (Kundu & Bej, 2021). This is why the creation of virtual escape rooms can play a significant role in the attainment of the desired learning outcomes. Apart from describing the main features of escape rooms, this paper seeks to give an account of the materials and resources that are needed for the creation of a virtual escape room proposal addressed to first-year Translation and Interpreting undergraduates. Considering it is a language course for future language professionals, promoting literary competence is a must, as stated in the course syllabus. In this line, the renowned and satirical work by George Orwell, *Animal Farm* (Orwell, 1945), and its rebellious and tyrannical characters are the protagonists of our virtual proposal.

2. EDUCATIONAL ESCAPE ROOM

Traditional escape rooms are live-puzzle games in which a team of players is trapped in a room (Dietrich, 2018; Kroski, 2019). In order to be able to break out of the room, they need to succeed in completing all the challenges and puzzles in a limited amount of time (Brusi i Cornellà, 2020; Pan et al., 2017; Nicholson, 2015), which will unlock the door, hence the name ‘escape room’. Prior to this, the gamemaster, whose main role is to support and monitor these cooperative games, is in charge of explaining the objective of the game to the participants and providing them with clues whenever necessary. Although these initiatives initially emerged as mystery or adventure-style video games for entertainment purposes (Brusi i Cornellà, 2020; Kroski, 2019), face-to-face formats have become commonplace due to their growing popularity all over the world.

These immersive experiences are usually set in fictional locations envisaging scenarios other than those of the real world. In this vein, theme-based settings (e.g. crime or space) are meant to get participants involved in the mission (Kroski, 2019; Vergne, Smith & Bowen, 2018). Through several challenges, quizzes or tests hidden in locked boxes in the room, players are expected to find a key to the lock, which might be disguised in the room or invisible to the naked eye. As for their creation, these games can be designed with different formatting styles: linear or nonlinear (López-Pernas et al., 2019), also called multipath (New Mexico Escape Room, n.d.). The linear sequence is quite descriptive in its name as solving an enigma takes to the other; hence, all events are in a logical order. This type of escape room promotes negotiation skills in which participants learn to express their opinion and to show agreement or disagreement with their fellow adventurers. However, drawbacks account for the participation on the grounds that one person may take the leading role, whereas the remaining members of the group become mere observers. In the Nursing domain, there is a preference for these linear approaches, as reported by Connelly, Burbach, Kennedy and Walters (2018). On the other hand, multipath escape rooms offer all members of the team a task to do as different codes in various

challenges can be cracked at the same time (Pedigo, 2019; New Mexico Escape Room, n.d.).

In an educational context, escape rooms have been regarded as creative learning environments that can not only be implemented at any educational stage but also integrate specific learning outcomes (Sánchez Lamas, 2018). Within this setting, which happens to be the ordinary classroom or the lab, students team up in small groups consisting of three or five members (Brusi & Cornellà, 2020; López-Pernas et al., 2019). Teachers, who act as gamemasters, know their audience and design the escape room sequence that best fits the needs of their students. The aforementioned missions become questions that encourage critical thinking and allow students to demonstrate their acquired knowledge in a less formative and academic environment. At the same time, they help the teacher keep track of students' progress in content understanding and knowledge acquisition as well as team-building competences (López-Pernas et al., 2019; Cain, 2019; McFadden & Samantha, 2018; Wu, Wagenschutz & Hein, 2018; Pan et al., 2017). These skills seem to be pivotal in academic and professional training, as proven in previous studies conducted in the field of Health Sciences characterised by a decrease of costs and mortality rate (Clemmer, Spuhler, Oniki & Horn, 1999). Furthermore, educational escape rooms allow teachers to implement interdisciplinary learning in their classroom, which also calls for teacher collaboration and the integration of interdisciplinary content (Dorado Escribano, 2018).

In this type of escape room, it is the teacher who becomes the gamemaster. The teacher would be the one in charge of feeding clues and tips to help the students move forward if needed. When the participants in an escape room ask for help, the gamemaster can apply certain penalties, as in timing.. Nevertheless, in an online asynchronous environment in which the teacher is not present, the extra help and guidance that the helpmaster could provide should be built within the game.

Recent research has mostly focused on escape rooms conducted in higher education, with positive outcomes in the fields of Nursing (Connelly et al., 2018), Medicine (Kinio et al., 2019), Pharmacy (Eukel, Frenzel & Cernusca, 2017), Chemistry (Vergne et al., 2018), Computer

Programming (López-Pernas et al., 2018; Borrego, Fernández, Blanes & Robles, 2018). To our knowledge, little research has been carried out in the field of literature concerning escape rooms. Based on the remote learning scenarios triggered by this global health crisis, extra help and guidance should be provided to those faculty members willing to devise an engaging digital narrative.

3. PEDAGOGICAL PROPOSAL

A detailed description of the contextual factors that have been paramount for the design of this proposal, the participants to whom it is aimed and the steps that should be followed to create an educational virtual escape room is provided below.

3.1. CONTEXTUALISATION, LEARNING OUTCOMES AND COMPETENCES

Due to the COVID-19 pandemic, university lessons were moved to an online context in March 2020. In order to make a gradual return to the classrooms, at the beginning of the new academic year 2020-2021, our university promoted hybrid teaching programmes in most degrees, which consisted of a combination of face-to-face and online modalities (Universitat Jaume I, 2020). In the event of an upsurge in COVID cases or increased transmission, health measures impede group work in the classroom as students need to keep a safe physical distance from one another. Therefore, alternative solutions are paramount to deliver online teaching practices which take into consideration all the participants, objectives, contents and competences outlined in the course syllabus.

This virtual proposal has been designed for a first-year English language course in the Translation and Interpreting degree at a Spanish public university. There are 97 students enrolled in the subject in total, of which 13 are males and 84 are females. The objectives and contents of the course are based on the assumption that students have acquired a B2.1 level of English, which is reached upon successful completion of a language subject taken in the previous semester. Regarding evaluation and assessment, students' work throughout the course is worth 20%,

the final exam accounts for 65%, and the reading book takes 15% of the final grade.

This module seeks to consolidate and extend students' knowledge of the language via a contrastive approach in regard to their L1, to develop the ability to produce different text types and genres as well as to identify and understand the influence of language variety, among other objectives. Likewise, this course is intended to promote the acquisition of general and specific competences, such as learner's autonomy, creativity, teamwork and interpersonal relationships as well as decision-making and lateral thinking skills. In doing so, the learning outcomes stated in the course syllabus entail the improvement of students' communicative skills in the target language and a deeper comprehension of its culture.

This subject encompasses all aspects of English that are useful for future translators and interpreters, that is, reading, speaking and listening skills, as well as grammar and vocabulary from a contrastive point of view with regard to L1. Although this subject focuses mainly on linguistic aspects, it also comprises culture as an intrinsic part of language-learning. Along with the analysis of common texts to enhance reading comprehension, students work on a novel of the teacher's choice. Literature, inasmuch as an art form, is one of the aspects on which to focus our attention regarding the learning of the cultural background. It is of our interest in this particular case due to its closely interwoven connection with language (Carter & Long, 1991). Literature is both a representation of the ideals and principles as well as a detailed picture of the society of a time (Baumbach et al., 2009). In that sense, providing students with the opportunity to read a classic, though relatively recent in time, would broaden the scope of their understanding of the world which, in turn, develops their critical thinking skills. Hence, our choice for the academic year 2020-2021 corresponds to George Orwell's *Animal Farm* (1945).

The aforementioned general and specific competences that students are expected to develop throughout the term, namely problem solving, critical reasoning, creativity, decision making, interpersonal relationship skills and teamwork, have taken a central role in designing this escape

room didactic proposal. Implementing an escape room in a face-to-face traditional classroom environment can be relatively easy, although the challenge arises in a virtual context. It is the design of a virtual escape room along with the pre-tasks leading to them that we will develop in this didactic proposal.

3.2. LESSON PLANNING

The virtual escape room is part of a four-hour session didactic sequence in which the novel *Animal Farm* (Orwell, 1945) is the main focus. In the first lesson, under the assumption that students have read the novel, the teacher will provide the theoretical background unveiling the metaphor behind the text with the collaboration of students by presenting the main ideas on a slide presentation and asking the right questions. This would generate a teacher-student discussion that would encourage critical thinking and literary analysis. In the second lesson, as a pre-task, students will be allocated in teams of four or five members to work on vocabulary activities related to the book and the topic of “animals” (i.e. idioms, proverbs, sounds animals make, ways of walking). The didactic sequence culminates in the escape room. In their teams, students assign the locksmith role for each of the missions. The locksmith is the one in charge of deciphering the code or organising the team to help decode it. As a post-task and wrap-up activity, students are asked to write a one-thousand-word essay individually on a topic from a list provided by the teacher.

FIGURE 1 Order of didactic sequence.



Source of the icons: Flaticon.com

3.3. DESIGNING THE ESCAPE ROOM

The educational adventure game designed for this digital proposal is a linear escape room, which was designed with the free online tool Genially (Genially Web S.L., n.d.). In order to organise the linear sequence of questions, clues and challenges that compose the game, careful planning was of utmost importance. First of all, in designing this virtual escape room, a few assumptions have been made regarding the recipients of this game, which can be read as follows:

- Students have read the book *Animal Farm* (Orwell, 1945).
- Students have a B2.1 level of the language.
- Students have access to a computer and internet connection.
- Students can work collaboratively.
- Students are familiar with the general workings of an escape room.

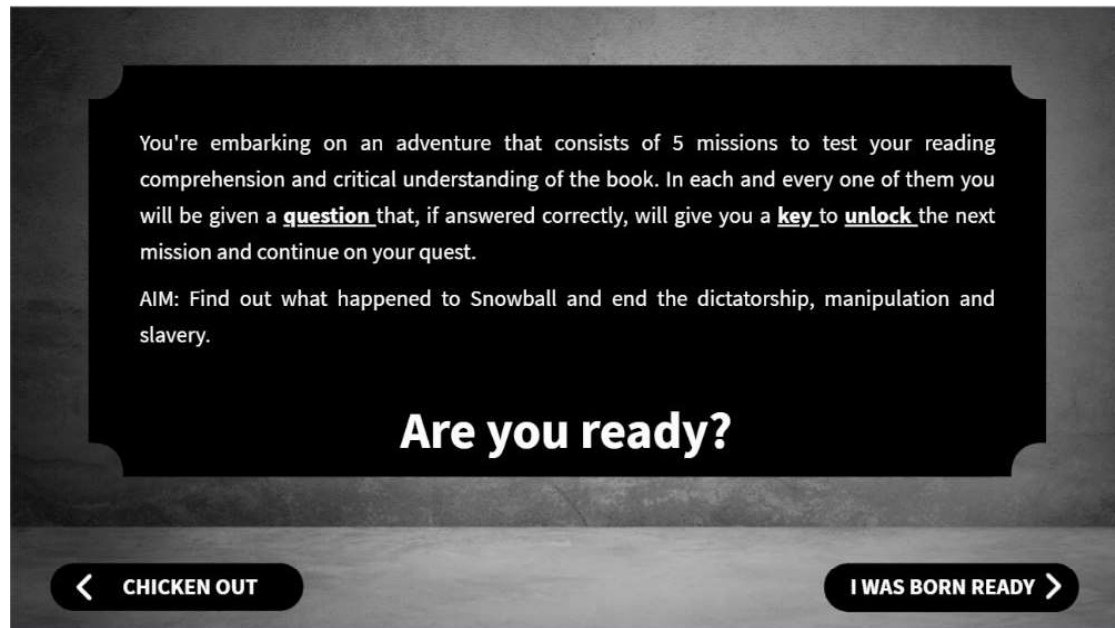
Not only has the profile of the participants been considered, but also which rules, challenges, rewards and clues they are meant to receive when having completed the parts of the mission successfully; not to mention which background is more appropriate for the digital quest. In line with the novel's importance of the wall on which The 7 Commandments (Orwell, 1945) are written along with the location of the uprising (i.e. the farm), three background designs have been selected to establish a clear-cut distinction among instruction slides, question slides and lock slides. For the first group of slides, there has been a preference for a concrete wall depicting the wall in the farm; the different missions comprising the second group of slides have been identified through the use of several solid background colours; a laminated wooden wall has been the ideal background for the third group of slides since it recreates the ambience of a barn. As established before in this didactic proposal, both contextualising the adventure and creating an atmosphere are of utmost importance in adventure games, especially in escape rooms.

3.3.1. Instructions screen

As regards instructions, a solution has been devised to guide students throughout the escape room (see Figures 2 and 3). On that account,

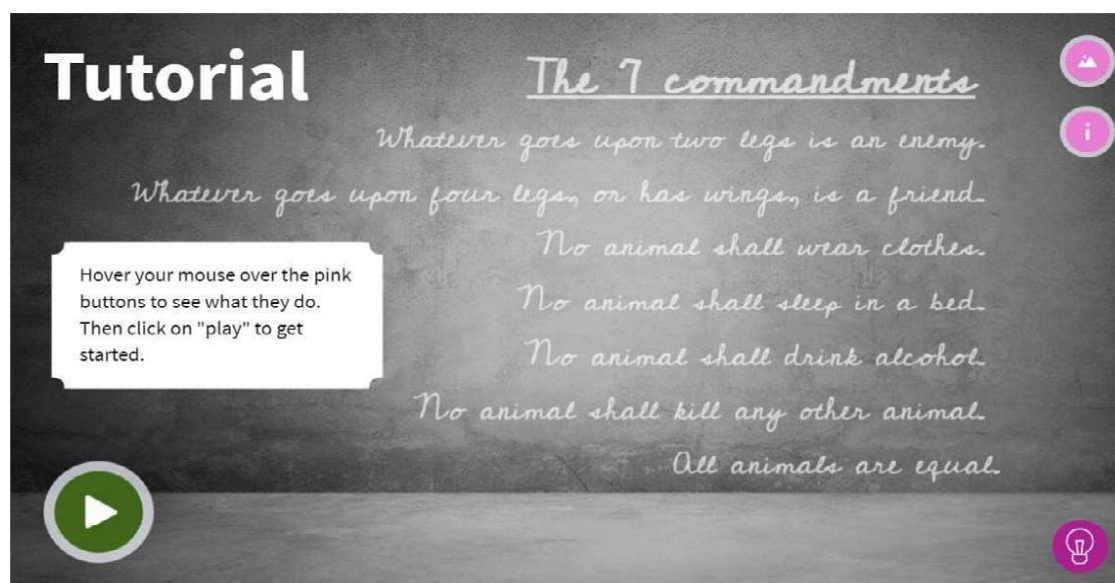
“instructions” and “tutorial” screens have been created within the game in order to attain our goal. Additional support is provided with a built-in help button with the symbol “i” in those screens in which students might struggle (see Figure 3). A clear illustration is that of cracking the codes to unlock the next mission.

FIGURE 2 Instructions screen



Source: Authors

FIGURE 3 Instructions



Source: Authors

In the instructions screen, students are given –what appears to be– the chance to either move forward or exit the game, yet choice is non-existent as it is part of a joke intentionally built within that screen of the game to catch students’ attention. Such an illusion has been resorted to as a humoristic resource to teach the informal phrasal verb ‘to chicken out’ (see Figure 2). This linguistic expression is also related to the pre-task students are expected to work on in order to learn vocabulary related to animals prior to embarking on the escape room. When the player clicks on the ‘chicken out’ button a window opens with a popular meme and the message “That’s just too bad”. This implies that there is no going back. Once in, they should only move forward; however, they can exit the game at any point by closing the window on their browser. On the other hand, the “I was born ready” button pretends to boost motivation in students to prepare them for the quest ahead.

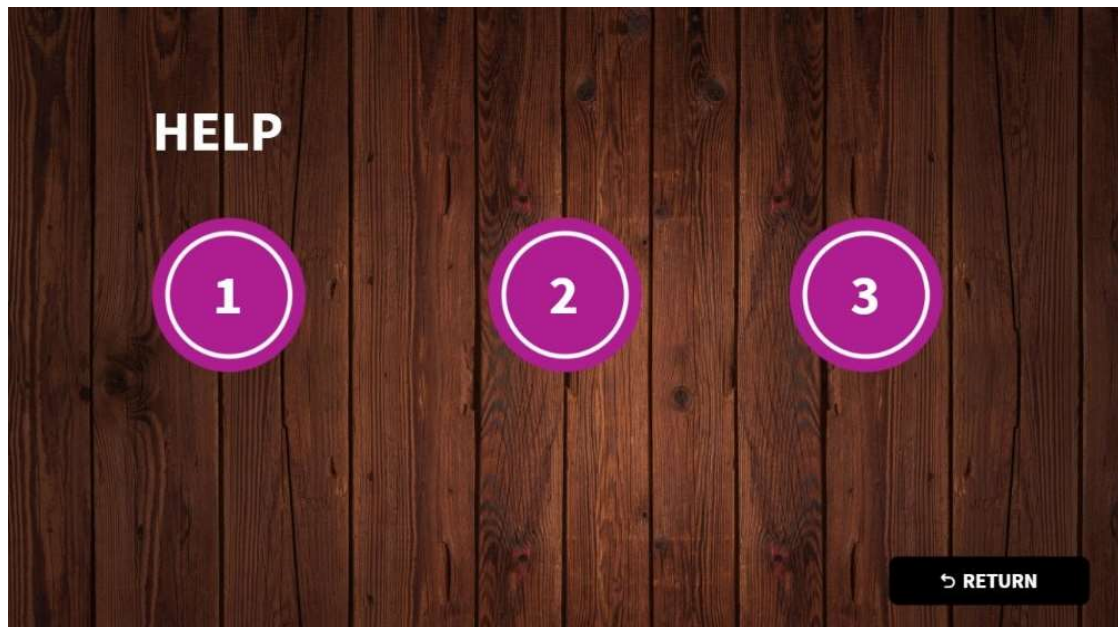
Adding a touch of humour to the task is meant to make students feel more comfortable and relaxed, eliminating the pressure of being assessed or performing and interacting with others in English, which sometimes blocks students and prevents them from achieving the learning outcomes successfully. Certainly, it is a natural interaction between the participants that is pursued with this escape room proposal.

3.3.2. Tutorial screen

What players see next is the ‘tutorial’ screen (see Figure 3), which displays the three pink buttons on the right-hand side that students will see during the game. This screen aims at explaining the function of those buttons. When they hover their mouse over them, their part within the game is revealed. For instance, the one at the top takes them to the map, the one below is a help button, whereas the one at the bottom shows the information they need to crack the code in case they forgot to click on the hyperlink given. The help button is hyperlinked to other slides within the *Genially* presentation. In the Help slide, three clues are given to the users, even though they can only click on one (see Figure 4). That icon is at the same time hyperlinked to the slide in which some clues or further explanations are given to guide the player through the educational adventure. The only option then is to click on “Return” to go back

to the main challenge. After examining the utility of each of the buttons, students only need to click on “play.”

FIGURE 4 Help in Mission 1: three clues.

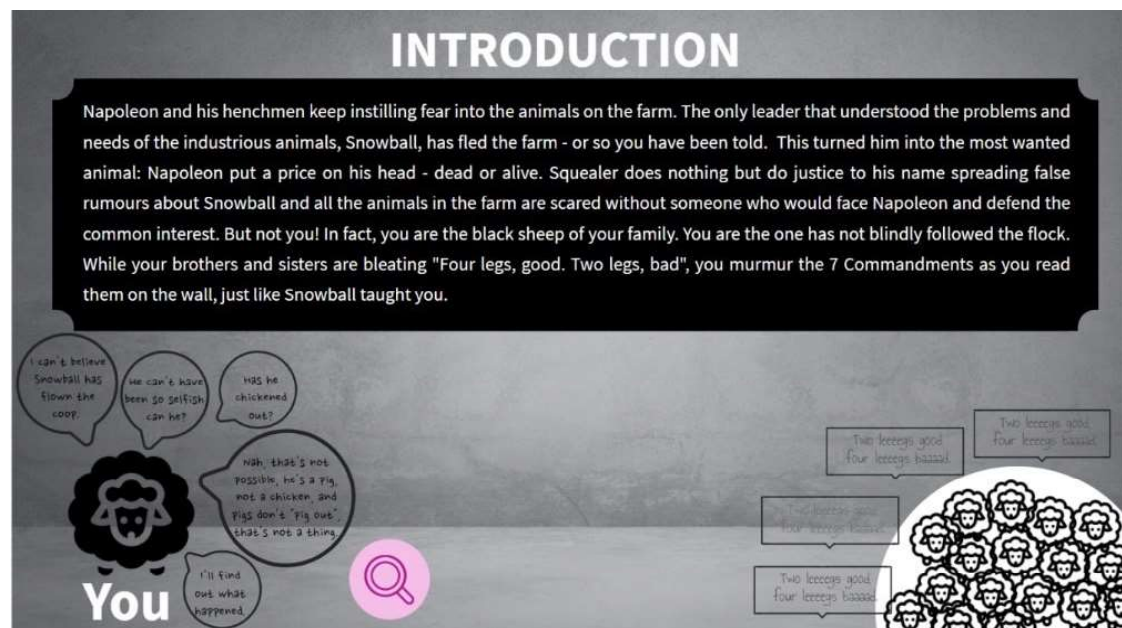


Source: Authors

3.3.3. Storyline

It should also be noted that in order to tie the story together and provide the students with a narrative that not only motivates them but also engages them in the plot, an alternative storyline that fits in with the main narrative of the novel has been procured. To do that, a character other than the other animals has been created, the ‘black sheep’ of the flock. As easy as the pun might have come, its convenience is linked to the teaching of idiomatic language and proverbs in which animals appear. Examples include ‘be the black sheep of the family’, ‘to have a whale of a time’, ‘the lion’s share’, ‘to eat like a horse’ or ‘straight from the horse’s mouth’, among others. The meaning of the idiom ‘the black sheep of the family’ is used to give the character an identity, which is the actual meaning of the expression (see Figure 5).

FIGURE 5 Character presentation: the black sheep.



Source: Authors. Icons taken from: flaticon.com

The player becomes the ‘black sheep’ since the sheep are the ones who are always bleating “four legs good, two legs bad” (Orwell, 1945, p.29) in the novel ad nauseam. That mantra is the simplification of one of The 7 Commandments “whatever goes upon four legs, or has wings, is a friend” (Orwell, 1945, p.21), which is established at the beginning of the rebellion by Snowball, one of its leaders, to help other animals determine who was welcome and who was not. In other words, that decision was made so that the characters remembered that animals were friends and, thus, welcome, whereas humans were not. To put it simply, beyond Orwell’s satirical and political metaphor, the working class should despise and bring down the accommodated classes. In this metaphor, the sheep represent the easily convinced and successfully manipulated folk who do not seem to question instructions or think critically. However, what an escape room teaches is precisely the opposite: to think outside the box, to suggest and explore alternatives and seek and negotiate solutions. Thus, the “black sheep” character was pertinent.

3.3.4. Structure

Last but not least, the planning of our virtual platform has also accounted for the number of missions and challenges students are expected to overcome. These missions comprise the content activities to be assessed; hence, questions, solutions and puzzles needed careful wording and planning in order to anticipate possible problems. Furthermore, establishing primary goals and learning outcomes serves as the basis for the assessment criteria. Gamification is important regarding learner engagement, but we shall not forget that learning, above all, needs to take place.

With the purpose of facilitating navigation to the players, namely students, clear organisation, layout and an attractive visual design were deemed appropriate. All missions have been divided into four parts: the map, a question, the key and a puzzle, in that order. The outline for each mission is as shown in Figure 6.

FIGURE 6 Organisation of missions.



Source of the icons: Flaticon.com

It has been of utmost importance to design a clear map indicating the order of the missions, for which arrows to define the path have been used along with numbers to establish their order. This map is shown on the first screen of each mission (Figure 7), which plays a paramount role in the game. On the one hand, it is an indicator of progress and completion of tasks; on the other hand, it serves as a navigation tool, which is key in adventure games. In order to complete their quest, students need to click on the open mission. At first glance, it should be obvious to the player which mission is available, that is to say, the only one to which access is not restricted, either because it is the first one, as shown in Figure 7, or because it is the one they have unlocked by completing the previous mission.

FIGURE 7 Map of missions.



Source: Authors. Icons taken from: flaticon.com

In order to help students identify which mission learners can access and to make it more visible and evident, three different strategies have been used. In the first place, we have used an icon of an open padlock as opposed to the icon of a locked one; in the second place, the open padlock has been coloured in green, which is a colour commonly associated with permission; in the third place, we have subtly modified the transparency levels of the images by desaturating those to which access is denied and full saturation to those the player can access. Contrast and hues offer the possibility of making navigation more predictable. Nevertheless, in other maps further in the game, although the icon for Mission 1 is saturated, a window opens when clicked informing the player that it has already been completed.

3.3.5. Contents and missions

This escape room has been designed to be completed in under forty-five minutes, depending on the group. It would be advisable to use a timer or a countdown while students are completing the tasks, as this would add thrill and excitement to the task encouraging students to think, negotiate and find solutions faster on the spot.

The contents and activities included within this escape room have been created bearing in mind the aforementioned learning outcomes, that is the consolidation and extension of lexical and grammar knowledge in the target language as well as a deeper understanding of its culture. The adventure game intends to assess both reading comprehension and students' critical understanding of the novel. To that end, multiple-choice questions are included in the missions. When the wrong answer is selected, the game takes the player to an explanatory slide which clarifies why that option is not the correct one. The player then returns to the question screen and attempts to answer the question again. Yet, when answered correctly, the game reveals the key to the lock.

The first mission consists of a question in which not only do students prove they have read the chapters of the novel, but have also grasped the essence of the main characters and the main message of the book. The first question (see Figure 8) delves into Snowball, one of the leaders of the rebellion, as previously mentioned. Students need to have comprehended Snowball's ideals and principles in order to be able to answer the question correctly.

FIGURE 8 Mission 1: Question.

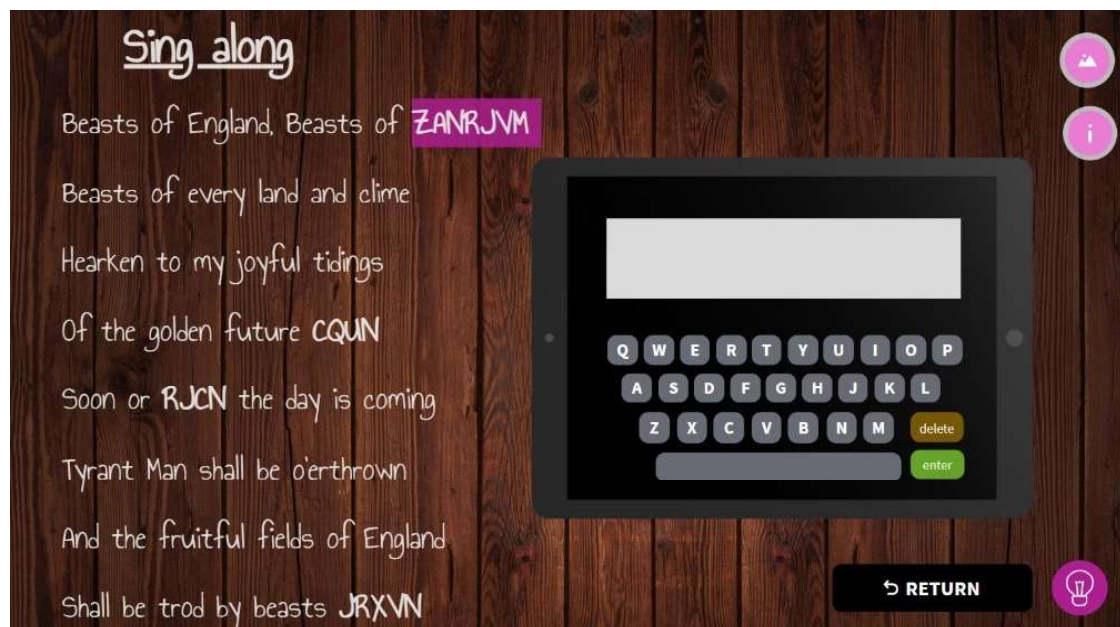


Source: Authors. Icons taken from: flaticon.com

Following the parallel storyline provided for this adventure, the players are told Snowball has hidden clues for them to find; they need to negotiate and agree as a group where to look for them by providing sound arguments and expounding on their views. All the reasoning process behind their choice needs to be connected to evidence in the novel.

In this particular mission, that is, Mission 1, the encrypted words of the message belong to the song “Beasts of England” (Orwell, 1945, p.27). Those words have been encrypted using the Caesar Cipher technique (see Figure 9), which consists of the alignment of two alphabets. In order to decrypt the message, students need the clue provided within the game (i.e. R equals A). When letters R and A from both alphabets are aligned, successive letters in the first alphabet correspond to a different one in the second alphabet; thus S equals B, T equals C and so on. This way, the players obtain the key to complete the challenge and unlock the next mission. Upon successful completion of the mission, the one that follows is unlocked.

FIGURE 9 Mission 1: puzzle.



Source: Authors. Adapted from Orwell (1945).

Moving forward in the adventure to Mission 2, both the question and the puzzle are aimed at testing the understanding of the allegorical scene that takes place in the living room of the manor house (see Figure

10). This time, the key to the puzzle has been created with *Snotes*[®] (Fleur de Lis Group, 2017). This online tool allows generating juxtaposed words which are later deformed and fitted into a circle. In order to read its contents, the player must tilt and rotate the element looking for the right angle that should reveal the hidden names with the help of the vertical and horizontal scroll bars.

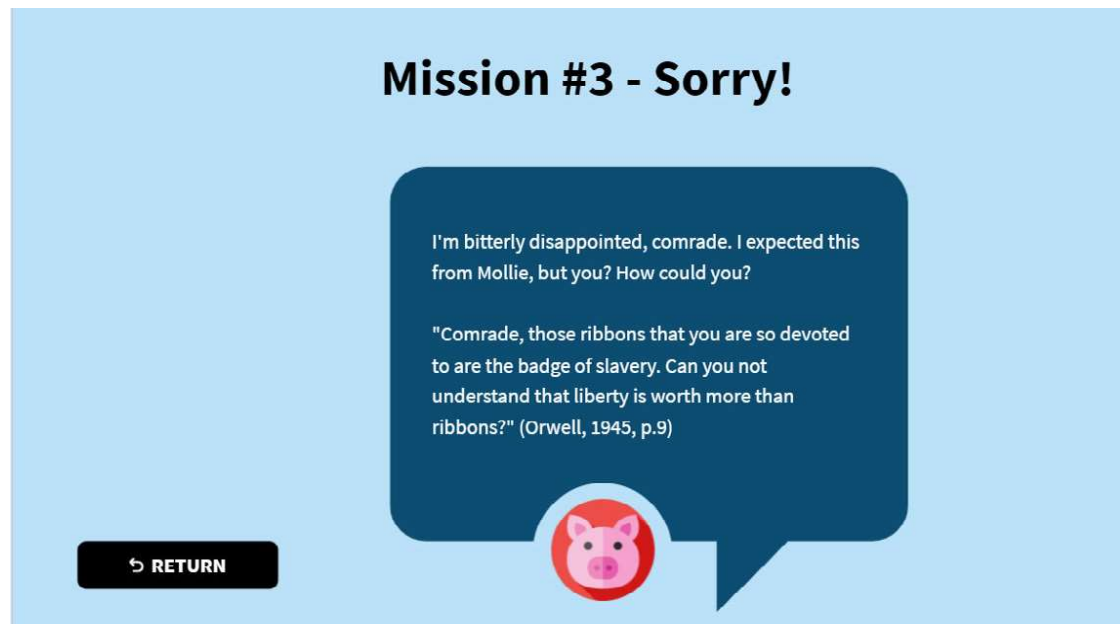
FIGURE 10 Mission 2 question.



Source: Authors. Icons taken from: flaticon.com

On to Mission 3, students' knowledge and comprehension of the rebellion undertaken in the book (i.e. Animalism) is tested. At this point in the game, the 'black sheep' are given further details and context regarding the storyline. This time, there are a few elements hidden in the bales of hay, namely ribbons, corn, tools and lumps of sugar. The players have to choose wisely one of those items to take with them since they should not upset Snowball (see Figure 11).

FIGURE 11 *Wrong answer: Snowball shows disappointment.*



Source: Authors.

The puzzle the player needs to decode at the end of Mission 3 consists of a ciphered message from the outcast leader Snowball, which is hidden within the corn husk. The key chosen for this puzzle is called pigpen cipher. It is a code in which each letter of the alphabet has an equivalent geometric shape that corresponds to fractions of a grid. The students are given this grid with the key or, alternatively, the grid provided can be missing some letters that the players would need to figure out in order to proceed with the game so as to promote logical competences.

Turning to Mission 4, the plot thickens. As the story unfolds, the player is reunited with the exiled pig, Snowball, to plot against the villainous Napoleon, who is the current dictatorial and corrupt leader (see Figure 12). In an attempt to continue in their quest, three flags are displayed requiring the player to choose the correct one. The right choice is the one that fits the description provided in the novel to represent the uprising:

The flag was green, Snowball explained, to represent the green fields of England, while the hoof and horn signified the future Republic of the Animals which would arise when the human race had been finally overthrown. (Orwell, 1945, p.16)

FIGURE 12 Mission 4: Plotting against Napoleon.



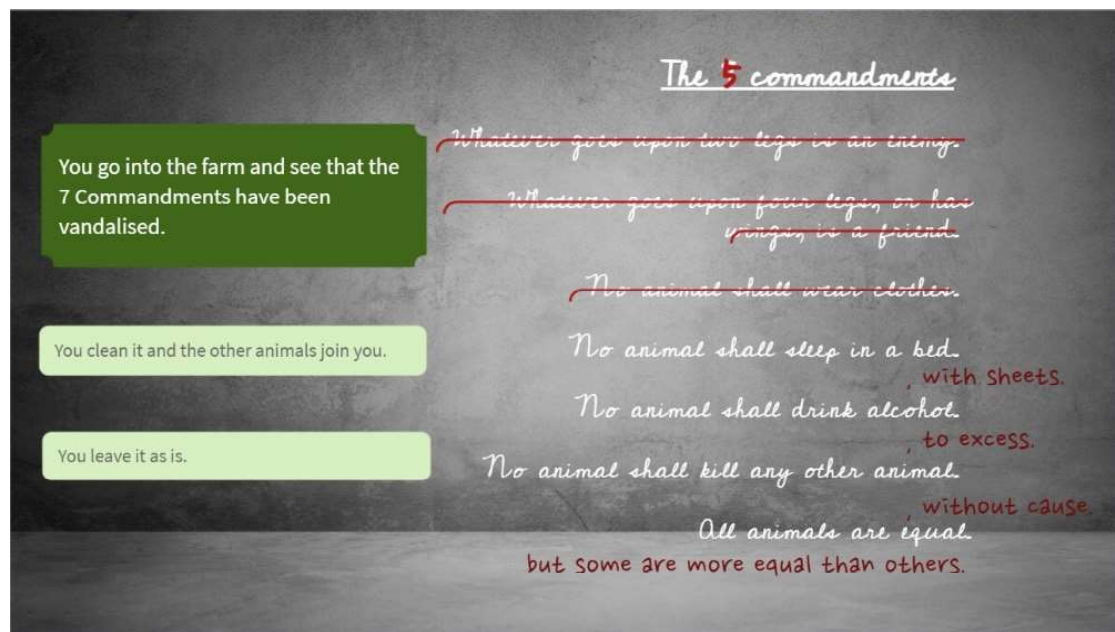
Source: Authors. Icon taken from: flaticon.com

If answered incorrectly, a disappointed Snowball demands explanations for their error. Nevertheless, when answered correctly, the key to the final mission is revealed. For this last puzzle, one of the objectives is to raise awareness on disabilities, particularly on visual impairment. Hence, Braille encryption has been deemed appropriate. Even though this adventure game occurs on the players' screens, it can always be adapted into a face-to-face modality, in which the Braille message would be even more meaningful. Yet, including Braille as a code that needs cracking as part of a puzzle is seen as an opportunity to acquaint students with a different and inclusive writing system. Such an action stresses the potential of escape rooms in coping with cross-curricular and transversal topics.

Solving the previous puzzle leads the player to the final mission, where special formatting is featured. As observed throughout the virtual proposal, the adventure follows a linear sequence up to this point, with three alternative endings in the final mission. This nonlinear ending is closely connected to the players' final choices on this occasion. In the last question, the players are offered four different options: when the incorrect answer is selected, Napoleon and his henchmen win; thus, the animals lose. However, when the correct one is picked, it takes the

player to the 7-Commandments Wall, which has been vandalised by Napoleon's supporters. At this point, the student needs to decide what to do (see Figure 13) in order to be an exemplary and admired figure-head who leads by example. Choosing one option or the other will determine whether the result of the adventure benefits everyone. Alternatively, the victory is not for the masses but for a few, hence making the black sheep a worthy successor of Napoleon.

FIGURE 13 *Vandalised Commandments*



Source: adapted from Orwell (1945).

3.4. ASSESSMENT

When it comes to assessment, three criteria are considered (see Table 1). These correspond to a final exam (65%), students' work (20%) and literary analysis (15%), as mentioned in earlier sections of this paper. The final exam consists of multiple-choice, cloze, matching and fill-in-the-gaps questions, two short written compositions and a speaking test; students' work is related to the submission of tasks, whereas literary analysis involves book-related activities, in this case, based on the novel *Animal Farm* (Orwell, 1945).

TABLE 1. *Assessment Criteria*

Criteria	% of final mark
Final exam	65%
Students' work	20%
Literary analysis:	15%
Essay	10%
Escape room	5%
Individual performance	2%
Group performance	2%
Peer assessment	1%

As observed in Table 1 above, literary analysis is composed of different items, namely an essay and the escape room. The essay accounts for 10% of the final mark, whereas the escape room stands for the remaining 5%. In this line, the latter percentage can only be attained upon completion and participation in the virtual escape room presented here. In doing so, individual performance (2%), group performance (2%) and peer assessment (1%) are employed as evaluation mechanisms to guarantee fair results.

Focusing on individual performance, factors such as pronunciation, language, content, interactive communication and discourse organisation are vital in order to attain that 2% of the final mark. The descriptors that should be taken into account are summarised below (see Table 2).

TABLE 2. *Escape room assessment: individual performance.*

	Needs Improvement	Satisfactory	Good	Excellent
Pronunciation	Pronunciation and intonation are strongly influenced by L1 (e.g. word stress, sentence stress, individual phonemes) Incomprehensible speech.	Pronunciation and intonation are somehow influenced by L1 (e.g. word stress, sentence stress, individual phonemes) Minor mistakes but comprehensible speech.	Pronunciation and intonation are intelligible. Little effort from the listener is required.	Pronunciation and intonation are completely natural. No effort from the listener is required.

Language (grammar and vocabulary)	Fails to produce simple sentences. Errors impede communication. Limited range of vocabulary and/or used inaccurately	Attempts simple and some complex structures. Errors are present in both syntactic structures but do not generally impede communication. Generic range of vocabulary.	Attempts complex structures. Errors are present in complex grammatical forms but do not impede communication. Appropriate and varied range of vocabulary.	Uses of simple and complex grammatical forms with ease. Errors occur as slips in complex grammatical forms but do not impede communication. Good range of vocabulary used accurately.
Content	Arguments are not based on evidence from the book. Improvisation and speculation.	Some arguments are based on evidence from the book but mostly on speculation.	Most arguments are based on evidence from the book.	All arguments provided are based on evidence from the book.
Interactive communication	Hardly ever encourages other members to share their views in the discussion.	Sometimes encourages other members to share their views in the discussion.	Generally encourages members to share their views in the discussion	Always encourages other members to share their views in the discussion.
Discourse organisation	Some ideas are not connected and organised. Hesitation prevents natural speech.	Ideas are generally connected and organised. There is hesitation to look for the right structures.	Ideas are mostly connected and organised. Speech flows despite some hesitation.	Ideas are perfectly connected and organised. Speech flows naturally.

Source: Authors

As noted above, speech comprehension, a wide range of vocabulary, the use of complex grammatical structures, and the connection and organisation of ideas are highly advisable when assessing students individually. Nonetheless, other elements are examined in group

performance, namely time management, teamwork and negotiation skills (see Table 3).

TABLE 3. *Escape room assessment: Group Performance.*

	Needs Improvement	Satisfactory	Good	Excellent
Teamwork	Tasks are not equally distributed.	Some tasks are equally distributed.	Most tasks are equally distributed.	All tasks are equally distributed.
Negotiation	One student monopolises and assumes the leading role. No discussion is created.	One or two students monopolise and assume the leading roles. Little discussion is created.	Most members make contributions, share opinions and generate discussion.	All members make contributions, share opinions and generate discussion.
Time management	It takes too long for students to finish the escape room. Abandon the escape room too early.	On time, but a little bit unbalanced in some questions.	On time and balanced performance.	On time, quick and right performance.

Source: Authors

Turning to peer assessment, a questionnaire has been created so that students provide feedback on their collaborative work. Not only are these mechanisms useful for their peers but also for the teacher, given that their contributions can prove very effective at reflecting upon their behaviour during the learning process (Huisman, Saab, Van Driel & Van Den Broek, 2019). Thus, items like “My partner has collaborated and contributed in the escape room”, “My partner has read the book” or “My partner has spoken in English” will be graded by means of both a Likert scale and Yes/No answers to facilitate the exchange of good and bad practices.

4. PEDAGOGICAL IMPLICATIONS

Pedagogically speaking, the growing popularity of technology-aided practices in the education system may lead to a new scenario for reflection as well as teaching and learning opportunities. The rationale for the design of virtual escape rooms lies in their potential as activities boosting the learning of negotiation, teamwork and communication skills. So far, the integration of interdisciplinary and transversal contents should be acknowledged. For instance, in the proposal presented here, literary analysis has also revolved around significant historical events. In other examples of digital escape rooms, interdisciplinary knowledge can be found through the use of mathematical formulae in a chemistry escape room, where they would serve as keys to unlock the following missions.

A flexible and accessible adaptation of the escape room for students with special needs can also support the development of their academic competence. The *Guide for digital accessibility addressed to educational settings* gives some clues that should be kept in mind when planning the implementation of digital tools in special education (Conselleria d'Educació, Cultura i Esport, 2020). These may include the use of clear and concise language, audio-visual software that allows for speech transcription or subtitles. Likewise, the incorporation of narrated virtual escape rooms can enhance greater learner autonomy for those students with visual disabilities. As previously mentioned, displaying Braille keyboards could also contribute to the learning of transversal topics. Even though it would be an enriching experience for all learners when used in face-to-face contexts, these topics can still be worked out in virtual learning environments to raise awareness. Planning the scenarios and materials that should be included in virtual escape rooms may take some time. Yet the role of these tools in the development of personal growth, linguistic and cultural knowledge is quite refreshing in literature initiatives conducted in the EFL classroom.

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