



Universidad de Valladolid

Facultad de Educación y Trabajo Social

Máster en Profesor de Educación Secundaria
Obligatoria y Bachillerato, Formación Profesional y
Enseñanza de Idiomas

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**Grammatical Conspiracy Escape Room: an
Educational Proposal to Revise the English
Passive Voice**

Nerea Serrano García

Tutora: Diana Carrascal Tris

Departamento de Filología Inglesa

Valladolid

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ABSTRACT

This research analyzes how gamification, specifically Escape Rooms (ERs), contributes to improving students' motivation in learning the English passive voice. The study analyzes the effectiveness of ERs in English as a Second Language (ESL) classrooms for improving L2 English learners' understanding and usage of the English passive voice. It involved 38 adolescents, both bilingual and non-bilingual, who engaged in a passive-voice themed ER to verify whether i) the English passive voice poses challenges for L2 learners, ii) the ER enhances the participants' understanding and usage of this grammatical structure, iii) the same ER could be utilized with the two types of participants, and iv) the ER motivates the participants. Results showed that both groups struggled with the passive voice, especially with its usage, but improved by 50% after participating in the ER. Additionally, the bilingual group expressed interest in more challenging puzzles, while both groups were motivated by the experience. These findings suggest that educational ERs are effective learning tools for complex grammatical structures in ESL classrooms.

Keywords: *Escape Rooms; passive voice; challenges; bilinguals; non-bilinguals; motivation*

RESUMEN

Este estudio analiza cómo la gamificación, en concreto los Escape Rooms (ERs), contribuye a mejorar la motivación de los estudiantes en el aprendizaje de la voz pasiva en inglés. El estudio analiza la eficacia de los ERs en las aulas de inglés para mejorar la comprensión y el uso de la voz pasiva de los estudiantes. 38 adolescentes, bilingües y no bilingües, participaron en un ER sobre la voz pasiva para comprobar si i) la voz pasiva en inglés plantea problemas a los estudiantes de inglés, ii) el ER mejora la comprensión y el uso de esta estructura gramatical de los participantes, iii) se puede utilizar el mismo ER con los dos tipos de participantes, y iv) el ER motiva a los participantes. Los resultados mostraron que ambos grupos tenían dificultades con la voz pasiva, especialmente con su uso, pero mejoraron en un 50% después de participar en el ER. Además, el grupo bilingüe expresó interés en haber tenido puzzles más complicados, mientras que ambos grupos se sintieron motivados por la experiencia. Estos resultados sugieren que los ERs son herramientas eficaces para el aprendizaje de estructuras gramaticales complejas en las aulas de inglés.

Palabras clave: *Escape Rooms; voz pasiva; desafíos; bilingües; no bilingües; motivación*

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1. INTRODUCTION

This dissertation explores three main topics: gamification, Escape Rooms (ERs), and the English passive voice. Gamification enhances intrinsic motivation, involvement in the learning process, participation in classroom activities, and acquisition of 21st-century skills (Rabah & Cassidy, 2018). Scholars such as Dicheva et al. (2015) and Nicholson (2015a) emphasize the importance of meticulously applying game design elements and principles to construct effective and meaningful gamified educational experiences.

One method of deploying gamification in the educational process is through ERs. This interactive, team-based activity originated in Kyoto, Japan, in 2007, garnered significant attention in 2016, and subsequently led to an increase in academic interest, particularly regarding its educational applications (Fotaris & Mastoras, 2019; Ouariachi & Wim, 2020). Educational ERs offer several advantages within an educational context, including the promotion of teamwork, enhancement of social interaction, and development of critical thinking skills (Fotaris & Mastoras, 2019; Nicholson, 2015b; Taraldsen et al., 2022). However, they also present challenges such as inadequate evaluation methods, time commitment issues, and resource limitations (Fotaris & Mastoras, 2019). Despite these challenges, the benefits of using ERs for education outweigh the drawbacks, highlighting their potential as effective learning tools.

Considering the benefits that educational ERs offer, their implementation as an instructional tool for revising the English passive voice with second language (L2) English learners could prove beneficial. Throughout this study, the concept of ‘second language’ will be utilized as the umbrella term for both foreign language and second language. Passive constructions, notoriously challenging even for native (L1) English speakers (Alexiadou, 2012; Crawford, 2012; Gotowski, 2016; Haegeman, 1985; Kirby, 2010; Pinker et al., 1987), are likely to pose difficulties for L2 English learners. Indeed, numerous scholars (e.g., Chairani Damanik, 2014; Ghabanchi, 2006; Hinkel, 2004; Kareema et al., 2020; Rashidi et al. 2020; Scholastica, 2018) have demonstrated interest in analysing which aspects of this grammatical structure present the greatest challenges for L2 learners. Among the difficulties faced by L2 learners, the structural complexity of

passive constructions, verb tenses, subject-verb agreement, and the past participle of the lexical verb are particularly challenging.

Given that L1 Spanish–L2 English adolescents first encounter this grammatical structure in the third grade of Compulsory Secondary Education and then revisit it during the subsequent academic year, the use of an educational ER with fourth-year students to review their previous learning and encourage further understanding of this complex structure could have a positive impact on their learning process. Although some scholars, such as Minton (2015) and Scholastica (2018), note that educators across various fields advise students to use the active voice instead of the passive, it is important to acknowledge that the passive voice is a fundamental grammatical structure in English, especially in formal and academic writing (Scholastica, 2018). The primary rationale for using this grammatical construction is to adhere to established writing conventions (Amdur et al., 2010). Indeed, following these conventions likely facilitates more effective communication as readers comprehend familiar writing styles better. Furthermore, including passive sentences is essential for ensuring diversity in an academic document. Therefore, promoting the usage of the English passive voice through an educational ER appears beneficial for fourth-year students.

Consequently, this dissertation aims to pursue the following objectives: i) to explore the challenges faced by L2 learners in learning the English passive voice to determine which aspects of the passive voice should be reinforced; ii) to explore the benefits that the application of gamification in educational settings offers students and whether the amount of exposure to the L2 is a key factor in English passive voice learning; iii) to assess if the same ER can be utilized with participants whose English proficiency varies slightly; and iv) to investigate whether the participants' engagement is affected by their involvement in the ER.

The structure of this dissertation is as follows. Section 2 presents the theoretical framework, covering: i) gamification in an English as a Second Language (ESL) classroom, ii) ERs as educational tools, and iii) the Passive Voice in English vs. in Spanish. Section 3 presents four research questions related to using an ER with L2 learners to revise the English passive voice. These include addressing difficulties posed by the English passive voice for L2 learners; assessing the effects of using an ER as an educational tool and evaluating any significant differences between the groups of

participants; evaluating the feasibility of reusing the same ER; and exploring participants' motivation towards the ER. Section 4 outlines the methodology involving a pre-test, a post-test and a final questionnaire, after participants' participation in the ER. This section also includes the participant profiles, and data collection procedure. Section 5 discusses the results derived from data collection and their interpretation. Finally, section 6 presents the conclusions and suggestions for further research.

2. THEORETICAL FRAMEWORK

2.1 Gamification in an ESL classroom

Video games have been part of human life for over 50 years (Annetta, 2008), and their popularity has significantly increased in recent decades. According to the Spanish Video Games Association (Rodríguez, 2024), there was a 16.3% growth in video game industry sales in Spain in 2023, with total expending on video games reaching 2,339 million euros. Therefore, the significance of video games in today's society cannot be denied. Notably, individuals between the ages of 10-34 are the primary consumers of video games, with teenagers aged 14-19 spending the most time engaging with them (Annetta, 2008). The captivating nature of video games can lead people to spend countless hours playing. As a result, scholars such as Kapp (2012) or Nicholson (2015a), and others, argue that these games could be beneficial for learning a L2.

Indeed, using games for learning is not a new idea. Children have been using play as a method of learning since early childhood, benefiting from various aspects of games such as their origin, organization, lack of consequence, and uncertainty (Brougère, 1999). It is not just children who learn through play; even older individuals who continue playing primarily for entertainment purposes can also learn from this activity (Annetta, 2008). In fact, it is believed that games help players better comprehend the logic behind rules by immersing themselves in the game. Engaging in simulations aids in building schemas about their surroundings. Nonetheless, although the benefits of learning through playing have long been known, it was not until 2011 when the first framework of gamification was published (Rabah & Cassidy, 2018). Therefore, with video games being highly relevant today and offering potential for learning while playing, adapting the learning environment to students' preferences may lead to better achievement of their educational goals (Fraser & Walberg, 1991), leading to an increase in studies on 'gamification' (Rabah & Cassidy, 2018).

2.1.1 Definition and significance of gamification

Kapp (2012) defined gamification as the application of “game-based mechanics, aesthetics, and game thinking to engage people, motivate action, promote learning, and solve problems” (p. 10). While gamification has been implemented in varied domains, including business, wellness, and healthcare, its incorporation within the educational sector is just beginning. Accordingly, this dissertation scrutinizes the notion of gamification and its amalgamation into English language learning, with a focus on complex grammatical structures such as the English passive voice.

Gamification has seen an exponential surge in popularity in contemporary society due to the incessant need to render learning more engaging and attractive for students. The current generation is persistently exposed to social media, online gaming, and technological devices, potentially making it arduous for learners to concentrate on cognitively demanding tasks (Rabah & Cassidy, 2018). Furthermore, this overstimulation from social media and online gaming might result in a diminished attention span, propelling individuals to seek novel forms of entertainment (de Ros Cócera & Polyakova, 2022; Firth et al., 2020). Consequently, individuals may find it increasingly challenging to engage in long-term activities (Atteh et al., 2020). Under these circumstances, gamification could be instituted in education as the nature of games and their elements have the potential to augment students' intrinsic motivation for participating in learning activities (Rabah & Cassidy, 2018). According to Rabah and Cassidy's research (2018), their findings suggest that gamification not only enhances intrinsic motivation but also elevates student engagement in the learning process, their involvement in school tasks, and fosters the development of 21st-century skills.

2.1.2 Key elements of gamification

According to the previously mentioned definition of 'Gamification,' there is a need to incorporate game design elements in non-game contexts. For this reason, several academics (e.g. Al-Azawi et al., 2016; Dicheva et al., 2015; Rabah & Cassidy, 2018, among others) have examined the specific game design elements to develop successful gamification strategies. In this paper, the categorization proposed by Dicheva et al. (2015) is considered due to its comprehensive nature.

Dicheva et al. (2015) classify game design elements into two levels of abstraction: game design principles and game mechanics. According to them, the first level encompasses the following fundamental principles:

- **Visible status.** It informs students about their progress.

- **Social engagement.** This principle enables students to engage in competition with others and promotes collaboration, interaction, group learning opportunities, and more.

- **Freedom of choice.** One of the principles that games have is the principle of optional participation, providing students with the freedom to choose which task(s) they wish to complete. This empowers them to feel in control of their learning experience instead of being dictated by others.

- **Freedom to fail.** Students have the opportunity to submit assignments several times for error checking and correction.

- **Rapid feedback.** Within a gaming context, students can swiftly receive feedback on their learning progress.

At a higher level of abstraction, game mechanics are viewed as more contextualized than game design principles according to Dicheva et al. (2015). This allows for the possibility of identifying:

- **Badges:** symbols linked to a learner's profile and granted upon task completion.

- **Points:** these game mechanics represent game elements awarded to students for desired performance or behaviour as determined by the game master.

- **Levels:** stages or tiers that students can advance through within a game.

- **Rewards:** tangible items provided by the designer to students who exhibit desired actions.

While these principles and mechanics are connected to gaming and thus should be included in gamification, it is also important to consider the occasions and circumstances when students will receive a form of stimulus. According to Nicholson (2015a), using reward-based gamification is appropriate when the goal is an immediate or short-term transformation. Rewards can enhance students' engagement in situations where there is no intrinsic motivation to complete a specific task. Once students grasp how to perform the task, their primary reward becomes the ability to carry out that task independently. However, with long-term objectives aimed at changing student's behaviour, the situation

differs. In such cases, extrinsic rewards may replace the students' intrinsic motivation (Deci & Ryan, 2002) leading to the cessation of behaviour if rewards are discontinued.

In addition to the aforementioned game principles and mechanics, scholars like Kapp (2012) and Nicholson (2015a) emphasize key concepts (game-based, mechanics, aesthetics, game thinking, engagement, people, motivation, promoting learning, and problem-solving) to obtain effective gamification. As claimed by Kapp (2012), successful gamification involves incorporating these elements to motivate individuals in real-life situations where they may not otherwise be engaged. Nonetheless, it is important to note that gamification should not be seen solely as applying game mechanics to real-world scenarios. This is the main reason why Kapp also modifies his previous definition and describes gamification as “a careful and considered application of game thinking to solve problems and encourage learning using all the elements of games that are appropriate” (p. 15). Additionally, intrinsic motivation plays a significant role for some individuals who engage in activities simply because of their internal drive. As suggested by Nicholson (2015a), those driven by internal motivations tend to have a more positive attitude towards the activity. Therefore, designing a meaningful gamified activity presents the challenge of catering to each individual's unique sense of meaning and creating diverse experiences for engagement (Moore, 2007).

Gamification, serious games, and Game-Based Learning (GBL) are all methods designed to facilitate learning through problem-solving in a gaming environment. Each method aims to motivate participants, but they differ in their approach. Gamification applies game techniques to real-world contexts, serious games often utilize game-like environments such as game boards, and GBL simulates a computer game atmosphere (Al-Azawi et al., 2016). Rabah and Cassidy (2018), however, argue that serious games are sometimes overlooked in discussions of gamification due to their limited use in educational contexts, a result of their specific contexts. A comparative analysis between gamification and GBL, provided by Al-Azawi et al. (2016), is briefly outlined below.

Games can be an effective tool for teaching and learning due to their capacity to capture learners' attention in a way that traditional teaching methods may not. Indeed, educators have long utilized games for educational purposes. This is why Al-Azawi et al. (2016) conducted a comparison between gamification and GBL, noting that while both incorporate gaming mechanics, gamification transforms the entire learning process into a game, whereas GBL integrates a game as part of the learning experience. Consequently,

these scholars assert that gamification offers more benefits compared to GBL by encouraging students' participation and enabling them to engage with the activity while pursuing learning goals.

The significance of gamification has been widely acknowledged in various fields such as education, training, marketing, and healthcare, among others. It is worth noting that, according to some scholars (i.e., Al-Azawi et al., 2016; Rabah & Cassidy, 2018), the benefits of gamification include: i) enhanced engagement, attendance, and participation regardless of demographic boundaries; ii) higher motivation levels and improved emotional outcomes; iii) increased interaction with the user; and iv) greater loyalty. By integrating game-based mechanics and aesthetics, gamification possesses the potential to captivate and motivate individuals in various real-life scenarios while fostering learning and problem-solving skills. Furthermore, gamification transcends the mere introduction of game mechanics to real-world situations - it involves a strategic use of gaming principles to effectively address challenges and promote learning.

However, there are also drawbacks to gamified activities (Nicholson, 2015a). According to Nicholson (2015a), one of the difficulties faced by designers of such activities is the need to offer a wide range of activities to meet the needs of every student, a concept known as Universal Design for Learning (Moore, 2007). This involves providing diverse methods for learning content and demonstrating knowledge in different ways. Moreover, it is crucial not only to address students' needs but also their interests when designing meaningful gamified activities. Designers must consider what is personally significant for each participant to ensure they fully engage with the activity.

Despite the benefits offered by gamification, there are limited studies focusing on its application in education. It was not until 2010 that research on this topic gained popularity, coinciding with the increasing accessibility of technology and digital platforms to a wider audience, and with classroom teachers beginning to share gamification examples online (Zainuddin et al., 2020). This suggests that gamification in education is still a relatively nascent concept with ample opportunities for further exploration and research.

2.2 Escape Rooms as educational tools

Escape Rooms have gained significant popularity since 2016, particularly in educational settings as a pedagogical instrument. The second part of this theoretical

framework concentrates on ERs, with Section 2.2.1 elucidating the concept and Section 2.2.2 presenting their key features. This part culminates with Section 2.2.3, which delineates the strengths and limitations of utilizing ERs for educational purposes.

2.2.1 Definition and significance of Escape Room

An ER is defined as a “live-action team-based game where players discover clues, solve puzzles, and accomplish tasks in one or more rooms in order to complete a specific goal (usually escaping from the room) within a set time limit” (Veldkamp et al., 2020, 1). While the primary goal was initially to escape from a locked room, the objectives have since varied and may involve solving a mystery, locating, and deactivating a device, or attempting to escape confinement as traditionally done.

According to Fotaris and Mastoras's (2019) systematic review on ERs for educational purposes, the first well-documented ER was developed in Kyoto, Japan in 2007. Despite the numerous studies conducted on this topic since then, it was not until 2016 that these activities gained popularity as a form of social entertainment. Since then, the number of studies exploring ERs has rapidly increased, particularly those focusing on their educational potential (Ouariachi & Wim, 2020). This surge may be driven by the ongoing need to discover innovative educational methods that can facilitate meaningful learning experiences for students (Serdyukov, 2017). Furthermore, prior research (Barata et al., 2013) has shown that participants engaging in gamified learning experiences demonstrated improved attendance rates and enjoyed a higher quality of learning. The growing interest in using ERs for education suggests an increasing desire among educators to understand how they can serve as effective teaching tools. However, despite the apparent benefits offered by ERs, research into their efficacy and utility within education remains limited (Fotaris & Mastoras, 2019).

Most studies on educational ERs belong to the field of science, technology, engineering, and mathematics (STEM), while research on the use of ERs for teaching English is less common. To our knowledge, the first study exploring the application of an educational ER in an ESL classroom was conducted in 2019 by Santamaría and Alcalde. Their results indicate that educational ERs can enhance students' motivation and activate language learning skills. However, their participants were from the Degree in Translation and Modern Languages, making it difficult to compare with the present high school study.

In addition to the previously mentioned research, five additional studies (de Ros Cócera & Polyakova, 2022; Gómez, 2019; Majkić & Olić Ilčešin, 2022; Mishkova-Yotova, 2022; Suntaxi Llumiquinga, 2023) have been conducted to assess the effectiveness of ERs in ESL learning. Among these studies, de Ros Cócera and Polyakova (2022) and Gómez (2019) also developed educational ERs for undergraduates - although the former was a pilot study tested by professors. Additionally, while de Ros Cócera and Polyakova's (2022) focused on education aspects, Gómez's (2019) ER addressed all four language skills (speaking, listening, writing, and reading). Then, Majkić and Olić Ilčešin (2022) and Mishkova-Yotova (2022) tried to determine if Halloween could be used as an effective theme among elementary school students and vocational school students, respectively. Lastly, Suntaxi Llumiquinga's (2023) research explored the implementation of an educational ER aimed at enhancing English oral skills in elementary school students. Notably, to our knowledge, this is the first study examining the impact of using an educational ER within a high school setting.

Additionally, previous studies have focused on ERs related to Halloween or English language skills, but none of them specifically addressed a particular grammatical structure. Santamaría and Alcalde (2019) recommend further research into gamifying activities related to grammar, as it is an aspect of language learning that students tend to dislike. Thus, this study will add to the current body of literature on the utilization of educational ERs in ESL classrooms.

2.2.2 Key features of educational Escape Rooms

This thesis explores the structural aspects of ERs, drawing from systematic reviews on ERs (Fotaris & Mastoras, 2019; Taraldsen et al., 2022; Veldkamp et al., 2020), alongside the strategies proposed by Reuter et al. (2020) regarding the design of educational ERs.

Four research projects cover essential attributes that educational ERs should possess. While certain elements are common across all reviews, specific studies mention exclusive characteristics. This study synthesizes all features and presents them as follows:

- **Game Type:** ER games come in various formats, including those using only physical objects, others combining physical and virtual elements, i.e., hybrid ERs, and

some using only virtual objects. Fotaris and Mastoras (2019) suggest that hybrid ERs may become more prevalent with advancing technology.

- **Location:** Most educational ERs are designed for use in either a classroom or laboratory setting. The former is often chosen due to the traditional learning setting being the classroom, while the latter may be selected based on thematic considerations.

- **Theme:** Most educational ER research focuses on occupations that require a balance of theoretical understanding and practical skills i.e., STEM (Fotaris & Mastoras, 2019). ERs are particularly relevant for these professions as they simulate working under pressure. Some studies also explore communication strategies, leadership, teamwork skills, creative design, information literacy, and English language proficiency (Fotaris & Mastoras, 2019; Veldkamp et al., 2020).

- **Time limit:** According to Fotaris and Mastoras (2019) and Veldkamp et al. (2020), the time limit in most ERs ranges from 15/20 to 120 minutes. The most common time limit is 60 minutes. However, in educational ERs, students are often given a shorter time limit of 30-50 minutes to allow time for briefing and debriefing sessions.

- **Players:** Fotaris and Mastoras' (2019) systematic review shows that most studies focus on higher education students, followed by secondary and primary education students. These findings align with those from Veldkamp et al. (2020).

- **Team size:** According to Fotaris and Mastoras (2019), most studies involve teams of 2 to 14 players, with five being the most common number. Educational ERs typically have larger teams.

- **Puzzles:** ER players must solve puzzles to earn rewards. Veldkamp et al. (2020) categorize them into three types: cognitive, physical, and meta-puzzles.

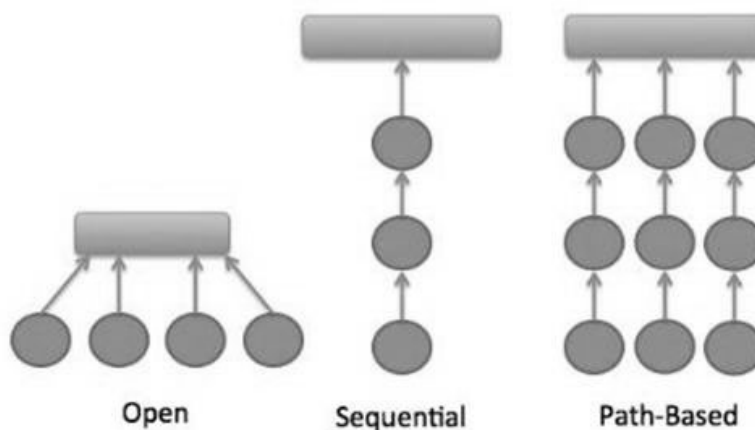
- **Cognitive puzzles:** These puzzles require thinking skills and logic. This type of puzzle is the most prevalent in ERs.
- **Physical puzzles:** This type of puzzle requires players to manipulate objects to solve a challenge, such as unlocking a padlock.
- **Meta-puzzles:** This is the final puzzle of the ER and requires the completion of all previous puzzles to reach it.

It is crucial for ER designers to ensure that puzzles align with the narrative and curriculum of the room, provide an appropriate level of challenge to prevent boredom or frustration among players, and have a resolution involving alphabetical or numerical codes (Reuter et al., 2020; Veldkamp et al., 2020).

- **Puzzle organization:** In an ER, each puzzle forms part of a specific path that determines the organization of the puzzles. According to Nicholson (2015b), there are three categories of paths: open, sequential, and path-based.

Figure 1

Basic forms of puzzle organization



Note. Taken from Peeking behind the locked door: A survey of escape room facilities, by Nicholson S, 2015, <https://scottnicholson.com/pubs/erfacwhite.pdf>

- **Open Path:** This approach presents players with multiple puzzles in the same space, and the solving order is not critical. However, these puzzles' solutions are necessary for decoding the meta-puzzle. Implementing this path type in ERs can increase the challenge for players due to potential difficulties in identifying a starting point (Reuter et al., 2020). This type of path is also referred to as a 'multilinear path' (Reuter et al., 2020).

- **Sequential Path:** In this approach, puzzles are presented sequentially. Solving one puzzle leads players to the next, culminating in the meta-puzzle. Educational ERs that utilize this method facilitate the design and guidance processes for teachers due to the predetermined order of puzzles. Furthermore, a sequential path supports students' learning progression

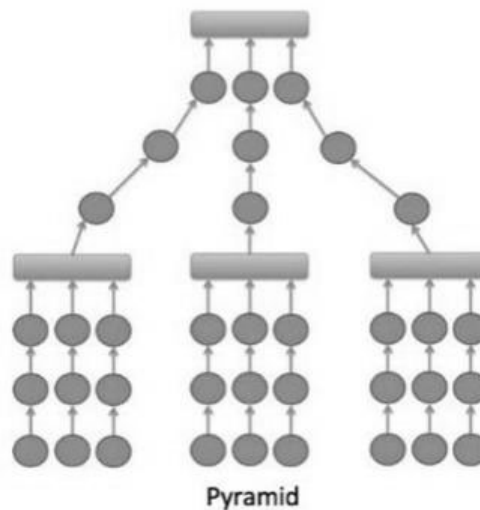
(Veldkamp et al., 2020). This type of path is also known as a 'linear path' (Reuter et al., 2020).

- **Path-Based:** This approach involves multiple paths with individual puzzles, leading to separate outcomes. The culmination of all paths is essential for solving the main meta-puzzle. This method is frequently employed in ERs (Nicholson, 2015b).

- **Hybrid Model:** This model combines different paths within the ER, transitioning between sequential and path-based structures based on player engagement. Alternatively, it can operate in reverse order.

Figure 2

Example of hybrid model structure



Note. Taken from Peeking behind the locked door: A survey of escape room facilities, by Nicholson S, 2015, <https://scottnicholson.com/pubs/erfacwhite.pdf>

- **Game Organization:** Veldkamp et al. (2020) discuss a shift in the organization of ERs. Initially, educational ERs followed a recreational model with only one team to play at a time. However, to reduce time investment and increase room turnover, designers began accommodating multiple teams simultaneously. This change has become common due to its benefits for educators.

Various strategies have been proposed to enable multiple teams to participate simultaneously in an ER. These include all groups sharing the same room, using separate boxes for each group within the room, placing each group in different rooms, and

maximizing the use of the entire building to accommodate more players based on the size of the ER location.

Despite the evolution that ERs have experienced, their different components have maintained the same organization as follows:

1. The game master communicates the rules and storyline of the game to engage and captivate players, fostering their participation. A well-crafted storyline is designed to establish a feeling of difficulty and motivate players to overcome presented obstacles.

2. The students start exploring the ER's setting, examining the available items for solving puzzles. As they progress, they discover clues and understand how the ER operates.

3. Effective collaboration and communication enable players to solve puzzles using critical thinking. When fully immersed in the tasks, participants enter a state of flow within the ER experience.

4. Upon solving the meta-puzzle, a debriefing must occur as outlined below.

- **Teacher's Role:** Teachers play a crucial role in educational ERs by facilitating collaborative learning while allowing students to fully engage in their experiences. However, it is crucial to allow students to fully engage in their learning experiences (Veldkamp et al., 2020).

Teachers are entrusted with various responsibilities within an ER. They must initially ensure that the students understand the game rules and then introduce the narrative of the ER through storytelling or multimedia resources.

According to Veldkamp et al. (2020), teachers are responsible for monitoring, guiding, and providing hints during the activity.

- **Monitoring:** Teachers are responsible for ensuring student safety and compliance with game rules. Veldkamp et al. (2020) suggest that the presence of teachers in the same room does not disrupt students' engagement in the activity.

- **Guiding:** Teachers are required to provide guidance to students only when necessary. Excessive intervention may lead to frustration and decreased engagement in the activity (Veldkamp et al., 2020). This approach enables students to engage in an active learning process (Vörös & Sárközi, 2017; Taraldsen et al., 2022).

- **Providing Hints:** Teachers use various methods to provide hints in ERs, with some providing a limited number of hints and others imposing time penalties for hint requests. In some cases, players must complete an extra activity to earn a hint, which can extend the game's duration (Reuter et al., 2020).

After the ER experience concludes, Veldkamp et al. (2020) and Reuter et al. (2020) propose a follow-up activity called 'debriefing,' varying in duration from 5 to 120 minutes, underscoring its significance. Initially, the game master should allocate time for participants to express their emotions experienced during the ER (e.g., motivation, frustration) and share their perceptions (e.g., difficulty, team size). This feedback is valuable for potential improvements. Moreover, in educational ERs, it is essential to explore the puzzles and their connection with course content knowledge so students can reinforce what they have learned. Finally, feedback on student performance is also crucial.

Lastly, according to Reuter et al. (2020), every educational ER should undergo an assessment with a debate recommended for evaluation since students can discuss their learning and identify areas for improvement. However, these scholars also propose other forms of evaluation to assess the teaching process and determine necessary adaptations and improvements.

In conclusion, ERs have evolved over time and are likely to undergo further changes as a result of technological advancements (Nicholson, 2015b). It is important to consider all the aforementioned factors when creating them to ensure their effectiveness.

2.2.3 Strengths and limitations of educational Escape Rooms

Section 2 provides an extensive analysis of ERs, a phenomenon that has gained considerable popularity in recent decades. This has inspired substantial academic scrutiny of their merits and demerits (e.g. Fotaris & Mastoras, 2019; Nicholson, 2015a; Taraldsen et al., 2022; Veldkamp et al., 2020; Vörös & Sárközi, 2017). This dissertation specifically focuses on studies that explore the use of ERs in an educational context. Hence, this section compiles the strengths and limitations of integrating ERs into learning environments.

ERs provide numerous benefits in the realm of education. According to Nicholson (2015b), teamwork and communication are often cited as the primary learning outcomes. Fotaris and Mastoras (2019) and Veldkamp et al. (2020) also acknowledge that ERs promote teamwork and contribute to elevated levels of enjoyment, engagement, social

interaction, communication, and the application of 21st-century skills such as critical thinking, problem-solving, creativity, and leadership. Moreover, despite the time investment required to design and implement ERs, these activities can be repeatedly utilized with diverse groups (Fotaris & Mastoras, 2019).

However, ERs do pose certain challenges. Despite these, the advantages offered by ERs are argued to outweigh the challenges. Fotaris and Mastoras (2019), in their systematic review of educational ERs, outline several potential drawbacks:

- **Poor evaluation.** The lack of comprehensive evaluation is a common criticism and is cited as a major downside in 33.8% of cases. Many studies depend solely on student surveys and feedback sessions to gather opinions, often without utilizing a control group. Fotaris and Mastoras (2019) and Veldkamp et al. (2020) noted that while some studies incorporated pre- and post-tests, these were deemed insufficient for conducting thorough evaluations.

- **Time commitment.** The time commitment required is a significant concern for some educators, as indicated by 25% of the ERs studied. This stems from the considerations involved in creating an educational ER tailored to the target group's needs and objectives, crafting the game narrative and puzzles, mastering game facilitation, and evaluating the entire process. This can be particularly daunting for those lacking familiarity with the tools and strategies essential for designing an effective ER (Reuter et al., 2020).

- **Small sample size.** The limited number of samples is cited as a drawback by 20.6% of the studied ERs, but Fotaris and Mastoras (2019) did not provide any justification for this perspective from the designers.

- **Limited resources and budget limitations.** Despite being two separate drawbacks, this dissertation posits that the latter likely contributes to the former and thus discusses them in conjunction. Having limited resources, such as only one room, presented a challenge for 14.7% of educational ERs. On the other hand, budget restrictions were cited as a disadvantage by 7.4% of ERs.

- **Unbalanced difficulty.** This issue was encountered in 11.8% of the reviewed ERs, attributed to timing challenges that result in the experience being either too brief or excessively prolonged for participants.

- **Timing issues.** Although consensus on this matter is limited among ERs, 8.8% expressed that preparing the ER setting with only a few minutes can induce stress. Furthermore, in connection to timing issues, the selection of time limits may impact participants' educational experience (Taraldsen et al., 2022).

- **Large group sizes.** Large group sizes are the least frequently cited drawback (7.4%). Nonetheless, respondents who identified it as a concern suggested that this arose from the challenge for game masters to accommodate multiple time slots, resulting in reduced participant immersion in the activity.

In conclusion, ERs have demonstrated numerous benefits for educational settings, including fostering collaboration, enhancing social interactions and communication, and providing opportunities to apply critical thinking and problem-solving abilities. While ERs may present challenges such as limited evaluation methods, time constraints, small sample sizes, and budgetary restrictions, the advantages they offer in educational contexts appear to surpass these limitations. With careful preparation and thoughtful design, ERs hold significant promise for boosting engagement and improving learning outcomes. Continued research and innovation in this field can help overcome obstacles while maximizing the instructional value of ERs.

2.3 The Passive Voice in English vs. in Spanish

Part 3 of the theoretical framework is divided into three sections. Section 2.3.1 introduces the passive voice in English. Section 2.3.2 presents the passive voice in Spanish. Lastly, section 2.3.3 offers a succinct overview of previous studies addressing the difficulties faced by L2 learners in acquiring the English passive voice.

2.3.1 Definition of the passive voice in English

In English, there are two primary types of passive voice: *be*-passives and *get*-passives. This dissertation defines a *be*-passive as a grammatical structure consisting of the auxiliary verb 'be', followed by the past participle form of a lexical verb, and potentially including a *by*-phrase. The structure of *get*-passives mirrors that of *be*-passives, with the auxiliary verb 'get' followed by the past participle form of a lexical verb, and an optional *by*-phrase. Thus, *get*-passives are generally considered a variation of *be*-passives. However, this paper will specifically focus on *be*-passives, as *get*-passives are not part of the Spanish students' curriculum according to the Decreto 39/2022. Por el

que se establece la ordenación y el currículo de la Educación Secundaria Obligatoria en la Comunidad de Castilla y León. 29 de septiembre de 2022. D.O. No. 190.

The passive voice pattern closely resembles the structure of the active voice, yet there are significant differences in the thematic roles assigned to each Determiner Phrase (DP) in the sentence. Pinker et al. (1987) provide examples to illustrate this distinction. In an active voice sentence like (1a), the DP ‘Many people’ functions as the Agent, while the DP ‘the argument’ serves as the Patient. Conversely, in a passive voice construction such as (1b), the DP ‘The argument’, which has a Patient thematic role, becomes focalized and thus appears at the beginning of the sentence.

1a) Many people misunderstand the argument [SVO]

1b) The argument is misunderstood by many people [SV(A)]

By changing the syntactic position of the elements, the Patient achieves a higher degree of prominence. Simultaneously, the Agent of (1a) in its passive counterpart (1b) is no longer a DP but a Prepositional Phrase (PP). Thus, while the Patient acquires informative preponderance at the beginning of the sentence, the Agent is backgrounded (Thompson, 2012). Indeed, the *by*-phrase can be either included or excluded.

According to Israel et al. (2006), the past participle in *be*-passives can be of two types: stative or eventive. The former type describes a state as in (1), where the past participle describes the state of the spinach, rendering the *by*-phrase unnecessary. Conversely, the latter type, as seen in (2), describes an event where the past participle refers to the action of cooking. Therefore, the sentence necessitates the presence of the *by*-phrase. Moreover, passive constructions may omit the *by*-phrase when the Agent is obvious, adds no significant value to the sentence, or is unknown, as seen in (3) where the doer of the action is irrelevant (Minton, 2015).

1. The spinach is cooked

2. The spinach was cooked by Mommy

3. The samples were stored at room temperature for 24 hours

Passive constructions have been the subject of extensive analysis by numerous scholars (e.g., Alexiadou, 2012; Crawford, 2012; Gotowski, 2016; Haegeman, 1985; Kirby, 2010; Pinker et al., 1987), as they are believed to emerge later in language

development compared to other grammatical structures such as active voice sentences. Therefore, if L1 English speakers find the passive voice challenging, it is plausible to assume that L2 English learners will also encounter difficulties with it. To verify this assumption, section 2.3.3 will outline the key findings from previous studies on the challenges encountered by L2 English learners in acquiring proficiency with the English passive voice.

2.3.2 Definition of the passive voice in Spanish

In the present dissertation, it is assumed that in Spanish there are two primary types of passive voice, each with distinct features: periphrastic passive constructions and passive sentences using *se*. The former involves the auxiliary verb 'be' followed by the past participle form of a lexical verb. On the other hand, the latter type is constructed with *se* and a third-person lexical verb (Böhmer et al., 2022).

Apart from these differences, these constructions also differ in their usage. Spanish individuals use periphrastic passive constructions when they want to focus in the process i.e., in the effect that the action/event has in the Patient (Böhmer et al., 2022; Joaquín Montes Instituto Caro Cuervo, 2002). As well as in the English passive voice (see section 2.3.1), this is reflected in the syntactic order of the construction - the Patient appears at the beginning of the sentence leaving the verb phrase on the right, something that is done to topicalize it. Finally, the Agent is placed at the end, partly diminishing its significance as it might appear preceded by *por*, as in example 1, or it can be recovered if it is not present, as it has been previously mentioned or it is already known by everyone.

1. El fuego fue apagado por los bomberos
2. The fire was extinguished by the firefighters

In the case of the passive constructions with *se* and a third-person lexical verb, this type of Spanish passive voice is used when the individual utilizing it wants to focus the result of the verb phrase, not the process. Furthermore, this type is also used when the Patient wants to be presented as novel and relevant. Additionally, the lack of relevance of the Agent is practically total as it does not usually appear and when it does, as in example 3, it is usually preceded by *con* and is an Instrument or Cause, instead of an Agent.

3. Se apagó el fuego con dificultad
4. The fire was extinguished with difficulty

The Spanish passive voice has been extensively studied due to its controversial nature, as this construction bears similarity to other active constructions in Spanish (Carrasco, 1973; Joaquín Montes Instituto Caro Cuervo, 2002; Kock & Gómez Molina, 1985). However, for purpose of this study which considers the existence of periphrastic passives and passives with *se*, it might be plausible to assume that positive crosslinguistic influence could occur. Nevertheless, given that passive constructions are much more frequent in English than in Spanish and particularly because periphrastic passives - which bear resemblance to English passive constructions - are less frequent (Böhmer et al., 2022) than passives with *se*, the present dissertation does not support the belief that crosslinguistic influence benefits English passive voice learning among L2 English learners.

2.3.3 Challenges faced by L2 English learners in English passive voice learning

This section presents previous research in which participants were tasked with various activities to identify difficulties, if any, encountered when learning the English passive voice.

Presumably, due to the extensive research conducted on passive voice acquisition, numerous scholars (e.g., Chairani Damanik, 2014; Ghabanchi, 2006; Hinkel, 2004; Kareema et al., 2020; Rashidi et al., 2020; Scholastica, 2018, among others) have been inclined to investigate specific aspects of this grammatical structure that pose challenges for L2 English learners. Several difficulties associated with learning the passive voice have been identified.

The transformation of an active voice sentence into its passive counterpart often presents challenges for L2 English learners due to the structural complexity of passive constructions. This difficulty may arise from the need to alter the order of specific noun phrases within the sentence. In passive constructions, as discussed in section 2.3.1 and noted by Chairani Damanik (2014) and Rashidi et al. (2020), the Patient assumes a more prominent role and therefore appears at the beginning of the sentence, while the importance of the Agent diminishes, and it is positioned at the end if included. However, beyond structural complexity, difficulties in transforming sentences also stem from inadequate vocabulary knowledge among L2 learners. Despite being able to infer which noun phrase is designated as conducting a particular action or receiving its effects, lacking

comprehension of certain words can make identifying relevant noun phrases for restructuring in passive voice challenging.

Furthermore, when L2 English learners are tasked with changing an active sentence into its passive form, they also need to carefully select the appropriate auxiliary verb that corresponds to the verb tense and number. Due to the movement that the Patient and the Agent undergo, maintaining the subject-verb agreement may be difficult for L2 learners (Rashidi et al., 2020). Indeed, in Chairani Damanik's (2014) study, 75% of the participants stated that the passive counterpart of (1a) is (1b) instead of (1c).

1a) They are playing football

1b) Football are played by them

1c) Football is being played by them

In this instance, the incorrect verb tense was chosen for the lexical verb by the participants. However, our focus will be solely on the auxiliary verb at this time. Due to the plural DP as the Agent and the singular DP as the Patient in (1a), there is a need to change the auxiliary verb in its passive form. Despite this, most participants overlooked subject-verb agreement.

One of the errors made by L2 English learners involves difficulties with verb tenses when changing an active sentence into its passive form (Chairani Damanik, 2014). It is evident that participants lacked a clear understanding of the various tenses such as Present Simple, Past Simple, Present Perfect, Present Continuous, and Future Simple. Consequently, they faced challenges in correctly matching the verb tense in passive sentences. Scholastica (2018) supports this observation by noting that 70% of participants found tense-aspect changes to be the most challenging area irrespective of the presence of time adverbs. Additionally, forming past participle forms for lexical verbs was particularly difficult for them when dealing with irregular verbs.

Moreover, Rashidi et al. (2020) assert that L2 English learners are typically instructed that passive constructions consist of the auxiliary verb 'be', followed by the past participle form of a lexical verb, and the Agent preceded by the preposition 'by'. The fact that the optional nature of the *by*-phrase is not commonly taught results in L2 English learners encountering difficulties with passive voice sentences where the doer of the action is absent.

The pragmatic use of the passive voice in English poses a challenge for L2 English learners. Some academics (Rashidi et al., 2020; Scholastica, 2018) argue that L2 English learners struggle to grasp when to use the passive voice. Surprisingly, none of the 100 participants in Kareema et al.'s (2020) study utilized the passive voice in their writing test, even though they were capable of transforming active sentences into their passive forms. This difficulty may be attributed to insufficient practice as highlighted by several scholars (Kareema et al., 2020; Rashidi et al., 2020) resulting in a slower internalization and application of passive voice usage. Furthermore, limited exposure to passives could contribute to this struggle as they are more commonly used in written contexts than spoken language. Therefore, Scholastica (2018) recommends teaching this grammar structure using authentic materials that create meaningful contexts and enhance opportunities for learning the passive voice.

In summary, the studies examined in this section indicate that L2 English learners encounter a range of difficulties when acquiring the English passive voice. These challenges encompass the complexity of sentence structure, limited vocabulary proficiency, struggles with selecting auxiliary verbs and dealing with tense-aspect changes, as well as uncertainty about how to practically apply the passive voice in English. Additionally, insufficient exposure and practice exacerbate the difficulty of understanding and using the passive voice. To overcome these obstacles, it is critical to offer meaningful contexts and authentic materials for teaching the passive voice to improve practical application opportunities for learners. In general, an inclusive approach that considers structural, lexical, and pragmatic aspects of learning the passive voice is indispensable for supporting L2 learners' mastery of this grammatical structure.

3. RESEARCH QUESTIONS

Considering the advantages of gamification in education, the increasing usage of ERs as educational tools, and the challenges L2 English learners face in grasping the English passive voice (as discussed in Section 2), this study aims to investigate whether an educational ER focusing on *be*-passives enhances motivation and proficiency among L2 English students when confronting this complex grammatical structure.

This study seeks to evaluate the English passive voice proficiency of 42 L2 English learners. This group includes 17 students with higher exposure to English and 25 students primarily exposed to the language during school lessons. Specifically, the

research will examine the participants' understanding of passive voice before and after engaging in an ER activity, seeking to identify any significant differences in their command of this grammatical structure as a result of learning through an ER. This analysis will address the following research questions (RQ):

RQ 1: Do the participants find the use of the English passive voice challenging?

RQ 2: Does participation in an English passive voice-themed ER impact the participants' understanding and usage of this grammatical construction? If so, are there significant differences between the bilingual and the non-bilingual group?

RQ 3: Can the same ER be used to enhance the participants' knowledge about the English passive voice although their English levels slightly differ?

RQ 4: Does participation in an ER influence the participants' motivation?

To our knowledge, most research on educational ERs has primarily focused on domains requiring a balance of theoretical knowledge and practical skills, largely neglecting its potential application in language teaching. Thus, addressing these four research questions will contribute to our understanding of how educational ERs can be utilized in language instruction, particularly for teaching complex grammatical structures like the English passive voice.

4. METHODOLOGY

4.1 Participants

The four research questions outlined in the previous section were addressed through an analysis of data derived from 42 fourth-year Compulsory Secondary Education students from a semi-private school in Castile and Leon (Spain) in which the average socio-economic level of the student body is medium or low. The participants were categorized into two groups: a group of 17 students with a higher level of exposure to English, henceforth referred to as the 'bilingual group' and a group of 25 students with lower exposure, henceforth referred to as the 'non-bilingual group'. Although all 42 participants attended the first session of this study, not all were present for the following sessions. Therefore, data from 9 male and 8 female students in the bilingual group, as well as from 12 male and 7 female students in the non-bilingual group, was included for the analysis in this study. The age range of the participants was between 15 and 16 years.

The inclusion criteria stipulated that participants should possess at least an A2 level of English according to the Common European Framework of Reference for Languages (CEFR), a standard requirement for students in the fourth year of Compulsory Secondary Education. English proficiency was assessed using the Cambridge English Placement Test (CEPT) (Cambridge Assessment English, s. f.). The test results indicated that all participants in the bilingual group either met or exceeded the A2 requirement, with five individuals attaining B1 or B2 levels. Similarly, most participants in the non-bilingual group achieved an A2 level of English, with two students demonstrating a higher proficiency at the B1 level. One student did not meet the minimum English level as he requires curricular adaptation in English. Consequently, this student's results are not included in the present study; however, he participated in the ER experience within groups and contributed beyond grammatical knowledge as this activity also involves other skills such as finding clues. As the other 38 participants met the minimum language requirement, they were included in further procedures.

Despite the participants exhibiting similar levels of English proficiency, the amount of English input they received varied. A specially designed for this study Language Background Questionnaire (LBQ) (Birdsong et al., 2012) (refer to Appendix 1) was utilized to collect information about the participants' exposure to both Spanish and English, as well as the number of weekly hours they were exposed to English. The bilingual participants reported receiving 8 weekly hours of exposure to English through their school subjects and used a more advanced English textbook compared to the non-bilingual participants. In contrast, the non-bilingual participants reported receiving 3 weekly hours of exposure to English. When extrapolated over the 37-week school year, this amounts to a total of 296 hours for the bilingual group and 111 hours for the non-bilingual group. Nonetheless, when it comes to exposure to English in non-academic settings, 47% of the non-bilingual participants reported using English with their friends, while 35% of the bilingual participants engage in similar usage.

4.2 Collection of data

In order to collect the requisite data for this study, four sessions of 50 minutes each were necessitated. During these sessions, the participants engaged in five experimental tasks, as delineated in Table 1. The scheduling of these sessions was largely consistent between both groups, coinciding with their English lesson schedules. Due to the

occurrence of Easter holidays within the data collection period, the procedure was extended over a month.

Table 1

Data elicitation distribution

TASK	SESSION	DATE	
		Bilingual group	Non-bilingual group
CEPT	Session 1	14/3	14/3
LBQ			
Pre-test	Session 2	19/3	15/3
Escape Room	Session 3	4/4	4/4
Participants' questionnaire	Session 4	10/4	10/4
Post-test			

i) In the first session, participants filled out the LBQ and undertook the CEPT to evaluate their English proficiency. This test was selected because its completion time is approximately 30 minutes, which ensures participants' engagement and focus.

ii) During the second session, the participants engaged in activities related to the English passive voice to evaluate their existing knowledge acquired from their third course of Compulsory Secondary Education. Nevertheless, proficiency in the English passive voice varied among participants based on their group. Participants from the bilingual group had been introduced to four types of passives (Present, Past, Future, and Modal passives) during their third course. Conversely, the non-bilingual participants had a more limited understanding, having only studied the Present Simple and Past Simple passives. Due to these disparities in knowledge, although the activities remained consistent across groups, they were adapted to correspond with each group's proficiency level. Out of the 24 non-bilingual students who met the English proficiency requirement, five (three male and two female students) did not attend this session. Thus, a total of 19 non-bilingual participants engaged in all aspects of this study.

In formulating the pre-test activities to fulfill the requirements of this experiment, the difficulties faced by L2 English learners, as identified in prior research (see Section 2.3.3), were taken into account. Consequently, students were asked to:

1. Identify the subject and object in active sentences.
2. Transform active voice sentences into their corresponding passive forms.

3. Choose the appropriate tense for a passive sentence within a passage.
4. Identify and correct errors pertaining to subject-verb agreement, verb tenses, and the past participle form of lexical verbs.
5. Formulate the past participle of both regular and irregular verbs.
6. Specify the circumstances under which the passive voice should be used.

The activities for the bilingual and non-bilingual groups only varied in terms of the passive constructions used. The bilingual group was exposed to a greater variety, while the non-bilingual group focused on passive sentences in the Present Simple and Past Simple tenses.

Considering the assessment criteria, the participants' performance was categorized into five groups: subject-verb agreement (S-V); ii) past participle (PP); iii) verb tense (VT); iv) subject; and v) passive voice usage (PVU). These classifications are linked to common challenges faced by L2 English learners in learning the English passive voice (Chairani Damanik, 2014; Rashidi et al., 2020; Scholastica, 2018). To assess pre-test proficiency, the percentage of errors was calculated based on instances where the participants needed to use each category and the number of mistakes made of each type. Incomplete exercises were also counted as errors since they indicated a lack of knowledge rather than time constraints for completion as all the participants handed in their pre-test before the end of the session.

iii) In the third session, participants partook in an educational ER activity centered around the English passive voice (see section 5).

iv) In the final session, participants were required to complete two tasks: i) a questionnaire dealing with their opinion about the ER and ii) a post-test on the passive voice. On the one hand, the completion of the questionnaire was necessary to obtain data about the participants' motivation, feelings, understanding of the English passive voice, etc.

The final questionnaire (refer to Appendix 2) comprises 19 questions segregated into three parts. At the beginning of the session, the participants were briefed about the characteristics of a Likert scale, where 1 indicated strong disagreement and 5 represented strong agreement. The sections were organized as follows: i) the first section included 17 statements for which participants had to assign a number from 1 to 5; ii) the second part

featured a question requiring the participants to select the boxes that best reflected their feelings during the ER and provide an explanation for their choice; and iii) the last section presented an open question allowing participants to express any additional observations or recommendations regarding the ER experience.

On the other hand, the post-test was crucial to determine whether their participation in the educational ER had enhanced their comprehension of this grammatical construction. Similar to the pre-test, the tasks assigned to the participants during this session were tailored to their proficiency level. Moreover, although focusing on the elements covered in the pre-test, the activities were modified to prevent possible influence from participants' prior responses. Furthermore, the same process used in the pre-test was applied to assess the post- test

5. DIDACTIC PROPOSAL FOR MASTERING THE ENGLISH PASSIVE VOICE THROUGH AN EDUCATIONAL ESCAPE ROOM

This section delineates the design process of an ER, drawing heavily from the prominent characteristics of ERs detailed in Section 2, as well as firsthand experiences of participating in them. The subsequent steps encapsulate the creation process.

5.1 Legal framework

The educational ER is primarily aims to review the concepts of the English passive voice introduced during the third year of Compulsory Secondary Education, serving as an introduction to this intricate grammatical construction for fourth-year students. Nevertheless, in line with the Ley Orgánica 3/2020, de 29 de diciembre, por la que se modifica la Ley Orgánica 2/2006, de 3 de mayo, de Educación (LOMLOE), it is emphasized that a comprehensive approach involving all senses is considered most effective for leaning and skill development rather than focusing solely on isolated content.

5.1.1 Stage aims to which it is intended to contribute

- To develop communicative competence: the students must engage in communication with each other to tackle the challenges presented in the ER, allowing them to improve their English language skills.

- To manage interpersonal relationships in teamwork: in an ER setting, students have the chance to develop their teamwork skills and collaborate efficiently to address challenges.

- To develop self-confidence, personal initiative, and learning to learn: by confronting challenges and resolving problems, students can build confidence in their linguistic capabilities and problem-solving skills, nurturing a proactive approach to learning.

- To develop curiosity, interest, and creativity in learning: ERs are naturally fascinating and thought-provoking, which can enhance students' curiosity and enthusiasm for studying the English passive voice, ultimately encouraging a more innovative approach to learning.

5.1.2 Key competences

This section presents a brief summary, based on the information regulated by the Ley Orgánica 3/2020, de 29 de diciembre, por la que se modifica la Ley Orgánica 2/2006, de 3 de mayo, de Educación (LOMLOE), of the key competences that are promoted in the subject of Foreign Language in the fourth year of Compulsory Secondary Education.

- Key competence 1: To understand and interpret the overall significance and key details of texts communicated clearly and in the standard language.

- Key competence 2: To produce clear and organized texts to express messages creatively and coherently, responding to specific communication purposes.

- Key competence 3: To interact with others with growing independence, employing collaborative approaches and non-digital tools.

- Key competence 4: To mediate in daily scenarios involving diverse languages.

- Key competence 5: To extend and utilize one's individual language skills across different languages.

5.1.3 Assessment criteria

- Key competence 1.

1.1 To extract and analyze the main ideas from texts closely related to personal experiences, using clear language and a variety of media.

1.3 To apply the best strategies and knowledge in each communicative situation to understand the meaning, essential information, and relevant details of texts; infer meanings and interpret non-verbal elements.

- Key competence 2.

2.1 To express simple, structured texts appropriate to the situation in order to describe, narrate, argue and inform using verbal and non-verbal resources.

- Key competence 3.

3.1 To participate actively in interactive situations on relevant topics, demonstrating initiative and empathy while respecting linguistic politeness and the needs of others.

3.2 To manage communication effectively through various strategies and activities such as initiating, maintaining, and terminating conversations; taking and giving the floor; requesting clarifications; comparing, summarizing, collaborating on problem solving, debating, and maintaining challenging situations.

3.3 To demonstrate the ability to communicate effectively in different situations, adjusting and refining the message as needed, while maintaining a collaborative and considerate approach.

- Key competence 4.

4.2 To utilize strategies that facilitate communication, simplify texts and concepts, and are suitable for the context and intended message.

4.3 To utilize the foreign language to effectively navigate various situations and address challenges in the environment.

4.4. To utilize mediation strategies such as interpretation, explanation, summary of essentials as well as the mediator's previous resources while seeking help from others.

- Key competence 5.

5.2 To improve communication and foreign language learning using strategies, knowledge, and peer support.

5.1.4 Achievement indicators

1. The student interprets the information of the puzzles accurately.

2. The student demonstrates comprehension of fundamental concepts of the English passive voice, including the past participle, the agent...

3. The student clearly and succinctly elucidates concepts pertaining to the English passive voice, employing accurate and precise terminology.

4. The student cultivates a constructive and persistent mindset toward grasping the English passive voice, displaying enthusiasm and inquisitiveness for acquiring knowledge and enhancing skills in this domain.

5.1.5 Contents

5. Locating items, individuals, and locations in a spatial context.

- There is /there are.
- Prepositions such as on, under, between, etc.
- Adverbs of place there, here, etc.

6. Requesting and sharing information about everyday topics.

- Interrogatives such as How far, How long, How tall, etc.

7. Providing and requesting guidance, cautions, recommendations, and commands.

- Modal verbs: should/ought to, must/have to.
- Expressions such as you'd better.

8. Offering, agreeing to or declining assistance, proposals, or ideas.

- Modal verbs can, could, shall/will , should/ought to, need/have to.
- Expressions such as Can I help you? Would you like...?, How/what about...? Let's... Why don't we...?

14. Communicating opinions, likelihoods, capabilities, requirements, prohibitions, and advice.

- Expressions such as I think, in my opinion, from my point of view, etc.
- Modal verbs may/might, can/could, must/have to, mustn't, can't, should/ought to.

15. Presenting basic arguments.

- Connectors such as because, but, and, on the one hand, on the other hand, however, therefore, because of, as a result.

17. Expressing hesitancy and skepticism.

- Expressions such as I'm not sure, I don't think so, I'm afraid.
- Adverbs such as unfortunately, unluckily.

18. Conveying confidence, inference, speculation, and commitment.

- Expressions such as I'm sure, I think so.
- Modal verbs such as can, must, can't, will.
- Adverbs such as definitely, obviously, clearly, etc.

19. Rewording, specifying, explaining, and summarizing discourse.

- Expressions such as in other words, that is to say, for example, I mean, in short, in conclusion, etc.
- Passive voice.

5.2 Narrative

At the outset of the session, the game master will articulate the rules (see Appendix 3) to ensure a comprehensive understanding of permissible and impermissible actions among participants. These rules will remain visible throughout the session. Subsequently, students will receive identification cards bearing their names and their respective images as Pixar characters, generated through Artificial Intelligence (AI), specifically using Microsoft Designer Image Generator. These cards will also encompass additional information regarding the spy agency they will be affiliated with (see Appendix 4). Groups were formulated based on the results of the pre-test to ensure a balanced composition. As a result, participants' identification cards will bear one of the four colors: red, blue, yellow, or green. The game master, who will also assume the role of the investigator, will possess a distinct color on her card to differentiate herself amid the activities.

Upon the acquisition of their identification cards, the groups will initiate their entry into the classroom. To immerse them into the ER's narrative, it was deemed optimal to incorporate technology. Consequently, Google Presentations was utilized to craft a

presentation aiming to pique the participants' interest and engage them in the narrative (see Appendix 5). As the participants enter the classroom, they will be greeted by a presentation projected on the whiteboard. The game master will verbally relay the information contained within each slide, informing the participants that she is an operative in a spy agency requiring their assistance in solving a case. A group named the Syntax Reorganizers plans to incite linguistic chaos by altering active and passive sentence constructions utilizing a device referred to as the Grammar Machine. This device has been concealed within the participants' school, who have been allocated 40 minutes to locate it and thwart the Syntax Reorganizers' scheme. The final slide of the presentation will initiate a countdown of 40 minutes, signifying the commencement of the ER and allowing participants to monitor the remaining duration.

In addition to the identification cards, AI has been employed to personalize the participants' experience. Agent Nerea, who features in the slides, will also function as the game master during the ER.

5.3 Location description

To immerse participants effectively in the ER experience, the location should be intrinsically linked to the narrative. Therefore, a classroom setting would be most suitable for this ER. The strategic placement of materials such as posters, folders, and planners around the classroom can simulate the 'provisional office' mentioned in the narrative (refer to Appendix 5). Moreover, conducting the ER in the familiar surroundings of their classroom will likely enhance participants' comfort levels while searching for clues.

Considering the 17 participants in the bilingual group and the 19 in the non-bilingual group, the classroom will be arranged to maximize mobility and establish comfortable workspaces for group activities. Each group will be provided with a desk and chairs for each member, thus ensuring sufficient space for puzzle-solving and ease of movement within the room. Furthermore, each desk will be equipped with team-colored paper, additional sheets of paper, writing materials such as pens and highlighters, and a post-it note (refer to Appendix 10).

In addition, participants will need to locate the Grammar Machine in the school's dining room, which is consistently accessible. After retrieving the device, they can conveniently return to their classroom on the third floor using the stairs. For participants

with physical disabilities, an alternative location closer to the participants' classroom could be considered to ensure ease of access.

5.4 Puzzles

The immersive experience of the ER is enhanced through puzzles that closely align with the narrative. Cognitive and physical puzzles, along with the meta-puzzle, were employed in this study to ensure a diverse range of challenges for participants. Furthermore, the puzzles were arranged in a sequential path to simplify the game master's guidance of the process, considering the large number of players. The following section provides a comprehensive outline of the puzzles that participants must solve to uncover the location of the Grammar Machine, along with all pertinent information required for their resolution.

5.4.1 Puzzle 1. Deciphering the Hieroglyphs

Upon commencement of the 40-minute timer, the game master will distribute to each team a color-coded envelope labeled with the number one (refer to Appendix 6). Each envelope contains an identical clue – a slip of paper bearing the message: "If discovering the Grammar Machine's location is your quest, master hieroglyphics, put your skills to the test". This hint directs the participants towards the location of the next envelope. Specifically, they must locate a color-coded hieroglyph (refer to Appendix 7), which will be concealed in various spots within the classroom.

Upon deciphering the hieroglyphs, the participants must determine their subsequent course of action based on the following clues: active voice, spy agency passive voice, and spy schedule.

5.4.2 Puzzle 2. Unraveling the Passive Voice

Within the classroom, decorated to resemble a provisional office, three posters created with AI, specifically with Microsoft Designer Image Generator, and a spy schedule have been displayed (refer to Appendix 8). The solutions to the hieroglyphics can be found on these items, prompting the participants to inspect them to locate the second puzzle.

Behind the aforementioned items, the participants will find their next envelopes (refer to Appendix 9), each containing another clue: "Seek an official document. The key to your escape lies in its pages." Guided by this hint, the participants must search for an authorized document. At this juncture, the previously mentioned post-it note (refer to

section 5.2 and Appendix 10) becomes relevant. According to the information on the post-it, the participants will infer that the official document is stored in the desk drawers. However, these drawers are locked and there are no keys available. Adjacent to the drawers, there is a box secured with a numerical code and a set of envelopes beneath it (refer to Appendix 11).

Within the third envelopes, participants will discover Puzzle 2, which features a crossword related to the formation of the English passive voice (refer to Appendix 11). The participants are required to infer the words represented by the definitions, and subsequently complete the formula located at the bottom of the provided sheet of paper. The resultant formula should be: $\text{PASSIVE VOICE} = \text{SUBJECT} + \text{BE} + \text{PAST PARTICIPLE} + \text{BY} + \text{AGENT}$. This formula has been selected for this activity as it corresponds with the one presented in the participants' textbooks. Upon completion of this task, they must request the flashcards from the game master (refer to Appendix 12).

5.4.3 Puzzle 3. Obtaining the Official Document

The fourth envelope contains flashcards, each marked with their team's color, which represent the elements of the English passive voice along with certain numbers. Upon arranging the flashcards appropriately—a skill they would have honed in the preceding puzzle—the participants will acquire the numerical code '321' (refer to Appendix 12). Given that the participants would have previously encountered a box with an unfamiliar numerical code, they will now attempt to input this code into the box. Upon successfully unlocking the box, they will procure the key necessary to unlock the drawers and retrieve the official document.

Due to the constraints of classroom space, there is a single desk with drawers, which contains only one key within the box. Consequently, the game master is stationed near the box to collect the key from each team once they have retrieved the official document. The game master will then lock the drawers, replace the key inside the box, and alter the numerical code for the subsequent team.

Upon opening the drawers, participants will discover duplicates of the official document for each team. Alongside the official documents, they will also find an additional sheet containing a series of numbers and letters (refer to Appendix 13). The official document features line numbers on the left and paragraph numbers on the right.

Moreover, the initial sentence, which employs the passive voice, is highlighted. There is also a sentence in bold directing the participants to solve Puzzle 3.

Each group is tasked with identifying and highlighting the passive sentences present in the official document. To facilitate this task, every group is supplied with highlighters and pens. The identified passive sentences, along with their respective line and paragraph numbers, will then be documented as follows:

1. Classified information is contained in this document (1, 1).
2. The Syntax Reorganizers is considered a substantial threat (1, 2).
3. Led by Syntax Serpent, advanced linguistic tactics are employed by the organization to create chaos (2, 2) (2,3).
4. Collaboration is urged to find the location of the Grammar Machine (1, 3).
5. The Grammar Machine is placed in [name of the school] (1, 4).
6. Investigative efforts should be focused on discovering the exact room where it is (3, 4) (4, 4).
7. It is believed that the Syntax Reorganizers have accessed our system (1, 5).
8. This document is classified as Top Secret (1, 6).
9. Unauthorized dissemination is strictly prohibited (1, 6) (2, 6).
10. Caution and discretion must be exercised in handling this information (2, 6) (3,6).

The participants are required to decipher how to complete the additional sheet of paper. The Y-axis features numbers from 1-5, corresponding to the maximum number of lines per paragraph, and the X-axis contains numbers from 1-6, coinciding with the total number of paragraphs in the document. Moreover, the first letter written is 'L', which corresponds to (1, 1) on the table and aligns with the first underlined passive sentence in the text. By highlighting all the passive constructions and matching them with their corresponding line and paragraph, the participants will decipher this message: "Look at the map".

5.4.4 Puzzle 4. Discovering the Grammar Machine's Location

In the final puzzle, participants will uncover the location of the Grammar Machine. Given the clue "Look at the map" provided in Puzzle 3, each group is required to navigate to a large corkboard situated at the back of the class to locate their respective maps. Individual maps for each group are color-coded (refer to Appendix 14). Although

the maps depict identical locations, they are intentionally arranged differently to discourage groups from copying each other's solutions.

Positioned above the map are sentences formulated in the active voice, while below, participants will encounter their grammatical and ungrammatical passive counterparts (refer to Appendices 15-18). Each group will be presented with sentences following a similar structure:

1. A sentence containing a grammatical error related to the past participle form of the lexical verb. Participants must demonstrate familiarity with various verbs' past participle forms (refer to Appendix 15).

2. A sentence featuring a grammatical error related to verb tense. Participants are required to revise the verb tenses in the provided sentence (refer to Appendix 16).

3. A sentence illustrating a grammatical error pertaining to Subject-Verb Agreement. Participants must focus on this part of the sentence (refer to Appendix 17).

4. A sentence containing a grammatical error related to the subject. This necessitates that participants accurately identify the object of the active sentence in order to determine the subject of its passive counterpart (refer to Appendix 18).

In addition to the maps and sentences in active and passive voice, each team will be equipped with color-coordinated drawing pins. These pins are connected to a piece of red thread with another pin at its end (refer to Appendix 19). The task for the participants is to match each active voice sentence with its grammatically correct passive counterpart. Once the four active sentences have been successfully matched with their passive counterparts, they will converge at a single point - the dining room. With this information, the participants are instructed to proceed to the dining room and retrieve the Grammar Machine (refer to Appendix 20). To ensure full engagement in the experience, each team is provided with its own Grammar Machine.

5.5 Debriefing process: reflection and impressions

The debriefing is a key part as claimed by Reuter et al. (2020) and Veldkamp et al. (2020). Once all the groups finish the ER activity, the game master (investigator) dedicates the remaining session time to allow participants to express their feelings and understand how puzzles relate to the English passive voice, which is part of their course

content. This helps reinforce what participants might have learnt during the ER. The connection between the puzzles and the English passive voice is presented below:

- Puzzle 1 is merely an introductory puzzle to help participants get familiar with the ER's flow.

- Puzzle 2 is designed to revise the structure of the passive voice in English. The game master will ask the participants whether any of them could recall the structure of the passive voice in English to assess their knowledge right after the ER. Once the participants answer, the game master repeats its structure.

- The purpose of Puzzle 3 is threefold: first, for participants to strengthen their understanding of the English passive voice structure; secondly, during the debriefing, it aims at revising the passive sentences from the official document with the participants. One highlighted point is that there is only one sentence out of ten containing a *by*-phrase - this exemplifies that using a *by*-phrase is optional since generally the Agent is known or easily recoverable. Finally, this puzzle aims at showing formal written contexts commonly use English passive voice.

- Puzzle 4 intends to demonstrate the participants some challenging aspects of the passive voice in English (see Section 2.3.3), emphasizing the past participle, the verb tense, the selection of the subject of passive sentences and the subject-verb agreement. Then, the game master will show the active sentences with their grammatical and ungrammatical passive counterparts and briefly explain which the grammatical one is and why.

In conclusion, the debriefing following the ER activity is essential in reinforcing the participants' understanding of the English passive voice. It provides an opportunity for them to express their feelings and solidify their learning from the ER. The connection between the puzzles and the English passive voice is effectively established through carefully designed activities, each serving a specific purpose in reinforcing and expanding the participants' knowledge. Additionally, the debriefing allows for a comprehensive review of the passive voice structure and its application in formal written contexts. Overall, the debriefing is instrumental in achieving the educational objectives of the ER and enhancing the participants' grasp of the English passive voice.

6. ANALYSIS AND DISCUSSION OF THE RESULTS

This study examines the difficulties that L2 English learners encounter when using the English passive voice (i.e., RQ 1) in order to develop an educational ER aimed at enhancing their comprehension of this grammatical construction (i.e., RQ 2). Furthermore, it explores the potential of utilizing the same ER activity to improve participants' understanding of the English passive voice, even when they have varying levels of English exposure (i.e., RQ 3). Lastly, one objective of this research is to assess whether this educational approach can positively influence participants' motivation (i.e., RQ 4).

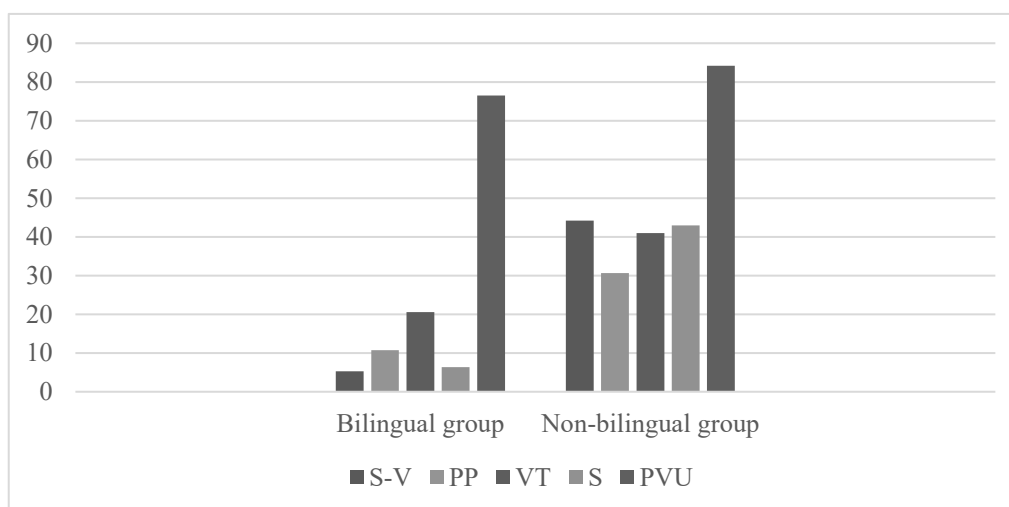
This section will display the outcomes pertaining to each RQ, accompanied by their interpretation and discussion.

RQ 1: Do the participants find the use of the English passive voice challenging?
YES, BOTH GROUPS STRUGGLED WITH THIS GRAMMATICAL CONSTRUCTION, ESPECIALLY WITH ITS USAGE.

In order to answer this research question, the results from the pre-test were categorized into five groups: i) subject-verb agreement (S-V); ii) past participle (PP); iii) verb tense (VT); iv) subject (S); and v) passive voice usage (PVU). These classifications are associated with the common difficulties encountered by L2English learners when mastering the English passive voice (Chairani Damanik, 2014; Rashidi et al., 2020; Scholastica, 2018).

Figure 3

Participant's pre-test mistakes (%)



As illustrated in Figure 3, the use of the English passive presents challenges for both, bilingual and non-bilingual participants. Notably, mastering the usage of the passive voice appears to be particularly daunting for both groups. Amongst the bilingual group, 29% did not respond to questions about when the passive voice should be used or its prevalence in diverse types of texts. Meanwhile, most participants who answered these questions simply indicated that the passive voice is employed when a speaker wishes for an object from an active sentence to become the subject of a passive sentence. In contrast, within the non-bilingual group, a higher percentage (56%) did not answer such questions – half were unaware of the passive voice usage. Furthermore, among those who did respond within this group, their answers mirrored those provided by bilingual participants. This similarity might stem from the type of exercises completed during their academic journey related to transforming isolated active sentences into their passive counterparts without context as discussed by Kareema et al. (2020). This could explain why their research found that although no participant utilized any positive sentences in writing samples they provided, they were able to transform active constructions into passives proficiently.

The remaining parts of the categories command differ between the two groups, as shown in Figure 3. However, it is noteworthy that the non-bilingual group made more errors across all categories.

The bilingual participants appeared to encounter some difficulty with verb tenses, particularly when selecting from pairs of verb tenses provided in a text. However, they did not consistently make this type of error in tasks requiring the selection of the correct tense. Interestingly, when asked to transform active sentences into their passive counterparts, they made hardly any mistakes related to verb tense.

The results are different for the non-bilingual group as they made twice as many mistakes as the bilingual group, even though they were only asked about Present Simple and Past Simple passives. Meanwhile, the bilingual group had to answer questions about more than two verb tenses. The non-bilingual participants faced difficulties in activities requiring them to choose the appropriate verb tense, which is consistent with findings by Chairani Damanik (2014) and Scholastica (2018) (see Section 2.3.3).

Considering the past participle (PP), the participants were required to write the past participle form of 16 lexical verbs; select the appropriate PP when converting active

sentences into their passive counterparts; and correct sentences in which the PP was incorrect. While the bilingual participants encountered little difficulty completing these tasks, the non-bilingual participants made more than twice as many mistakes as the bilingual group. Specifically, they struggled with irregular verbs, aligning with findings from other authors (Scholastica, 2018).

Finally, both groups made mistakes in the remaining categories (i.e., subject-verb agreement and subject), although there is a significant difference between each group. The bilingual participants accurately identified the object of the active sentence and were able to choose the correct subject for the passive sentence. They also understood the required agreement between the subject and the verb. However, for the non-bilingual participants, it was different – they lacked command over both selecting a subject for the passive sentence and ensuring proper agreement between the subject and the verb.

Below, the answer to RQ 2 considering whether the participation in an educational ER focused on the English passive voice impacts their understanding and application of this grammatical construction will be presented.

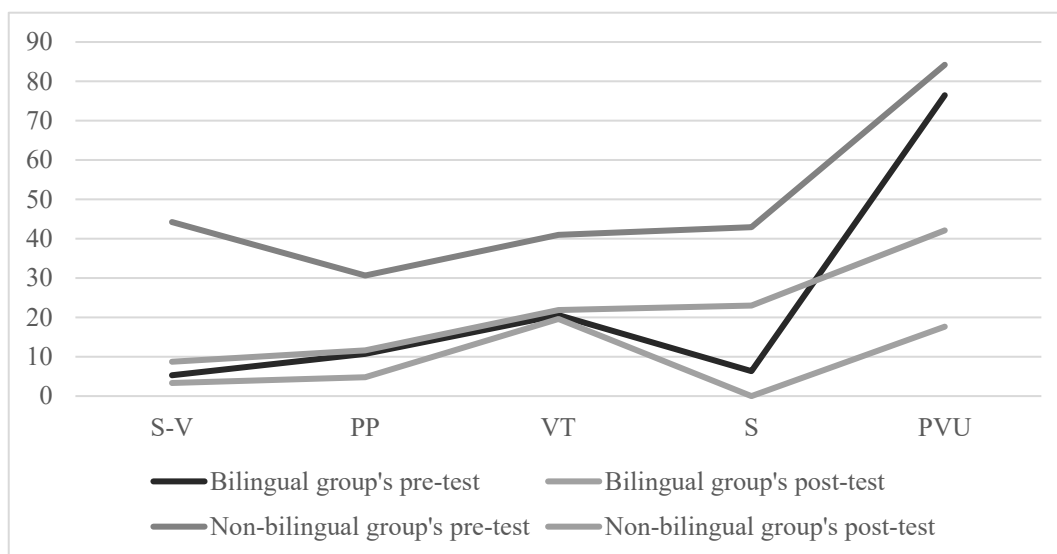
RQ 2: Does participation in an English passive voice-themed ER impact the participants' understanding and usage of this grammatical construction? If so, are there significant differences between the bilingual and the non-bilingual group? YES, BOTH GROUPS ENHANCED THEIR COMPREHENSION AND USAGE OF THE ENGLISH PASSIVE VOICE IN EVERY CATEGORY, BUT NON-BILINGUAL PARTICIPANTS' PROGRESS WAS MORE SIGNIFICANT.

The participants were instructed to complete a post-test to assess the influence of the ER on their proficiency in using the English passive voice. The activities in this test covered similar content as the pre-test, but some tasks were modified to prevent any potential influence from the previous test.

Figure 4 shows the development in the errors made by the participants from the pre-test and the post-test. The darkest lines indicate the percentage of mistakes from the pre-test, while the lighter lines show the average of post-test errors from each group. As illustrated, both groups demonstrated a reduction in mistakes during the post-test, indicating that the ER has a positive impact on their comprehension and usage of the English passive voice.

Figure 4

Evolution of the participants' mistakes (%)



Despite the clear advancements made by both groups, the non-bilingual group showed particularly impressive improvement, with a 50% reduction in errors across various categories. This group ultimately reached a level similar to that of the bilingual group in relation to verb tenses. Furthermore, the non-bilingual participants nearly matched the pre-test results of the bilingual group in terms of subject-verb agreement and past participle usage. However, it was their utilization of passive voice where this group demonstrated their most considerable progress compared to their pre-test performance.

Similarly, the bilingual participants also displayed substantial improvement, with over a 50% reduction in mistakes related to the English passive voice usage, what aligns with the non-bilinguals' results. Moreover, they also became slightly better in the subject-verb agreement category but made little progress in the verb tense one. Finally, they improved in the subject category in which they could make no mistakes. Nonetheless, it is relevant to note that the slight progress of the bilingual group in most categories might be attributed to their limited potential for improvement.

In conclusion, both the bilingual and non-bilingual groups showed significant improvement in their comprehension and use of the English passive voice after participating in the educational ER. The non-bilingual group demonstrated particularly impressive progress, with a 50% reduction in errors across various categories, ultimately reaching a level similar to that of the bilingual group in relation to verb tenses. On the other hand, the bilingual participants also displayed substantial improvement, with over a 50% reduction in mistakes related to passive voice usage. Despite the slight progress of

the bilingual group in some categories, the results indicate the positive impact of the ER on their language skills. Overall, the study suggests that ERs can be an effective tool for enhancing passive voice usage and overall English language skills in both bilingual and non-bilingual individuals.

The answer to RQ 3 will be addressed by examining the feasibility of utilizing the same educational ER for both groups.

RQ 3: Can the same ER be used to enhance the participants’ knowledge about the English passive voice although their English levels slightly differ? YES, SINCE BOTH GROUPS IMPROVED, BUT ADDING SLIGHT DIFFERENCES.

Figure 4 illustrates that both bilingual and non-bilingual participants showed enhanced comprehension and usage of the English passive voice after engaging in the ER activity. This suggests that the ER could be beneficial for students at varying levels of English proficiency. However, final questionnaire responses from the participants provided vital insights to address this research question.

Table 2

Participants’ beliefs about the ER’s difficulty

Statement	Bilingual group	Non-bilingual group
6. I would rate the difficulty of the ER as...	2.47	2.32
17. I could have completed the ER without the support and guidance from the game master.	3.24	2.05

Both sets of participants rated the difficulty of the ER at below three, indicating that they did not receive it as challenging. There was almost no distinction between the bilingual and the non-bilingual groups in relation to statement 6, but it was the non-bilingual group who perceived the ER to be less difficult. This is intriguing given that their understanding of the passive voice in English was inferior to that of the bilinguals.

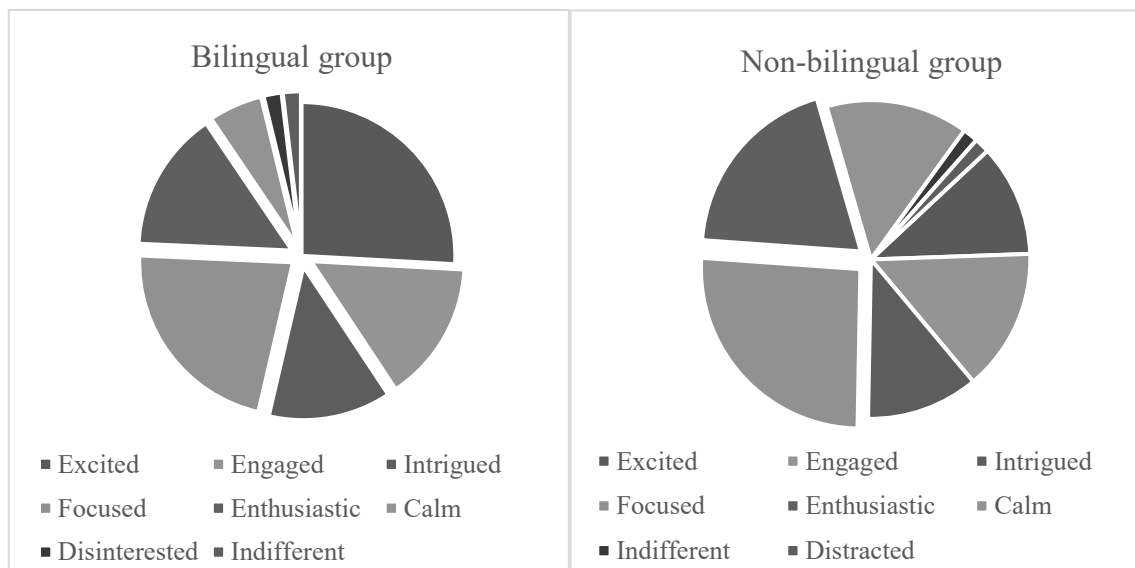
However, a notable difference is observed in statement 17. The bilingual participants expressed confidence in their ability to complete the ER without assistance of the game master and were more assured about the grammatical construction under analysis. In fact, 75% of the bilingual teams participating in the ER activity completed it within 20 minutes. On the other hand, as shown in Table 2, non-bilingual participants were less certain about solving ER independently and relied on guidance from the game

master. Despite receiving hints from the game master, all non-bilingual teams required the full allotted 40 minutes to complete the ER.

In addition to these statements, participants were also required to choose the descriptors that most accurately represented their emotions during the ER, and to justify their selection. The choices included positive adjectives such as *excited*, *engaged*, *intrigued*, *focused*, and *enthusiastic* as well as their opposite such as *calm*, *bored*, *disinterest*, *distracted*, and *indifferent*. The participants had the freedom to select as many descriptors as they felt applicable since their feelings might have varied throughout the entire ER experience.

Figures 5 and 6

Adjectives linked to the participants' emotions in the ER



Figures 5 and 6 display the proportion of participants who chose the aforementioned descriptors. The data illustrates that out of all available adjectives, 63% are classified as positive while 37% are categorized as negative. However, respondents who selected the adjective calm provided an explanation for feeling so and described it in a positive light, e.g., *I was calm because I could solve the ER* or *I was calm because I do not consider the ER a reason to stress out*. Consequently, it can be asserted that 75% of the chosen adjectives were linked with positive attitudes.

In the instance of the bilingual group, the graph indicated that *excited* was the most commonly chosen adjective, followed by *focused*. Conversely, in the non-bilingual group, *focused* was favored, with *enthusiastic* coming next. This illustrates that educational ERs

serve as effective teaching aids by enabling students to enjoy learning while maintaining essential focus.

Considering the negative adjectives chosen, *disinterested* and *indifferent* were selected by one participant. This individual expressed dissatisfaction with their ER experience due to a lack of positive interaction with their group members rather than by the ER itself. Within the non-bilingual group, a participant described feeling *distracted* because they found themselves frequently observing other groups instead of focusing on their own work. Additionally, the participant who chose *indifferent* did not provide an explanation for this sentiment. Nonetheless, these examples might demonstrate that even though ERs offer opportunities for collaboration and group learning opportunities, achieving these goals can be challenging if students are not receptive.

In conclusion, the data from the participants' choice of descriptors during the educational ERs indicates a predominantly positive emotional experience. The majority of participants expressed feelings of excitement, engagement, and focus, whereas the few instances of negative descriptors chosen were mostly related to external factors such as dissatisfaction with group interaction or being distracted by observing other groups. Overall, the data reflects the potential of educational ERs in creating a positive and engaging learning environment, especially when supported by effective group dynamics and participant receptiveness.

Lastly, participants were encouraged to share any other information they deemed significant for the investigator in the final section of the questionnaire. This component was crucial for gathering pertinent data to address RQ 3.

Among the 19 non-bilingual participants who participated in the ER activity, 16% indicated a desire for more challenging puzzles in both quantity and difficulty. The remaining non-bilingual participants either had no feedback to provide or expressed satisfaction with the experience.

In the instance of the bilingual group, 71% of the participants indicated a desire for the ER to be more challenging. They not only expressed this sentiment but also detailed specific ways in which they would enhance the difficulty of the experience. The majority favored incorporating additional puzzles or increasing their complexity, while others proposed reducing the number of hints provided by the game master, placing the

clues in more difficult locations, and utilizing multiple rooms throughout the ER rather than solely at its conclusion.

Overall, while non-bilingual participants generally expressed satisfaction with the experience, most of the bilingual participants sought an increase in difficulty and offered specific suggestions for enhancing the experience. Hence, the study underscores the potential of ER activities as a tool for language learning, particularly in enhancing comprehension and usage of complex grammatical structures like the English passive voice. However, future iterations of the ER could consider the differing perspectives of bilingual and non-bilingual participants to optimize the learning outcomes and overall experience.

As for the influence of an educational Escape Room on the participants' motivation will be the issue discussed in RQ 4.

RQ 4: Does participation in an ER influence the participants' motivation? YES, SPECIFICALLY THE BILINGUAL GROUP SHOWED ENHANCED MOTIVATION DURING THE ER COMPARED TO THE NON-BILINGUAL GROUP.

The results obtained from the final questionnaire have been analyzed in order to respond to this research question. The average rate of the participants' experience in the ER 4.47 in the bilingual group and 4.32 in the non-bilingual group, considering that 5 was the highest and 1 the lowest, both groups enjoyed participating in the ER. In fact, both groups had very similar beliefs about the ER, this is why Table 3 only exposes the results in which there was a difference of 1 point among both groups.

Table 3

Participants' beliefs about their motivation

Statement	Bilingual group	Non-bilingual group
9. My motivation to understand the passive voice was positively influenced by my experience in the ER.	3.94	2.74
11. The variety of activities within the ER kept me engaged and motivated to explore different aspects of the passive voice.	3.65	2.63

As Table 3 presents, the statements related to the participants' motivation in which each group possessed more different opinions were in statements 9 and 11. The data from statement 9 indicates that the bilingual participants' motivation was enhanced in comparison to the non-bilingual group. The higher degree of motivation could also be associated to the advanced familiarity with the English passive voice that this group possessed prior to the ER i.e., they were more familiarized with the grammatical construction and the ER helped them and motivated them to learn more about it.

Considering statement 11, it seems that the bilingual group was more engaged and motivated during the ER experience due to the variety of puzzles about the English passive voice they had to solve in order to complete the ER activity. The bilingual participants might be more open-minded to exploring distinct aspects of the game as they were more confident with the passive voice, what allowed them to get the most out of the experience. On the other hand, the non-bilingual group might not have been as receptive as the bilingual group due to their scarce knowledge about the grammatical construction under analysis.

In conclusion, the analysis of the final questionnaire revealed that the bilingual group showed enhanced motivation and engagement during the ER experience compared to the non-bilingual group. This might be attributed to their advanced familiarity with the English passive voice, which allowed them to fully immerse themselves in the various puzzles and challenges related to this grammatical construction. The non-bilingual group, on the other hand, seemed to have been less receptive and engaged, likely due to their limited knowledge of the passive voice. These findings suggest that language proficiency and familiarity with specific grammatical concepts can significantly influence participants' experiences in educational ERs apart from the ER itself.

6. CONCLUSION

The current study's results contribute to the existing body of literature on the effectiveness of educational ERs in ESL classrooms, particularly among high school students who are tackling complex grammatical structures such as the English passive voice. The study assesses participants' understanding and application of the passive voice in English before and after engaging in the ER activity, with a focus on: i) identifying the challenges posed by the passive voice for L2 English learners; ii) exploring ERs as effective tools for teaching this grammatical construction; iii) examining how fourth-year

students with varying levels of exposure to English respond to using the same ER; and iv) evaluating ERs' ability to motivate students.

The results show that the use of English passive poses challenges for both bilingual and non-bilingual participants. Both groups struggle with mastering the usage of the passive voice, but non-bilingual participants appear to face more difficulties overall including verb tense errors and past participles. Bilingual participants struggle with verb tenses, particularly when selecting from pairs of verb tenses provided in a text but make hardly any mistakes related to verb tense when transforming active sentences into their passive counterparts. The groups also differ in their ability to handle past participles, subject-verb agreement, and selecting the correct subject for the passive sentence.

At the same time, the participants completed a post-test to assess the influence of the ER on their proficiency in using the English passive voice. Both groups showed significant improvement, with an over 50% reduction in mistakes related to passive voice usage. The non-bilingual group demonstrated particularly impressive progress, reaching a level similar to that of the bilingual group in relation to verb tenses. In other areas, both groups enhanced their understanding of using the English passive voice; however, it was evident that the improvement by the non-bilingual group was even more significant due to its greater potential for progress.

Additionally, both bilingual and non-bilingual participants showed improved understanding and use of the English passive voice through the ER activity, indicating its benefits for students at different language proficiency levels. Questionnaire responses revealed that both groups found the ER less challenging, with non-bilinguals perceiving it as easier. Bilinguals expressed more confidence in completing the activity independently and were quicker to finish, while non-bilinguals relied on guidance from the game master and took longer to complete it. Moreover, the data showed that 63% of adjectives chosen during the ER experience were positive, indicating a predominantly positive emotional response. In both groups, some participants expressed dissatisfaction due to factors such as lack of interaction or distractions from observing other groups. Furthermore, in terms of feedback for improvement, 16% of non-bilingual participants wanted more challenging puzzles while 71% of bilingual participants sought a greater challenge and suggested specific ways to achieve this. Overall, this study highlights ER activities' potential for language learning but emphasizes considering different perspectives for optimizing learning outcomes and participant experience.

Lastly, the analysis of the final questionnaire revealed that the bilingual group showed enhanced motivation and engagement during the ER experience compared to the non-bilingual group. This might be attributed to their advanced familiarity with the English passive voice, which allowed them to fully immerse themselves in the various puzzles and challenges related to this grammatical construction. The non-bilingual group, on the other hand, seemed to have been less receptive and engaged, likely due to their limited knowledge of the passive voice. These findings suggest that language proficiency and familiarity with specific grammatical constructions can significantly influence participants' experiences in educational ER activities.

In conclusion, the study has demonstrated the effectiveness of educational ER activities in improving high school students' understanding and application of the English passive voice, but also emphasize the importance of considering participants' language proficiency and familiarity with specific grammatical constructions to optimize learning outcomes and participant experience. These insights can inform educators and curriculum developers in designing effective and inclusive language learning activities for diverse groups of students.

Further research into the effectiveness of educational ERs in teaching intricate grammatical constructions such as the English passive voice could also consider implementing pre- and post-writing tasks to assess whether the ER enhances the participants' practical application of this construction, rather than just their theoretical understanding and knowledge of how and when to use it in writing. Additionally, designing extra puzzles for proficient English groups is another aspect to consider to fully utilize the effectiveness of the ER.

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8. APPENDICES

Appendix 1. Language Background Questionnaire.

TFM Investigator: Nerea Serrano García
nerea.serrano@estudiantes.uva.es



TFM Tutor: Diana Carrascal Tris
diana.carrascal@uva.es

University of Valladolid (Spain)

Universidad de Valladolid

Language Background Questionnaire¹

We would like to ask you to help us by answering the following questions concerning your language history, use, attitudes, and proficiency. The survey consists of 20 questions and will take less than 15 minutes to complete. This is not a test, so there are no right or wrong answers. Please answer every question and give your answers sincerely. Thank you very much for your help.

I. Biographical Information

Name _____ Today's Date ____ / ____ / ____

Age _____ Male / Female

Current place of residence: city/state _____ country _____

Birthplace: city/state _____ country _____

Parent's highest level of formal Less than high school High school College
 College (B.A., B.S.) Graduate school Masters
 PhD/MD/JD Other: _____

II. Parents' Information

1.1. **Mother's** native language: _____

1.2 Mother's birthplace: _____

2.1. **Father's** native language: _____

2.2. Father's birthplace: _____

3. **Other member(s)** of the family who live or who have lived with you:

3.1. Member 1

Relationship with you: _____

Birthplace: _____

3.2. Member 2

Relationship with you: _____

Birthplace: _____

III. Language history

In this section, we would like you to answer some factual questions about your language history.

4. At what age were you **exposed** to the following languages for the first time?

Spanish

Since birth 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

English

Since birth 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

5. At what age did you **start speaking** in the following languages?

Spanish

As early as I can remember 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

English

As early as I can remember 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

6. How many hours of **lessons** do you have in the following languages per week?

Spanish

Since birth 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

English

Since birth 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

7. How many years have you spent in a **country/region** where the following languages are spoken?

Spanish

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

English

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

8. How many years have you spent in a **family** where the following languages are spoken?

Spanish

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

English

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

9. How **comfortable** do you think you feel when speaking the following languages? (0= very uncomfortable 10= very comfortable)

Spanish

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

English

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

IV. Language use

In this section, we would like you to answer some questions about your language use. Total use for all languages in a given question should equal 100%.

10. In an average week, what percentage of the time do you use the following languages **with friends**

Spanish

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

English

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Other languages

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Please, indicate the other language(s): _____

11. In an average week, what percentage of the time do you use the following languages **with family**?

Spanish

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

English

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Other languages

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Please, indicate the other language(s): _____

12. In an average week, what percentage of the time do you use the following languages **at school**?

Spanish

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

English

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Other languages

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Please, indicate the other language(s): _____

V. Language proficiency

In this section, we would like you to rate your language proficiency.

0 = I disagree

5 = I agree

13. a. How well do you speak **Spanish**?

0 1 2 3 4 5

b. How well do you speak **English**?

0 1 2 3 4 5

14. a. How well do you understand **Spanish**?

0 1 2 3 4 5

b. How well do you understand **English**?

0 1 2 3 4 5

15. a. How well do you read **Spanish**?

0 1 2 3 4 5

b. How well do you read **English**?

0 1 2 3 4 5

16. a. How well do you write **Spanish**?

0 1 2 3 4 5

b. How well do you write **English**?

0 1 2 3 4 5

¹The following questionnaire is an adaptation from Birdsong, Gertken & Amengual: Bilingual Language Profile: An Easy-to-Use Instrument to Assess Bilingualism.

VI. Language attitudes

In this section, we would like you to respond to statements about your language attitudes

- | | 0 = I disagree | | | | | 5 = I agree | | | | | |
|--|----------------|--------------------------|---|--------------------------|---|--------------------------|---|--------------------------|---|--------------------------|---|
| 17. a. I feel like myself when I speak Spanish. | 0 | <input type="checkbox"/> | 1 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 5 |
| b. I feel like myself when I speak English. | 0 | <input type="checkbox"/> | 1 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 5 |
| 18. a. I identify with a Spanish culture. | 0 | <input type="checkbox"/> | 1 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 5 |
| b. I identify with an English culture. | 0 | <input type="checkbox"/> | 1 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 5 |
| 19. a. It is important to me to use (or eventually use) Spanish like a native speaker. | 0 | <input type="checkbox"/> | 1 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 5 |
| b. It is important to me to use (or eventually use) English like a native speaker. | 0 | <input type="checkbox"/> | 1 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 5 |
| 20. a. I want others to think I am a native speaker of Spanish. | 0 | <input type="checkbox"/> | 1 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 5 |
| b. I want others to think I am a native speaker of English. | 0 | <input type="checkbox"/> | 1 | <input type="checkbox"/> | 2 | <input type="checkbox"/> | 3 | <input type="checkbox"/> | 4 | <input type="checkbox"/> | 5 |

If you have any other remarks about your child's language history that you think maybe important for his/her ability to use these languages, please feel free to write them here

Appendix 2. Final questionnaire.

TFM Investigator: Nerea Serrano García
nerea.serrano@estudiantes.uva.es
 TFM Tutor: Diana Carrascal Tris
diana.carrascal@uva.es



Universidad de Valladolid

University of Valladolid (Spain)

Final Questionnaire

We would like to ask you to help us by answering the following questions about the passive voice Escape Room (ER). The survey consists of 19 questions and will take less than 15 minutes to complete. This is not a test, so there are no right or wrong answers. Please answer every question and give your answers sincerely. Thank you very much for your help.

5 (highest) ————— 1 (lowest)

	5	4	3	2	1
1. I would rate my experience in the passive voice ER as...					
2. My understanding of passive voice usage has improved after participating in the ER.					
3. The level of enjoyment I experienced during the ER was...					
4. The teamwork during the ER significantly enhanced my experience.					
5. I consider the passive voice ER to be an effective way to learn/revise about this topic.					
6. I would rate the difficulty of the ER as...					
7. I believe the ER helped me remember key concepts about the passive voice.					
8. I would recommend this ER to other students looking to improve their understanding of passive voice.					
9. My motivation to understand the passive voice was positively influenced by my experience in the ER.					
10. The interactive nature of the ER made learning about passive voice more engaging than traditional classroom activities.					
11. The variety of activities within the ER kept me engaged and motivated to explore different aspects of the passive voice.					
12. I found the puzzles and challenges in the ER to be well-designed for reinforcing the passive voice.					
13. I believe the ER experience will have a lasting impact on my ability to use passive voice effectively in writing.					
14. I feel more confident in my ability to identify and use passive constructions after completing the ER.					
15. I feel that I actively participated and engaged with the material during the passive voice ER.					
16. I felt uncomfortable with the presence of the game master in the classroom during the ER activity.					
17. I could have completed the ER without the support and guidance from the game master.					

18. During the ER, I was... (Fill in the boxes that best represent how you felt during the ER)

- | | |
|---------------------------------------|--|
| <input type="checkbox"/> Excited | <input type="checkbox"/> Calm |
| <input type="checkbox"/> Engaged | <input type="checkbox"/> Disinterested |
| <input type="checkbox"/> Intrigued | <input type="checkbox"/> Bored |
| <input type="checkbox"/> Focused | <input type="checkbox"/> Distracted |
| <input type="checkbox"/> Enthusiastic | <input type="checkbox"/> Indifferent |

Explain briefly why you felt the way you did:

19. Please, write down any additional insights or suggestions you have regarding the Escape Room experience to help us enhance it further.

GAME RULES

It is obligatory to comply with the following rules during the Escape Room.

Do not talk with other groups



Do not touch the other group's materials

Respect the time limit



No use of electronic devices

Respect classroom furniture and equipment



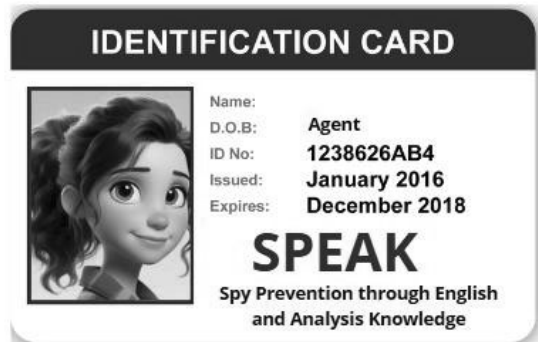
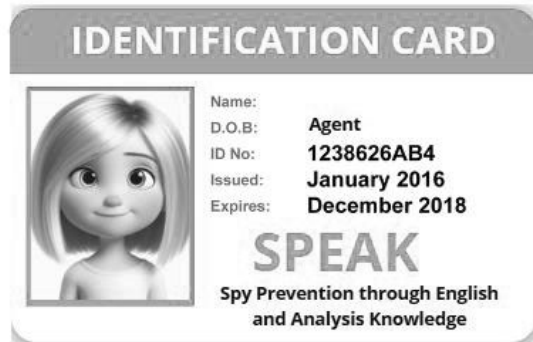
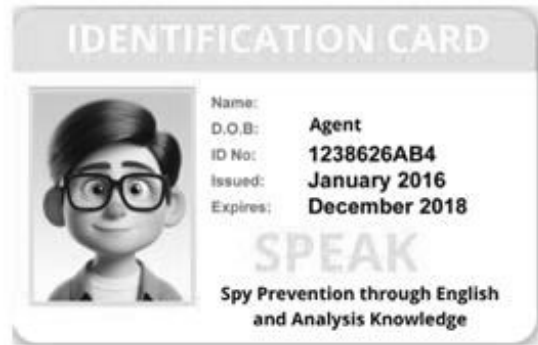
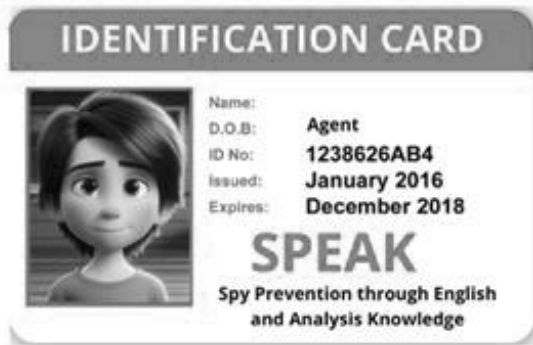
Follow the teacher's instructions

Leave the room only when necessary.



Use a moderate tone of voice

Appendix 4. Example of identification cards.

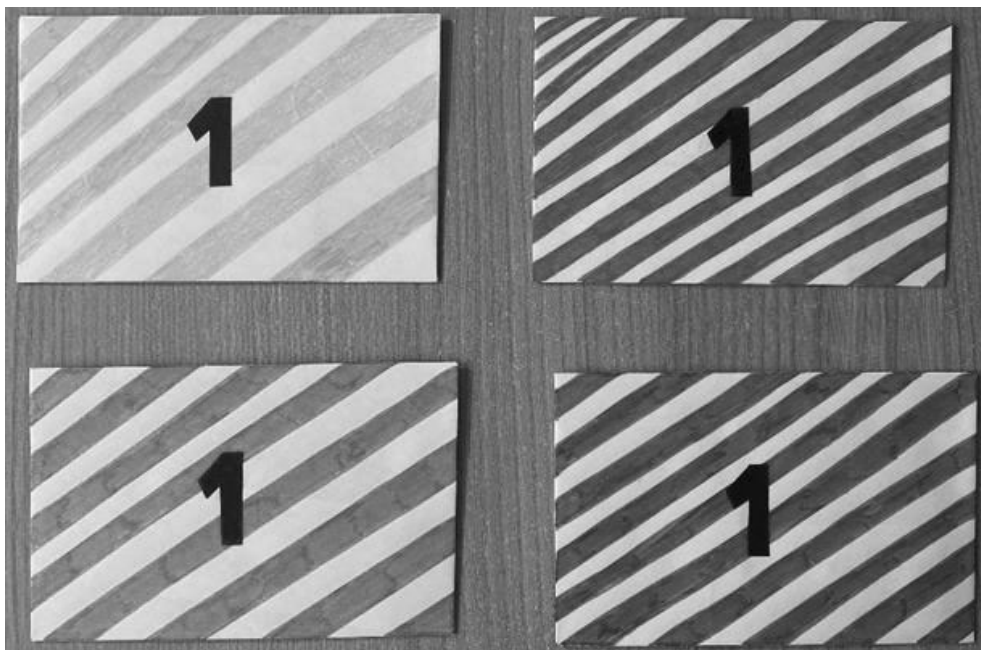


Appendix 5. Narrative through Google Presentations.

https://docs.google.com/presentation/d/17aCcas3O6uEZG77xwAxncImPndNnbZpQNmWXZmu__XQ/edit?usp=sharing






Appendix 6. Envelope 1 with clue 1.






**"If discovering the Grammar Machine's location is your quest,
Master hieroglyphics, put your skills to the test." ①**




Appendix 7. Hieroglyphics and solutions.

A +  **- D +**  **- E + VE**
V + O +  **- R**




ACTIVE
VOICE

S + P +  **- KE**
 **- P + N +**  **- D + Y**

SPY AGENCY

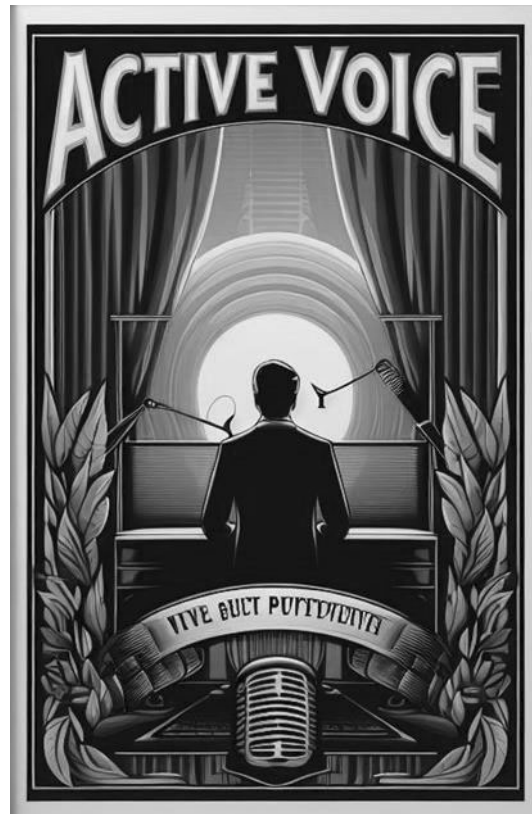
 **- GE + 2 x S +**  **- DETECT**
V + O +  **- R**

PASSIVE
VOICE

S + P +  **- KE**
S +  **- ESE +**  **- C + U + LE**

SPY
SCHEDULE

Appendix 8. Posters and schedule.



SPY SCHEDULE

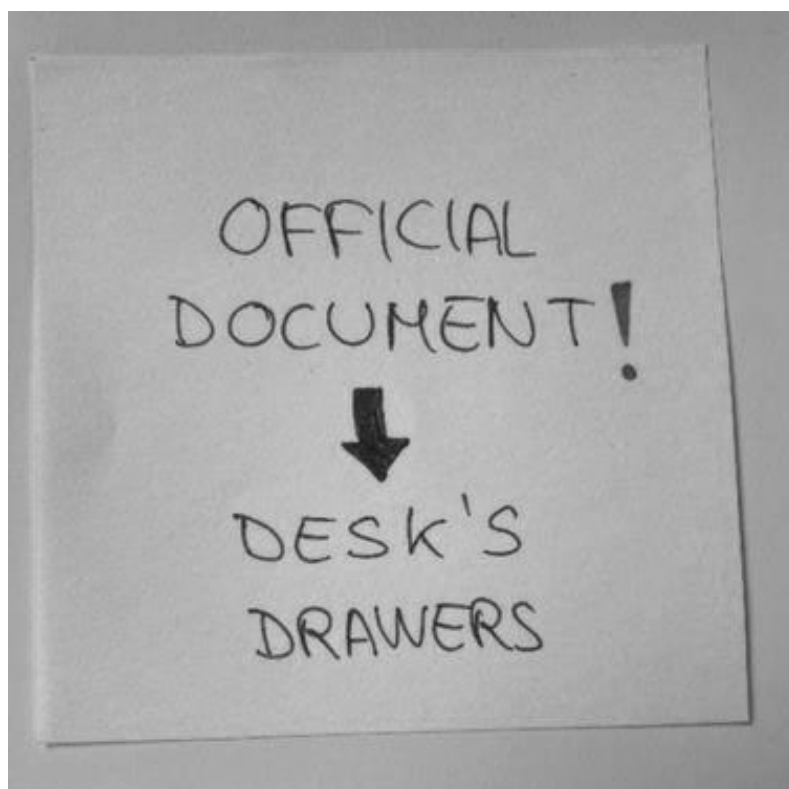
	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
7:00-7:30				INTELLIGENCE GATHERING	
7:30-8:00		INTERROGATIONS OF PERSONS OF INTEREST			COMBAT PRACTICES
8:00-8:30	EMERGING THREAT ANALYSIS				
8:30-9:00			INTERVIEWS WITH CONFIDENTIAL SOURCES		
9:00-9:30	INTERVIEWS WITH CONFIDENTIAL SOURCES	DAILY OBJECTIVES DISCUSSION		INTERROGATIONS OF PERSONS OF INTEREST	
9:30-10:00		MISSION AND TASK ASSIGNMENTS			PLANNING FOR FUTURE OPERATIONS
10:00-10:30					
10:30-11:00					
11:00-11:30	TIME FOR MEAL AND REST	TIME FOR MEAL AND REST	TIME FOR MEAL AND REST	TIME FOR MEAL AND REST	TIME FOR MEAL AND REST
11:30-12:00					

Appendix 9. Envelope 2 with clue 2.

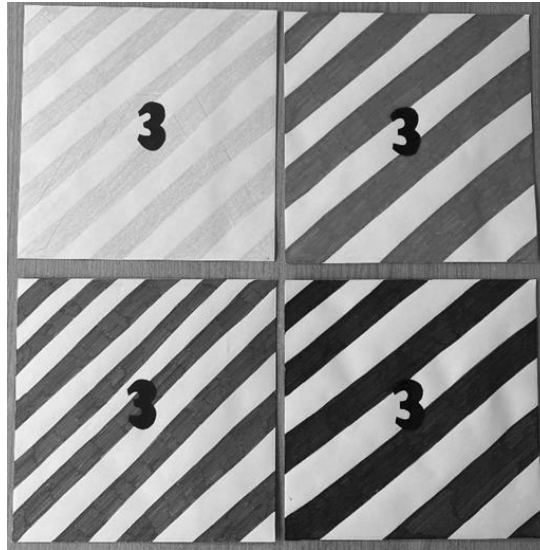


**“Seek an official document. The key to your escape lies
in its page.”** 2

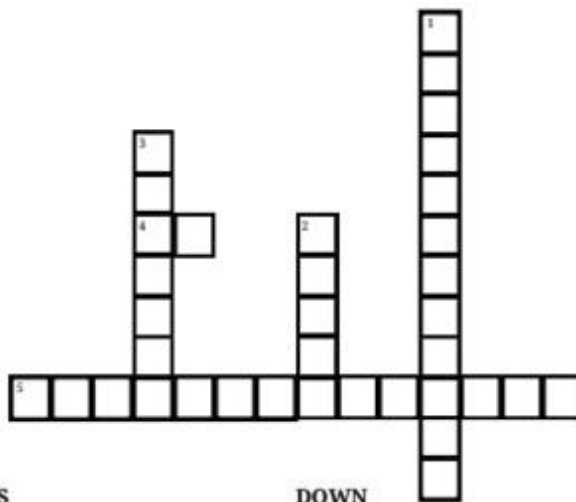
Appendix 10. Clue 3.



Appendix 11. Envelop 3, crossword and solutions.



SOLVE THE CROSSWORD



ACROSS

DOWN

4 - Irregular verb in English. It is used in passive constructions to indicate the tense of the sentence. It includes various forms such as "am," "is," "are," "was," "were" ...
 5 - The form of the main verb used in passive constructions. For regular verbs, it is often formed by adding "-ed" to the base form whereas irregular verbs have unique forms.

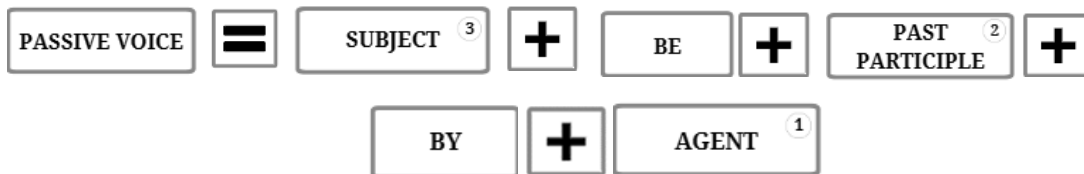
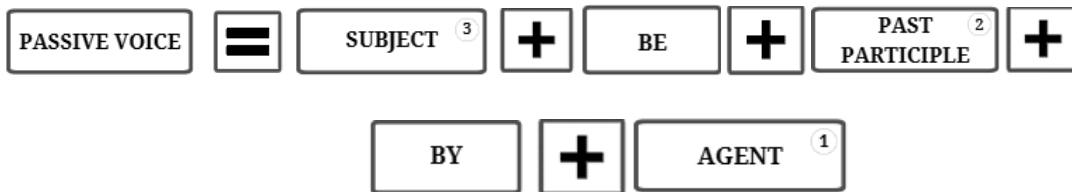
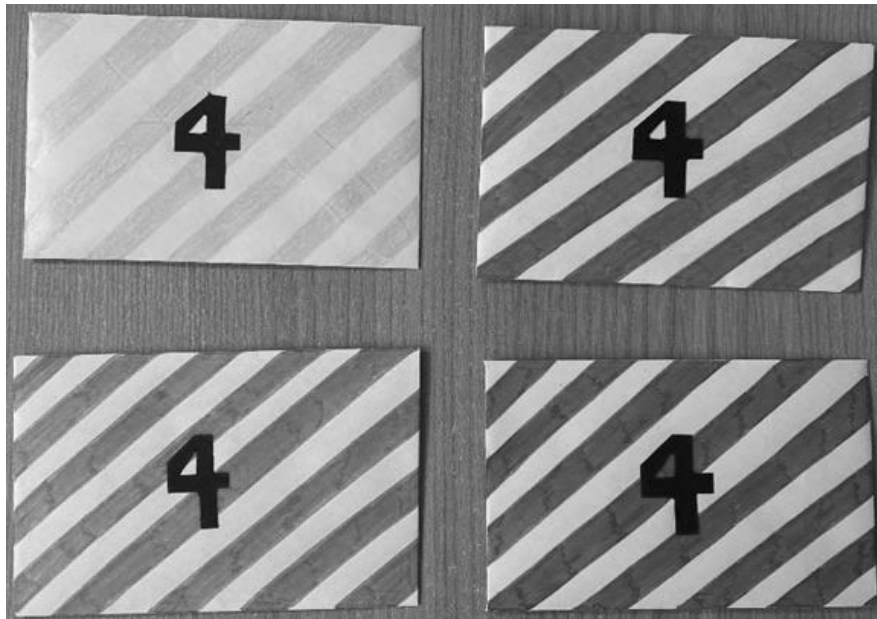
1 - Type of sentence in which the subject receives the action of the verb, rather than performing it.
 2 - The person or thing that performs the action of the verb. It is often found after 'by' in passive constructions, providing clarity about who or what is responsible for the action.
 3 - Person, thing, or entity that receives the action of the verb instead of performing it as it happens in active constructions.

- 1. Passive voice
- 2. Agent
- 3. Subject
- 4. Be
- 5. Past participle

Complete this formula with the words from the crossword. Then, ask Nerea to give you some flashcards.

_____ = _____ + _____ + _____ + BY + _____

Appendix 12. Envelope 4 and flashcards.



CLASSIFIED



Mission: Operation Syntax Serpent
Object: Find the Grammar Machine

1 Classified information is contained in this document. In particular, it
2 contains information about the notorious group of villains known as the 1
3 Syntax Reorganizers and their enigmatic leader, Syntax Serpent.

1 The Syntax Reorganizers are considered a substantial threat. Led by
2 Syntax Serpent, advanced linguistic tactics are employed by the 2
3 organization to create chaos.

1 Collaboration is urged to find the location of the Grammar Machine. The
2 collaboration of international spy agencies is crucial for developing 3
3 strategies to locate and neutralize this device.

1 The Grammar Machine is placed in San Francisco de Asís. It is a school
2 located in the outskirts of Valladolid, according to reliable sources of 4
3 information. Investigative efforts should be focused on discovering the
4 exact room where it is.

1 It is believed that the Syntax Reorganizers have accessed to our system.
2 For this reason, experts recommend paying attention to the structure of
3 the sentences. **Therefore, all our agents must take notes, underline or 5**
4 **highlight the PASSIVE SENTENCES that appear in every official**
5 **document.**

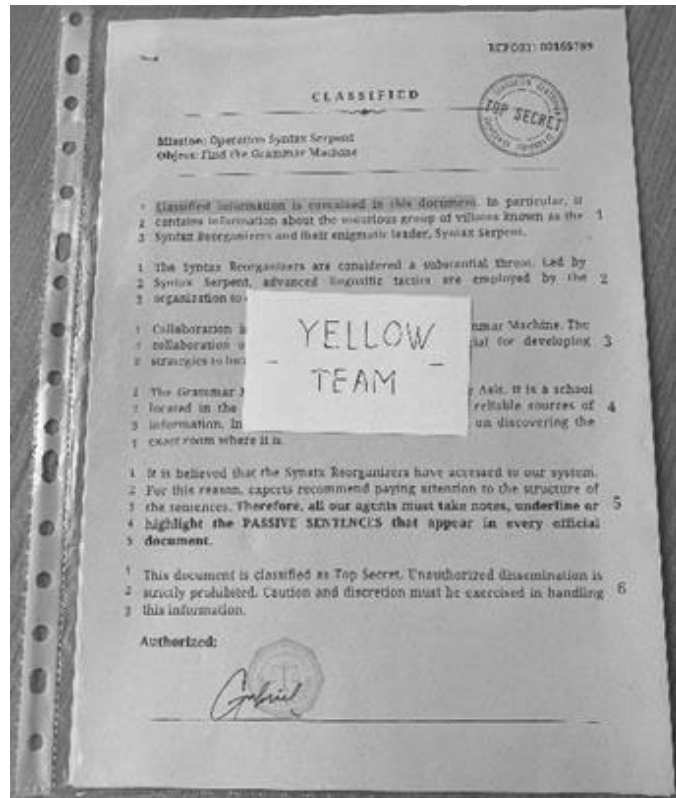
1 This document is classified as Top Secret. Unauthorized dissemination is
2 strictly prohibited. Caution and discretion must be exercised in handling 6
3 this information.

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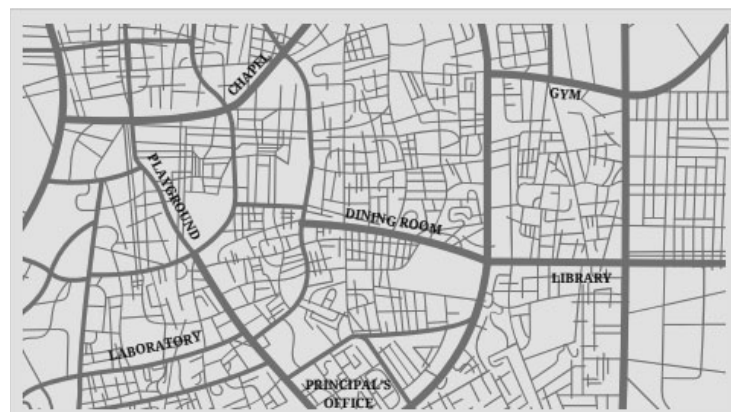
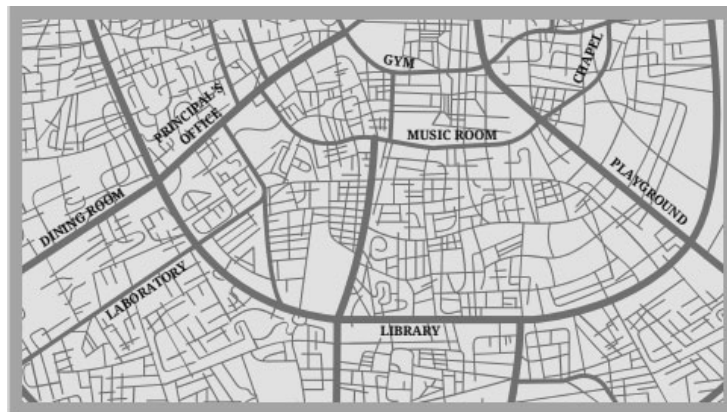
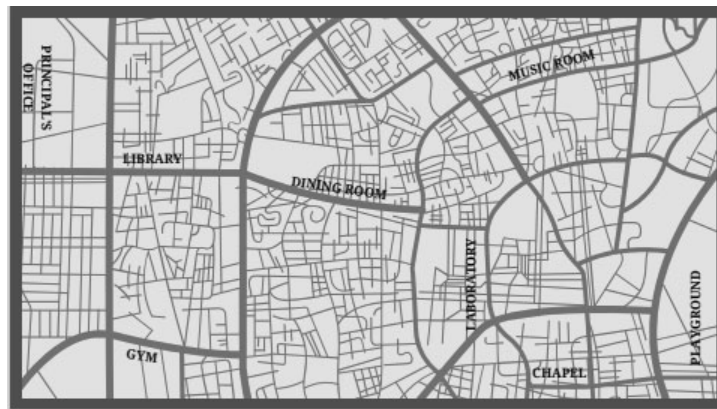
5	P	E	X	I	B	R
4	A	T	Y	H	C	V
3	N	K	Q	T	U	P
2	R	O	H	D	F	A
1	L	O	A	T	E	M
	1	2	3	4	5	6

L _ _ _ _ _

_ _ _ _ _ _



Appendix 14. Maps.



Appendix 15. Active and passive sentences whose mistake is the Past Participle form.

The spies need the Grammar Machine's location.

The Grammar Machine's location is need by the spies.

The Grammar Machine's location is needed by the spies.

The Syntax Reorganizers had hidden the Grammar Machine in the school.

The Grammar Machine had been hidden in the school by the Syntax Reorganizers.

The Grammar Machine had been hid in San Francisco de Asís by the Syntax Reorganizers.

The agents found the Grammar Machine.

The Grammar Machine was found by the agents.

The Grammar Machine was founded by the agents.

Syntax Serpent placed the Grammar Machine in the school's dining room.

The Grammar Machine was placed in the school's dining room by Syntax Serpent.

The Grammar Machine was place in the school's dining room by Syntax Serpent.

Appendix 16. Active and passive sentences whose mistake is the verb tense.

The Syntax Reorganizers have hacked our system.

Our system has been hacked by the Syntax Reorganizers.

Our system has hacked by the Syntax Reorganizers.

The Syntax Reorganizers planned an elaborate scheme to create linguistic.

An elaborate scheme to create linguistic chaos will be planned by the Syntax Reorganizers.

An elaborate scheme to create linguistic chaos was planned by the Syntax Reorganizers.

Syntax Serpent was going to alter the structure of passive sentences.

The structure of passive sentences was going to be altered by Syntax Serpent.

The structure of passive sentences was being alter by Syntax Serpent.

The Grammar Machine creates linguistic chaos.

Linguistic chaos is created by the Grammar Machine.

Linguistic chaos was created by the Grammar Machine.

Appendix 17. Active and passive sentences whose mistake is the subject-verb agreement.

The agents have decrypted the hieroglyphic.

The hieroglyphic has been decrypted by the agents.

The hieroglyphic have been decrypted by the agents.

The spy agents decrypted some messages.

Some messages were decrypted by the spy agents.

Some messages was decrypted by the spy agents.

The agents are discovering the secret hideout.

The secret hideout is being discovered by the agents.

The secret hideout are being discovered by the agents.

Gabriel sent an email with confidential information.

An email with confidential information was sent by Gabriel.

An email with confidential information were sent by Gabriel.

Appendix 18. Active and passive sentences whose mistake is the subject.

The spies discovered crucial information of the Syntax Reorganizers.

Crucial information of the Syntax Reorganizers was discovered by the spies.

Crucial information was discovered by the spies of the Syntax Reorganizers.

The agency SPEAK discovered the leader of the Syntax Reorganizers.

The leader of the Syntax Reorganizers was discovered by the agency SPEAK.

The leader was discovered by the agency SPEAK of the Syntax Reorganizers.

Gabriel wrote the official document.

The official document was written by Gabriel.

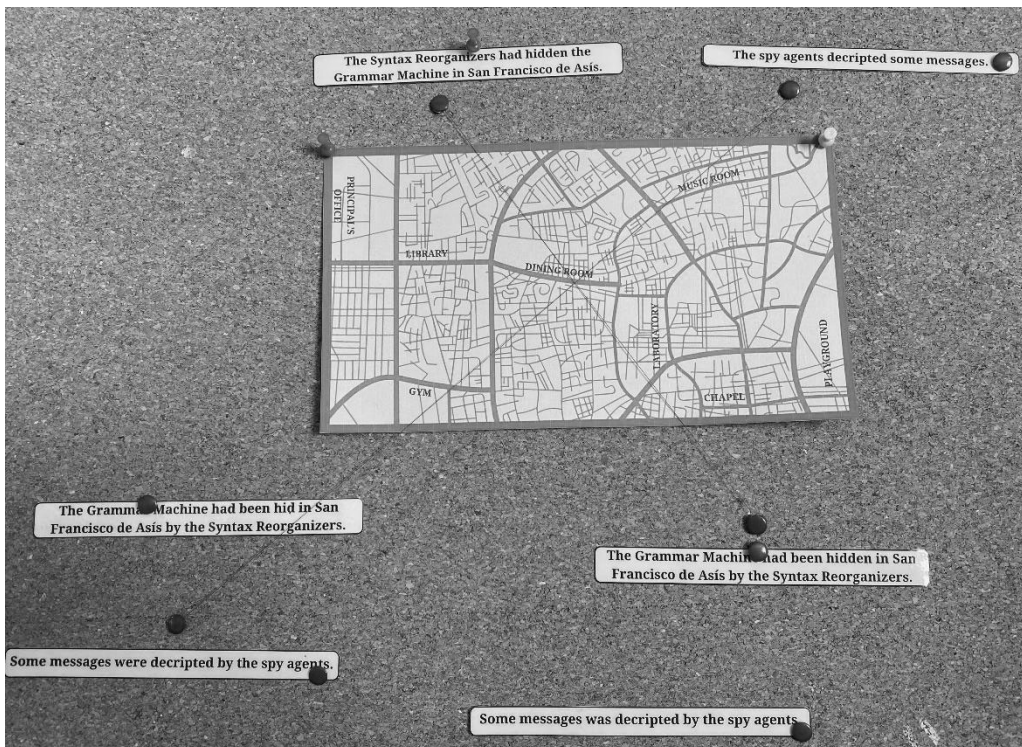
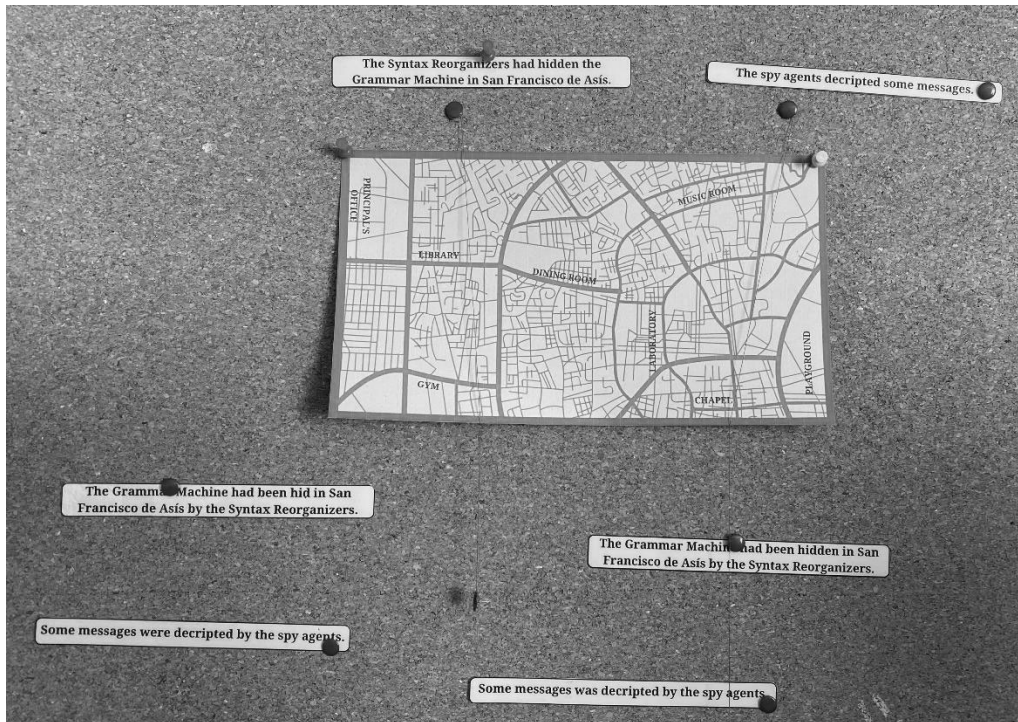
The document was officially written by Gabriel.

Syntax Serpent designed a plan related to the passive voice.

A plan related to the passive voice was designed by Syntax Serpent.

A plan was designed by Syntax Serpent related to the passive voice.

Appendix 19. Drawing pins.



Appendix 20. Grammar Machine.

