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**El uso de *Quizizz* en la clase de inglés como idioma extranjero: estudio
comparativo de motivación y rendimiento académico.**

**The implementation of *Quizizz* in the EFL classroom: a comparative study on
motivation and academic performance.**

ESPECIALIDAD: INGLÉS

APELLIDOS Y NOMBRE: Caboblanco Manzanares, Lucia.

CONVOCATORIA: Julio.

TUTORA: María Córdoba Gómez.

Departamento de Didáctica de las Lenguas, Artes y Educación Física. Facultad de
Educación.

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RESUMEN

La motivación es a menudo señalada como un factor esencial en el proceso de aprendizaje, así como un impulso para la mejora del rendimiento académico. No obstante, la Escuelas Oficiales de Idiomas en España han estado acusando una grave falta de motivación por parte de los alumnos, que se ve reflejada en las menguantes ratios de matriculación de los últimos cinco años. Por tanto, este trabajo de fin de máster se propone explorar si el uso de la app-web gamificada Quizizz dentro de la clase de inglés como idioma extranjero (EFL) mejorará la motivación de los estudiantes adultos y, por consiguiente, elevará su rendimiento académico.

Con el fin de probar tal hipótesis, se ha realizado un estudio comparativo contrastando dos clases de una EOI de la Comunidad de Madrid con el mismo nivel de inglés (B2.2) tomando una de las clases como grupo de control y otra como grupo experimental. Así pues, la manipulación de Quizizz fue implementada solamente con este último grupo, mientras que en el anterior se sustituyó por recursos no digitalizados.

Se ha empleado una metodología mixta (cuantitativa y cualitativa), con pruebas iniciales y finales relativas a la motivación y una evaluación constante del rendimiento académico mediante los cuestionarios implementados en todas las sesiones, así como un examen escrito.

Los resultados sí prueban que los estudiantes que usaron Quizizz aumentaron sus niveles motivacionales y su autopercepción más que el grupo de control, pero son poco concluyentes en cuanto al rendimiento académico; no obstante, se registró cierta mejoría en las notas del grupo experimental en comparación con la relativa uniformidad del grupo de control.

Key words: *Quizizz, motivación, rendimiento académico, gamificación, estudiantes adultos.*

ABSTRACT

Motivation is often regarded as an essential factor within the learning process as well as a driver of academic performance. However, Language Schools in Spain have been suffering an acute lack of motivation on the part of the learners, reflected in their dwindling enrollment rates throughout the last five years. Therefore, this dissertation purports to explore whether the use of the gamified web-app *Quizizz* inside the EFL classroom will increase adult learners' motivation and subsequently, enhance their academic achievement. In order to prove the aforementioned hypothesis, a comparative study has been performed contrasting two groups from a Language School in *Comunidad de Madrid*, with the same language ability (B2.2), using one of them as the control group and the other as the experimental group. Thus, the use of *Quizizz* was only implemented in the latter, while it was substituted in the control group by non-digitalized resources.

A mixed methodology (quantitative and qualitative) has been employed, with initial and final tests measuring motivation and a constant record of academic performance provided by the quizzes undertaken in every session as well as a written exam.

The obtained results prove that *Quizizz*-exposed students increased their motivational levels and their self-perception more than the other group, yet they remain rather inconclusive regarding academic performance. Either way, a slight improvement was perceived in the grades of the experimental group in comparison to the control group, which remained relatively unvaried.

Key words: *Quizizz, motivation, academic performance, gamification, adult learners.*

1 Problem statement and justification

Motivation is usually recognized as an essential factor in any learning process due to its direct link with achievement. Following this line of thought, new and modified TEFL approaches are in constant development in order to attend to learners' individual needs while motivating an appropriate and meaningful engagement of all the agents involved in the educational process, so as to ultimately see the positive results reflected in the realm of academic performance.

Besides linguistic and psychologic breakthroughs, these approaches also rely on technological advances, which have become one of the driving forces of change within the learning environment in recent years. The growing presence of technology in academic spaces, as well as its outspread existence and easy availability nowadays is reflected in the increasingly important presence of digital devices and ICT-aided instruction in the EFL classroom.

Nonetheless, despite this growth, there is still a reluctance on the part of the teaching faculty to integrate ICTs in these types of settings (Papadima-Sophocleous et al., 2014, p. 297; Zhao, 2019, pp. 37). In fact, in the specific case of Spain, the country has been declared the one with less ability to foster the use of technology in education, with only 11,5% of educators willing to include ICTs in their classes, according to the data provided by the 2018 PISA report; a staggeringly low number compared to the average percentage (56%) recorded by the Organization for Economic Co-operation and Development (Sanmartín).

Furthermore, according to the Digital Economy and Society Index (DESI) of 2021, despite the fact that more than half of Spain's general population does have basic technological skills, there is still a surprising 36% of active population which does not possess said competences (*Gobierno de España*, 2021, pp. 7 – 8). This document also shines light on the issue of the lack of ICT specialists, which ultimately hinders the progress and productivity of the nation within this realm (*ibid*).

Notwithstanding, the government is attempting to rectify these shortcomings in the realm of technology engagement and manipulation. Thus, in 2021, the plan "Programa Educa en Digital" was propelled into action, with the objective of providing devices and internet connectivity to educational centers nationwide, paying special attention to students in an economically vulnerable situation (*Gobierno de España*, 2020). Besides, it also intends

to reach a more personalized instruction by means of offering Artificial-Intelligence-based services to all agents involved in the teaching-learning process (ibid). These measures and investments manifest the important role that technology is acquiring in academic settings as well as the increased need to adapt to the changing needs of today's society.

Among the wide diversity of educational centers coexisting in the national territory of Spain – and included in the aforementioned proposal – let focus be drawn to the Official Language Schools (*EO/s*), wherein this dissertation will take place.

Coincidentally – or not at all, these public institutions have been displaying very surprising and thought-provoking enrolment rates in Spain during the past years. According to the statistics provided by the Ministry of Education and Vocational Training, in the span of a six years the number of learners registered in English courses has dwindled by over 35%, going from 325.037 enrollees in the academic year of 2014/15 to only 213.919 in 2020/21, which stands as the last available data thus far (Gobierno de España, 2022).

Such astonishing shift in numbers displays what may only be defined as a decrease in the desire to learn English in Spanish Language Schools, either caused by current learners' decision to drop out of the courses, or potential learners' lack of enticement to register in the offered programs, which are often solely seen as pathways to obtain an official certificate of language ability. In any case, the data evidences a need for change so as to motivate L2 learners and be able to stop the ongoing decline in enrollment rates on the English courses offered by Language Schools in Spain.

The comparative case study presented in this paper follows the hypothesis that the introduction of the gamified-based instructional app *Quizizz* in the EFL classroom will elevate learners' levels of motivation, consequently provoking an overall enhancement of academic performance and achievement.

This app was chosen over others due to its apparently greater adaptability to the learner, who is given autonomy and self-direction; qualities which can be particularly favored by adult learners that tend to enroll in these centers. Besides, in terms of the actual manipulation of the application, it is expected that the interface's user-friendly nature will facilitate the app's usage both inside and outside the classroom; providing the students

with a place wherein lessons and multiple forms of assessment and self-assessment are united and accessible, for an easier integration in their daily lives.

Additionally, the easiness in usage and the expected increase in motivation is also intended to entice learners' employment of ICT and desire for further usage of these resources, normalizing and facilitating a more widespread presence of ICTs inside Spanish classrooms and state-funded centers.

To test it, the results of two groups from a Language School with the same language ability (B2.2) will be contrasted, focusing on motivation and academic achievement. The two classes will receive a language instruction based on the same didactic unit, yet Quizizz will be implemented with the research group for constant review and assessment; while the control group will not engage in any form of gamification, receiving a so-called *traditional* instruction with minor manipulation of digital contents on the part of the learner.

2 Theoretical background

2.1 Motivation and academic achievement

2.1.1 Motivation in L2 learning.

Motivation is a concept surrounded by confusion and open-ended definitions, which is why before delving further into the topic it appears necessary to delineate a clearcut meaning of the word in this specific context. Thus, from this point onwards motivation is to be understood as a driving force that stimulates and maintains goal-oriented performance (NASEM, pp. 109).

Focus on motivation in L2 learning can be traced back to 1959, when psychologists Robert C. Gardner and Wallace E. Lambert published their paper "Motivational variables in second language acquisition". This groundbreaking text basically called attention to the prominence of affective variables in second language acquisition (SLA) by means of equating the importance given to motivation to the one garnered by intelligence and aptitude, which were hitherto considered foundational aspects of language learning (Al-Hoorie and MacIntyre, 2019, pp. 1 and 21).

Additionally, the importance of context is also brought to the forefront of discussion within this realm of studies, drawing attention to the sociocultural surroundings of the learners, which directly affect their attitude upon acquiring the language (Hymes, 1972). In fact,

such attitudinal implications are deeply explored in Stephen Krashen's Affective Filter Hypothesis – developed in the 1980s building on Dulay and Burt's "Remarks on Creativity in Language Acquisition", which studies how affective factors influence SLA, drawing importance to the attitude of the individual towards the learning process (Krashen, 1982). Said theory describes how motivation, self-perception and anxiety constitute *the affective filter*, which dictates the input that is actually acquired by the speaker, so that a lack of motivation, a low self-perception, and a high level of anxiety result in a higher affective filter that hinders SLA, while the opposite variables would be beneficial for the progression of the learner (ibid).

These areas are intricately related to personality factors and individual differences, such as age, gender, or ethnicity, as well as each person's society and culture (Bower, Boyer & Scheirer, 1970, pp. 34), or classroom environment and the overall teaching conditions, which constitute the fabric of the affectivity blanketing the language learning process. Simply put, context, temper, goal, and instrument are major influences on motivation in any learning process (Amrai, Motlagh, Zalani, & Parhon, 2011, pp. 399).

Finally, it is important to note that upon targeting the realm of language learning specifically, it can be observed how the sociocultural aspects of motivation acquire an even more pivotal role, since any language entails a degree of performativity tied to the pertaining cultural and social implications of its speaking community, which then come in contact with the student's identity and self-perception upon approaching learning that language (Al-Hoorie and MacIntyre, 2019, pp. 11). Thus, the sociocultural clash between the learner and the target language (TL) – what Hymes describes as the learner's "attitude toward the differences" (Hymes, 1972, pp. 289) – is added to the list of affective variables which have a direct effect on motivation, with agency to facilitate or hinder SLA.

2.1.2 Types of motivation and relation to academic achievement

Having mentioned the great number of variables which affect motivation in language learning, it is now time to focus on the different types of motivation which might be experienced by said learners, and how these can be sparked and maintained to reach the desired results.

Amid Gardner's research on the field of motivation, there can be found a specific framework which stands out, receiving the name of the Socio-Educational Model. This framework basically divides motivation depending on the source of the drive, resulting in

the existence of integrative and instrumental orientation for language learning (Mahadi & Jafari, pp. 232).

Thus, it can be stated that instrumental motivation is fueled by utilitarianism – “to pass an examination, to use in one’s job, to use on holiday in the country, as a change from watching television, because the educational system requires it” (Wilkins, 1972, pp. 184) – while integrative motivation is fueled by the desire to potentially identify with the TL group – “because one wants to know more of the culture and values of the foreign language group, because one wishes to make contact with the speakers of the language, because one hopes to live in the country concerned” (ibid).

However, conflicting results in the relation between these orientations and L2 achievement led to the development and popularization of another notorious framework contained within the Self-Determination Theory posited by Ryan & Deci (Mateos de Cabo & Mateos de Cabo, 2015, pp. 6). In general terms, these scholars state that there can be extrinsic and intrinsic motivation depending on the source of the goal or reason that sparks performance (Ryan and Deci, 2000, pp. 55). While intrinsic motivation is said to originate from within the person, sparking action because the goal is inherently appealing or gratifying, extrinsic motivation stems from outward goals, leading the person to perform in a certain manner in order to attain a specific outcome, that is separate from the action itself (ibid). Furthermore, these two types of motivation are contraposed to a third possibility – amotivation, which entails a situation wherein no relation is perceived between an action and its consequence, thus eliminating any reason for people to be enticed to act (Mateos de Cabo & Mateos de Cabo, 2015, pp. 9).

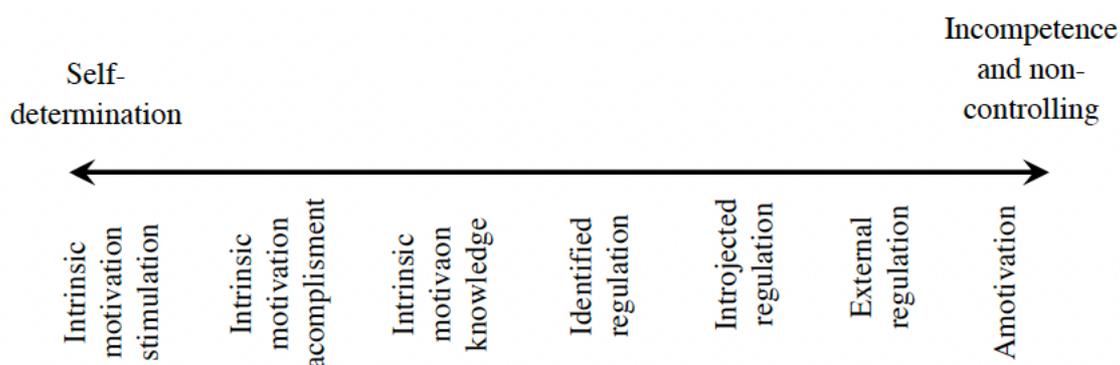


Figure 1. Self-determination scale. Source: *An application of the English Language Learner Motivation Scale (ELLMS) among Spanish Primary ELLs* (Mateos de Cabo & Mateos de Cabo, 2015, pp. 10).

Since 1970s extrinsic rewards have often been demonized for their negative effects on intrinsic motivation (Deci, 1971; Kruglanski, Friedman, & Zeevi, 1971; Lepper, Greene, & Nisbett, 1973, as cited in Lepper, Iyengar & Corpus, 2005), hindering what Ryan & Deci would come to term “self-regulatory processes”, and even having been said to affect other related areas like creativity or performance (Sansone & Harackiewicz, 2000, pp. xvii). These results were challenged in the following decades, especially after the publication of “Detrimental Effects of Reward: Reality or Myth”, in 1996, by Robert Eisenberger and Judy Cameron, wherein certain rewards were proven to have positive effects for the rewarded individual (ibid, pp. xviii).

Be that as it may, there still remains a divide of tendencies among scholars, with some championing one type of motivation over the other (Ryan & Deci, 2000; Wigfield & Eccles, 2000), while the remaining ones accentuate the importance of fostering a combination of both intrinsic and extrinsic motivation for a holistic learning experience (Lepper, Iyengar & Corpus, 2005).

Focusing on the line of study that bolsters a balanced approach, Sansone & Harackiewicz (2000) call attention to the fact that learners may be driven to tackle certain academic tasks solely by their innate interest, or simply because these will satisfy their instructor and potentially earn them a satisfactory grade, or even as a result of a combination of the two previous aspects.

Subsequently, there appears the need to find the optimal way of fostering a balanced presence of intrinsic and extrinsic motivation inside the classroom so as to delimit their negative effects and potentiate the benefits that their cooperation could offer (Lamas Rojas, 2008, pp. 16). Due to variables such as age, ethnicity, academic environment, or personal circumstances, among others, there is no fixed or clearcut formula to achieve the best motivational outcomes in every task or lesson. Nonetheless, in general terms, it has been suggested that extrinsic motivation should be used as the scaffolding upon which intrinsic motivation is constructed, by means of promoting autonomy, curiosity, and enjoyment upon engaging with academic tasks (Valerio, 2012, pp. 31).

It is safe to proclaim that motivation is regarded as the most important “affective individual-difference variable contributing to achievement in learning another language” (Masgoret and Gardner, pp. 174), with an already thoroughly demonstrated direct relation between motivation and academic performance across learners worldwide (Amrai et al, 2011). So much so that the concept *motivation for academic achievement*

has been amassing attention in the past decades, hinting at the pervasive relation between the two phenomena (Amrai et al., 2011, pp. 400).

To conclude, it should be mentioned that motivation has also been shown to have a sizeable impact in many other factors which are key to the learning process, such as interest or perseverance (Ayub, pp. 364; Sansone & Harackiewicz, 2000, pp. 185). But that is not all, since research also relates motivation – and its subsequent academic success to extremely determinant states and situations in the life of any individual, such as finishing school, achieving career prosperity, and even being healthy mentally and physically (Taylor et al. 2014, pp. 342).

2.2 Gamification

Having reviewed the literature on motivation, its types, and the link to academic achievement, it can be affirmed that, in order to increase results in performance, extrinsic and intrinsic motivation need not only to be fostered, but also maintained in every lesson throughout the span of the academic year. To this effect, there are numerous – and continually renewed – sets of approaches, methodologies and many other teaching strategies and techniques, among which *gamification* holds a central spot nowadays.

Gamification, in the more general sense of the word, entails the employment of game elements and dynamics in non-game situations (Huang and Soman, 2013, pp. 5). The objective of doing this relies in the fact that gamification has been proven to notably target and nurture intrinsic motivation (Inocencio, 2018, pp. 1).

Initially used in marketing to enhance user engagement, the widespread presence of gamification has been soaring in recent years, leading to its application in many other contexts, among which lies the field of education (Huang and Soman, 2013, pp. 6; Inocencio, 2018, pp. 1-2; Nah, Zeng, Telaprolu, Ayyappa, & Eschenbrenner, 2014, pp. 401). In fact, “the distinctive game elements in gamification play a crucial role, not only in accelerating learners’ determination to complete the assigned tasks but also by increasing their motivation to progress” (Anak Yunus and Hua, pp. 104) through a wide array of elements, such as points, levels, badges, leaderboards, rewards, progress bars or storylines (Inocencio, 2018, pp. 2; Nah et al., 2014, pp. 402).

There is an accused lack of literature regarding the impact and implications of gamified learning environments as well as its employment as a tool to gauge formative and

summative assessment (Nah et al., 2014, pp. 408; Göksun and Gürsoy, 2019, pp. 16). However, this seems not to have hindered the soaring of gamification, which, in recent years, has been included in the development of many digital resources intended to be implemented within educational environments and institutions (Nah et al., 2014 pp. 407), with various applications and online tools gaining momentum, and being increasingly popularized within the L2 classroom. This success has been mostly attributed to the fact that “developing motivation in the L2 learner by using technology provides a common denominator between Gamification and L2 learning” (Figueroa, 2015, pp. 37), compelling society and academia to increasingly view these resources as really appealing modes of instruction and assessment.

Notwithstanding, there are certain aspects which have been deemed challenging regarding the use of gamification in the academic field, among which Hung (2017, pp. 59) points out the following as the more concerning across studies:

1. It is difficult to determine which form of gamification is effective since it is such a broad area with multiple possibilities and modifiable elements.
2. It can be rather demanding on the part of the instructor, especially in terms of design and implementation.
3. It can be foreign to students who are adapted to more traditional forms of education.

All in all, after reviewing the principal benefits and challenges derived from using gamification, it can be concluded that the introduction of gamified learning systems and strategies possesses a tremendous potential so long as it is implemented effectively, with the promise of an improvement in learners’ performance and engagement levels and its novel manner of motivating learners and attacking monotony within the classroom (Inocencio, 2018, pp. 1-2).

2.3 Quizizz

The integration and manipulation of information and communication technologies (ICTs) is extremely present in all areas of people’s personal and professional lives nowadays, allowing for a rapid and limitless access to constantly enhanced and upgraded information (Shopova, pp. 26), while also being characterized by their mostly “learner-controlled” and “facilitator-friendly” nature (Knowles, Holton III & Swanson, 2015, pp. 183).

In the context of the classroom, the use of ICT has been greatly encouraged during the past decades, since it has been proven to easily cater to learners' needs through its multimodal nature, allowing students to process information in the way that best adapts to their preferred learning style, thus making the experience more satisfactorily enjoyable and increasing the overall quality of learning (Anak Yunus & Hua, pp. 105.)

Kahoot, Quizizz, Padlet, Mentimeter or Edmodo are some of the most recognized digital resources, with each of them presenting a set of features more particularly focused on a specific area – quizzes, games, exams, etc. – and offering different modes of content and feedback delivery, flexibility, and user-friendliness, which can ultimately sway the choice of ones over others – being Kahoot the most utilized application out of the group (Göksun and Gürsoy, 2019, pp. 16 - 17).

In spite of having garnered less popularity in the past years, Quizizz seem to present a similar and very promising gamified learning tool. In fact, a study (Boulden, Hurt & Richardson, 2017) showed that students appear more focused and enthralled in the quiz when manipulating this app rather than Kahoot, registering a higher response rate. Similarly, another contrastive study on students' perspectives regarding the use of Quizizz and Kahoot! (Basuki & Hidayati, 2019) encountered that both web-apps displayed great efficacy in terms of motivation and engagement. Nonetheless, even though Kahoot! was proven to be more collaborative and unified, with the group answering quizzes at the same time, learners generally preferred Quizizz precisely for its less competitive and threatening nature, since it allowed them to process information and provide answers at their own pace. Besides, Quizizz also awards the user more flexibility in terms of questions and answers limitations, even offering the chance to include visuals to illustrate both areas (Göksun and Gürsoy, 2019, pp. 17).

Although some features are solely accessible in the educational web-app's paid option, there are still plenty of available resources which can be used and incorporated within the classroom for free; with all of these features serving to support and acknowledge the importance of differentiated instruction in a way that Kahoot fails to do yet.

On the part of the instructors and facilitators, Quizizz provides them with a wide array of customizable options to best adapt to the specific needs of the learners, among which there can be found:

- The design of Quizizz items (multiple choice, open question, true or false, fill-in the-gap, with or without visuals, etc.)
- The control of background music, which can be changed or completely turned off
- The modification of each game's background image and user avatar
- The inclusion of explanatory feedback along with each item
- The choice to display the whole leaderboard on the screen or solely the top five students
- The possibility of assigning quizzes as homework
- The ability to shuffle questions so each learner answers at a different moment
- The possibility of sharing each learners' report to their parents
- The ability to randomly create teams to do the Quizizz game

Amid the myriad of features offered by Quizizz, the importance of the web-app seems to reside in the autonomy of the learner, as reflected by the feature concerning time limitation (Anak Yunus and Hua, 2021, pp. 105). This can be eliminated whenever the instructor so desires, which will award the participants full control over their answering – and ultimately, their learning – pace (ibid), which provides great support for the characteristics of the adult learner as well (see subsection 2.4). Furthermore, Quizizz makes use of a system of badges or bonuses which can be activated by the learners themselves throughout the games in order to reward the users who answer correctly, thereby adding another layer of gamification to the app, as well as providing students with the autonomy to use said options.

Among the positive outcomes of the use of Quizizz in the classroom there can be found an enhancement of learners' positive attitudes towards the learning process, a successful aid in improving students' understanding of the materials – especially when the resource is employed by the students as a means of self-assessment – as well as an overall innovative presentation of tests and tasks, which lessens their threatening and tedious implications (Irwansyah & Izzati, 2021, pp. 15).

According to an exploration conducted by Zhao (2019) in an American university, these beneficial outcomes have been proven to steepen over a somewhat extended period of time using Quizizz, mostly due to the acquired familiarity with the app (pp. 41). Furthermore, an increased frequency in usage reported better results in the area of in-class concentration and even enhanced social relations among peers (ibid).

In the specific area of language instruction, a recent investigation (Anak Yunus & Hua, 2021) tested the implementation of Quizizz in a Malaysian ESL classroom. The results displayed great benefits in the learning outcomes, with a notable mark increase upon comparing a pre-test and a post-test. Quizizz was also attributed the merit of improving the teaching experience and enhancing learners' interest.

Similarly, another investigation conducted in Indonesia (Irwansyah & Izzati, 2021) tested the use of Quizizz in an English course throughout two semesters, evaluating teachers' opinions on its introduction as a learning tool to provide feedback. The responses of the instructors concluded that students displayed more enthusiasm and motivation, becoming more active in the classroom. The study also asked students about their engagement with the app and their responses show an agreement regarding the perception of improvement in their learning experience.

Besides the aforementioned studies, in recent years several other researches – ranging across primary, secondary, and tertiary education – have arisen to support the positive effects and implications distilled from using Quizizz inside the EFL classroom (Dewi, Myartawan, Swari, & Sugihartini, 2020; Jimenez-Sanchez & Gargallo-Camarillas, 2020; Zuhriyah, & Pratolo, 2020; Dhayamanti, 2021; Fadhilawati, 2021), as well as within courses dedicated to many other subjects (Cadieux Bolden, Hurt & Richardson, 2017; Hamilton-Hankins, 2017; Suo Yan & Mei, 2018; Handoko, Mizkat, Nasution, Hambali, & Eska, 2021), denoting the app's versatility in adapting to the requirements of any type of classroom; and even more so in adult-populated contexts, wherein learners' autonomy and self-regulation are generally higher – as will be seen in the next subsection.

Therefore, it appears that the discussed findings are rather conclusive in further emphasizing the theory that ties ICTs, gamification, motivation, and academic performance; a thing which ultimately jolts these apps – and other related educational tools and resources – into the forefront of the teaching-learning practice, revealing the flagrant need to implement them in the current educational system,

2.4 Adult education: ties to motivation and gamification.

Answering the question “what is an adult?” can be an arduous task, for it is a concept that appears tied to multiple frameworks such as society, culture, economy, law, or biology, among others; however, there seems to be an initial agreement that an adult is what a child is not, standing at a different developmental stage that entails more

responsibilities, independence, and life experience in comparison to childhood (Merriam & Bierema, 2014, pp. 25). As expected, the aforementioned differences affect the manner in which adults learn, which is why Malcolm Knowles posited the concept of *andragogy* in 1970s; a notion that can be regarded as the alternative to traditional pedagogy, having become one of the best-known theories devoted to exploring adult education and teaching, focusing more on the learner rather than the content or the prescribed methodology (Kawalilak & Groen, ,pp. 75; Knowles, Holton III & Swanson, 2015, pp. 16).

In the specific field of language learning, age has been given a great deal of attention by scholars for many decades, with research mentioning the importance of the so-called *critical period*, an idea initially presented in Penfield and Roberts' "Speech and Brain Mechanisms" (1959), and which may be defined as "a maturationally determined point of heightened receptivity to environmental stimuli" (Bialystok, 1997, p. 116).

Applying such conceptualization to the specific case of second language learning, the critical period hypothesis specifies that individuals' success in language acquisition and learning is affected by their age, setting the end of optimal receptiveness by the end of puberty (Marinova-Todd, Marshal & Snow, 2000; Dąbrowska, Becker & Miorelli, 2020) and displaying a linear decline up until that point, after which age seems to stop systematically affecting L2 acquisition (Wang, 1999, pp. 1). However, it should be emphasized that the critical period hypothesis does not state that individuals are unable to acquire languages after a certain age, but rather implies that there is a change in the manner in which linguistic skills are learnt, and failure to meet adults' learning requirements may result in oversimplifications about their ability to acquire and/or master language ability.

Although there is a sizeable body of research suggests L2 mastery or native-likeness becomes an incredibly hard attainment for adults, who tend to display poorer proficiency levels in comparison to their younger counterparts (Dabrowska, Becker & Miorelli, 2020, pp. 1); there are many other studies which point out the existence of natively-like-proficient adult learners and attribute differences in results to other variables, stating that brain organization differs from one age group to another (Marinova-Todd, Marshal & Snow, 2000, pp. 11). In fact, this difference affects the characteristics of the learners, with adults presenting less memorization and retention rates (Johnson, 1996, pp. 6), yet displaying a generally higher "motivational factor of cognitive interest" (Wolfgang & Dowling, 1981, pp. 642).

Furthermore, it can be stated that motivation is one of the major differencing factors between children and adults, since the latter lack the autonomous agency that the former employ in order to engage in the learning process, be it due to goal-oriented – extrinsic – or learning-oriented – intrinsic – reasons (Merriam & Bierema, 2014, pp. 25 & 139). Additionally, many authors (Newton 1977, pp. 362; Hardison et al. 2012, pp. 8; Knowles, Holton III & Swanson, 2015, pp. 31; Kawalilak & Groen, 2021, pp. 75) mention the following positively-regarded characteristics as pivotal to all adult learners:

- Independence
- Self-directedness
- Readiness for learning
- Maturity and experience
- Life-centered orientation to learning
- More analytically-focused learning strategies
- Increased individual differences

However, it is also necessary to mention the main barriers that adult learners can face and need to overcome during their learning process, which Ahl (2006, pp. 394 – 395) agglutinates into the following three types with their respective examples:

- Dispositional variables
 - scarce self-confidence
 - lack of self-efficacy
 - negative past experiences with learning.
- Situational variables
 - lack of time
 - lack of expected results
 - loss of interest
- Institutional level
 - meager education opportunities and/or insufficient information about them
 - lack of childcare arrangements
 - scheduling problems
 - unsuitable pedagogy

In relation to this last institutional variable, and circling the discussion back to ICT and gamification, it can be concluded that although adult learners usually possess lower technology proficiency than younger generations, they are not strangers to the manipulation of these types of resources, which allows for their implementation with observable results (Koivisto & Malik, 2020, pp. 350). In fact, several studies show that the inclusion of gamified elements in adult education settings reported beneficial outcomes, enhancing social activity, and even displaying learners' desire to continue to partake in these types of programs (ibid, pp. 352).

To sum up, it can be said that adult education differs greatly from the prototypical obligatory education targeted to younger learners in formal settings, which necessarily entails adapting the employed resources and pedagogical interventions to cater to the needs of this specific group, taking into account their strengths and weaknesses to maximize their potential throughout their learning experience while preserving and boosting their motivational levels.

3 Objectives

This dissertation is born out of the intention to observe and contrast the effects of introducing ICTs in the form of a gamified tool inside a language learning classroom within a Spanish *EOI* (Language School), targeting the realm of motivation and academic performance.

The main objective of this study is to determine whether the daily manipulation of the educational web-app Quizizz enhances the learning experience by improving students' motivational levels, which, in turn, will be reflected in their academic achievement.

In order to effectively attain the objective, the following research questions have been posited and are expected to be answered through the present study:

1. Does Quizizz improve learners' motivation in adult learners?
2. Does Quizizz improve learners' academic performance?

Finally, it should be emphasized that the initial hypothesis of this study is that the learners from the experimental group will indeed be more motivated than the learners from the control group, which will, in turn, be reflected in their performance, expecting better academic results in the Quizizz-manipulating group.

4 Methodology

The methodology employed for data collection follows a mixed approach, using both quantitative and qualitative methods, since it has been deemed as the most comprehensive way for the measurement of such varying variables like motivation and academic performance. In other words, this study is not solely focused on students' data output within the realm of academic achievement, but it also intends to delve into the reasons motivating fluctuations in performance, directly asking students what they like and what they do not enjoy, as well as the reason why.

Thus, in general terms, the participants of the study were presented with a quantitative pre-survey and a mixed (quantitative and qualitative) post-survey for motivation measurement, while academic achievement was quantitatively measured through the daily quizzes performed via Quizizz (experimental group) or in paper (control group) as well as the results of a written task. The data from both groups was then averaged in order to provide statistics of each of them, which were posteriorly contrasted.

4.1 Context: Academic Centre and Groups

The study was performed in the “Escuela Oficial de Idiomas Madrid-Embajadores”, in Madrid (Spain), a public entity created in 1994 through the Royal Decree 1042/1994, initially opening its doors to students in the academic year of 1994/5, with two adjoined districts, which are Madrid-Centro and Arganzuela (Escuela Oficial de Idiomas de Madrid-Embajadores, 2021, pp. 26 – 27).

Embajadores is the most populated neighbourhood out of the six ones composing the Madrid-Centro district, which stands in the historical part of the capital, having become the neuralgic centre of the city as well. Extending over 523,73 hectares, Embajadores houses a population of 141.236 residents, representing one of the most culturally and leisurely active areas within Madrid. Meanwhile, the district of Arganzuela stands just below Madrid-Centro, harbouring a very similar density of population, since 154.243 individuals reside in a total expanse of 646,2 hectares. However, there is a disparaging difference regarding the immigration rates of both areas, with a notable decrease in Arganzuela. Thus, while Madrid-Centro holds 109,06 immigrants per 1.000 residents, the rate of the other district solely amounts to 52,53 – according to the same standards (ibid).

Delving into the specificities of the student body, it is firstly important to notice its heterogeneity, which is partly explained by the nature of an Official Language School, wherein the age of the enrolees is very unlimited, ranging anywhere from 15 years old to adulthood, including middle-aged and elderly population. In this particular Language School, the average age of the student body is set at 37,7 years (Escuela Oficial de Idiomas de Madrid-Embajadores, 2021, pp. 27),

Besides the age variable – and intrinsically related to it – there can be found the differences in the occupation, the academic formation, and the cultural level of the students. Therefore, one may encounter learners who are in high school sitting next to university or postgraduate students, as well as full-time workers or unemployed individuals.

In this study, two groups were used as *sample*, both of which were registered to receive the same type of instruction, face-to-face, as opposed to another third group that engaged in a blended learning course and was thus disregarded for this study. This was intended to equate the groups' characteristics as much as possible, having them be taught the same number of in-person sessions.

Between the two groups, one was selected at random as the experimental group, engaging with Quizizz practically on a daily basis; while the other was chosen as the control group, receiving the same instruction save for the manipulation of the aforementioned gamified web-app, which was substituted for printed materials (worksheets and quizzes). Notwithstanding, these printed materials contained exactly the same content, so that differences only stemmed from the mode of presentation and the gamification embedded in the one used with the experimental group students.

Finally, regarding the number of learners that was supposed to receive instruction as part of the control or experimental group within this study, there was a total of 46 enrolees, divided equally so that 23 belonged to the Quizizz-manipulating class while the remaining 23 were part of the other group.

4.2 Didactic Unit

The implemented didactic unit was composed of four sessions, with a duration of 135 minutes each, so that they amounted to a total of 9 hours of instruction. For reference and context, especially regarding the introduction of Quizizz within the classroom, a

summary of the development of the four sessions composing the didactic intervention is included below (Table 1).

Therein, it can be observed the sequence of activities per session as well as their timing and the work dynamics that these entailed, with a somewhat balanced approach between teacher-student interaction, individual work, and other groupings. Nonetheless, special attention was drawn to the collaborative and communicative aspect of language within the classroom, stressing its importance within the learning process.

Regarding the educational objectives, the following ones were specifically targeted throughout the development of this didactic unit:

- Comprehend, recognize, and analyze the different types of crimes, acquiring sufficient vocabulary to discuss daily-life occurrences within this field.
- Distinguish the different parts of a sentence being able to pinpoint the Subject, Verb, and Object.
- Understand and differentiate the different types of passive constructions: personal, impersonal, causative, etc.
- Memorize and employ useful phrases for language production.
- Examine and judge the depiction of crime in news.
- Comprehend what is a report and how it can be used as a form of writing.
- Employ ICTs – more specifically Quizizz – to improve learning and revision, focusing primarily on vocabulary and grammar.
- Create a written report related to the realm of crime.

As for the methodological principles implemented to achieve said objectives, they revolve around the notion of today's reality, with a prevalent focus on communication and technology. Therefore, special emphasis has been drawn to the following aspects:

- The constant use of English within the classroom as a communicative tool.
- The practice of language skills interconnectedly in communicative tasks.
- The promotion of learners' critical thinking.
- The encouragement of learners' independence in terms of learning management and strategies.
- The employment of ICTs to deliver and engage with content.
- The utilization of Quizizz in every session to review and solidify content.

- The stimulation of learners' motivation and interest with the use of authentic and relatable materials.

Furthermore, learners were encouraged to use their mobile phone not only for the completion of Quizizz games (in the research group) but also to use online tools and apps which serve as dictionaries or even translators, for them to be able to fully engage in certain tasks in a more autonomous manner.

Although gamification – in the form of Quizizz review games – appears as the most persistent teaching methodology, there can be observed an obvious blend of other methodologies and approaches employed throughout the sessions, with a more student-centered nature. Among these, emphasis can be placed on the following two:

- Inductive teaching, especially in the form of the inquiry-based method. This enhances students' active learning by enticing them to discuss and provide answers to questions and problems, wither individually or through a more collaborative or cooperative manner (Prince and Felder, 2006, pp. 2). In other words, "it requires designing instruction so that as much learning as possible takes place in the context of answering questions and solving problems" (Prince and Felder, 2006, pp. 21).
- Communicative language teaching (CLT). A methodology which brings to the forefront the communicative function of language (Littlewood, 1981, pp. 10), as was intended by the constant introduction of news and up-to-date situations for the development of language instruction.

Table 1. Summary of the implemented Didactic Unit.

SESSIONS (135')	DEVELOPMENT OF ACTIVITIES – TIMING – WORK DYNAMICS ¹
Session 1	<ol style="list-style-type: none"> 1. Introduction of didactic unit: <i>crime is wrong, right?</i> (10') <ul style="list-style-type: none"> • SS-SS 2. Trolley dilemma (15'): spark socio-cognitive conflict – <i>What could/should be done?</i> <ul style="list-style-type: none"> • S-S

¹ The work dynamics refer to the types of interaction within the classroom. They can be: T-S (teacher-student), S-S (pairs), SS-SS (groups), I (individual).

	<p>3. Inductive introduction of the grammar – News headlines about crime (35'): elicit meaning of key vocab and switch word order to place object first.</p> <ul style="list-style-type: none"> • S-S and I. <p>4. Presentation about passive voice (35'):</p> <ul style="list-style-type: none"> - personal - impersonal - modals & passive - ditransitive verbs <ul style="list-style-type: none"> • T-S. <p>5. Practice – <i>Switcharoo</i> (30'): change news headlines from active to passive and vice versa. Elicit meaning of new vocab.</p> <ul style="list-style-type: none"> • S-S <p>6. Closing Quizizz (10'): review grammar and vocabulary (printed version in annex 1)</p> <ul style="list-style-type: none"> • I <p>Homework: watch videos on virtual classroom about report writing (flipped classroom) for the exam in session 3.</p>
Session 2	<p>1. Review: <i>Taboo</i> game (35')</p> <ul style="list-style-type: none"> - crime-related vocab - creation of passive voice sentences <ul style="list-style-type: none"> • SS-SS, T-S <p>2. Inductive introduction of the grammar</p> <ul style="list-style-type: none"> - Spiderman meme (10'): the blame game – <i>who is accused by whom?</i> - <i>Draw it</i> (15'): <i>are these actions done by the subject or does she get them done by someone else?</i> <ul style="list-style-type: none"> • S-S, I. <p>3. Presentation about the Causative and Passive Causative pattern (25')</p> <ul style="list-style-type: none"> • T-S <p>4. Practice (20'): rephrase sentences to make them passive causative.</p> <ul style="list-style-type: none"> • I

	<p>5. Useful Language Crash Course (20'): B2 idioms, phrases and expressions targeting language production, and which can be related to crime.</p> <ul style="list-style-type: none"> • T-S, S-S <p>6. Closing Quizizz (15'): review grammar, vocabulary, and expressions (printed version in annex 2).</p> <ul style="list-style-type: none"> • I
Session 3	<p>1. Writing exam² (45'): report about crime in your area (annex 3).</p> <ul style="list-style-type: none"> • I <p>2. Reading activity (60'): edited version of the article <i>How passive voice can be dangerous</i>.</p> <ul style="list-style-type: none"> - Reflection about the (im)morality of crime depiction in the news - Reflection about the role of the agent and the importance of omission <ul style="list-style-type: none"> • I, S-S, SS-SS <p>3. Closing – Vocabulary wheel</p> <p>https://wordwall.net/es/resource/31991045/copia-de-crime-vocabulary to review. (No quiz since the exam was this session).</p> <ul style="list-style-type: none"> • SS-SS, T-S
Session 4	<p>1. Recap and review all passive voice patterns (20')</p> <ul style="list-style-type: none"> • T-S, SS-SS <p>2. Listening activity: Ted Talk about false confessions</p> <p>https://www.youtube.com/watch?v=c431D5Tj_aU&t=159s&ab_channel=TEDxTalks</p> <ul style="list-style-type: none"> - elicit meaning of new vocabulary - find the passive voice sentences <ul style="list-style-type: none"> • SS-SS, I, T-S <p>Top-tier detective: read and solve the detective riddles, then watch the video and find out the answer</p>

² The reason for placing the Writing exam “in the middle” of the didactic unit is the fact that these dates were already set by the EOJ as part of their continuous evaluation. Since pushing the date would cause organizational problems to other teachers as well as some students, the date was maintained, and the didactic unit was organized around it.

	<p>https://www.youtube.com/watch?v=5flaUK1fQwA&ab_channel=BRIG HTSIDE</p> <ul style="list-style-type: none"> - elicit meaning of new vocabulary - highlight the passive voice sentences • SS-SS <p>Final Quizizz (Annex 4): review vocabulary, grammar, and expressions from all sessions.</p> <ul style="list-style-type: none"> •
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4.3 Motivation

Motivation is one of the two variables which were targeted for measurement before, after and throughout the development of the teaching activity. In order to adequately achieve these goals, two surveys were employed to measure motivation in each group; one before implementing the didactic unit and another one after having done so.

Delving further into the specificities of these surveys, it can be remarked that the initial questionnaire was fully quantitative and intended to measure learners' base levels of motivation towards the English-learning process, providing a numerical value that worked as an initial point with which a comparison could be established to analyze the posterior measurements derived from the final questionnaire. This latter survey is to be considered the one which specifically targets the provided Quizizz-based instruction, both qualitatively and quantitatively.

It is also necessary to mention that both surveys were performed using the online platform Google Forms. This particular resource was chosen for data recollection due to the guaranteed complete anonymity of the responses, which was expected to incite learners' most honest answers. Furthermore, it was selected for its easily accessible nature, allowing learners to reach the survey by simply scanning a projected QR code, which they could also easily share with each other.

Before moving forward, however, it should be stressed that motivation is hardly – if at all – an objective variable. It is due to said fact that the items within the questionnaires were selected, tailored, and/or created to specifically record learners' self-perceptions and subjective impressions of their own intrinsic and extrinsic motivation towards the

language-learning process at large, as well as towards their respective experience throughout the provided instruction.

4.3.1 Pre-survey and Post-survey

The initial survey is based on the SCIENCE MOTIVATION QUESTIONNAIRE II [SMQ-II], which is a tool developed by the University of Georgia (Glynn), intended to measure learners' self-perceptions about their motivation and confidence throughout the learning process, with certain statements really honing on external variables (2, 4, 6, 15, 16) and others targeting more specifically intrinsic motivation (1, 3, 9, 12). The majority, however, rather imply a balanced mixture of the two motivational types, which ultimately measures self-confidence in knowledge and learning potential.

The original statements were science-focused and intended for secondary education students, i.e.: a high-school-aged audience. Therefore, taking into account the characteristics of the sample, as well as the purpose of this study, all statements have been subjected to minimal modifications with the objective of making the information as relevant and suitable for EFL learners as possible – as visible in Figure 2. Additionally, certain statements which were deemed unimportant for the intended measurements of this dissertation have been eliminated.

Table 2. Initial motivation survey statements

Statements
1. The English I learn is relevant to my life.
2. I like to do better than other students on English tests.
3. Learning English is interesting.
4. Getting a good grade is important to me.
5. I put enough effort into learning English.
6. Learning English will help me get a good job.
7. I am confident I will do well on English tests.
8. I spend a lot of time learning English.
9. Learning English makes my life more meaningful.
10. I am confident I will do well on English tasks and projects.
11. I believe I can master English knowledge and skills.
12. I enjoy learning English.

13. I am sure I can understand English.
14. I study hard to learn English.
15. My career involves/will involve English.
16. Scoring high on English tests matters to me.

Regarding the form of measurement, learners were given the chance to choose among a five-options scale, representing the degree of agreement with each given statement – which was proportional to the degree of self-perceived motivation. Thus, the measuring held the following options: 1) Strongly Disagree, 2) Disagree, 3) Neutral, 4) Agree, 5) Strongly Agree.

It is important to consider the fact that statements in the survey have been formulated in such a manner that necessarily establishes a direct proportionality between the agreement and motivation scale. In other words, a higher or lower percentage of agreement in learners' responses accounts for a higher or lower level of motivation.

As for the final survey, it is composed of a series of statements that meant to delimit focus as much as possible to the learners' experience and impressions regarding the implementation of the didactic unit at hand, while still allowing for the expression of their opinion by means of including the open-ended questions. Also, in order to measure learners' answers, the same 1-to-5 agreement scale used in the pre-survey has been employed.

Since the research group manipulated Quizizz and the control group did not engage with said platform, the received instruction had differences which evidenced the need for the creation of two versions of the final motivation survey. These slight changes in the statements can be seen inside the table below, wherein both surveys have been joined, so that there are two versions of each statement. The numbered statements are the ones within the experimental group's post-survey, while the statements below them are the ones presented to the control group.

It is also necessary to state that the open-ended questions were included to further inform the discussion of results, taking into accounts learners' perspective on the use of the digital tool Quizizz or printed quizzes for daily review and assessment. Thus, they were not intended to provide any numerical value, rather fulfilling the qualitative part of the employed methodology. Meanwhile, the quantitative part of the survey was

measured and averaged in the exact same manner as the pre-survey, which has already been described in detail.

Table 3. Final motivation survey composed of statements and open-ended questions.

Statements
<ol style="list-style-type: none"> 1. I liked using Quizizz in every session <ol style="list-style-type: none"> 1.1. I liked doing quizzes in every session 2. I find Quizizz motivating <ol style="list-style-type: none"> 2.1. I find quizzes motivating 3. Quizizz has helped me learn <ol style="list-style-type: none"> 3.1. The quizzes have helped me learn 4. I would prefer NOT to do these types of tasks on paper <ol style="list-style-type: none"> 4.1. I would prefer NOT to do these types of tasks digitally 5. Performing well on Quizizz games was important to me <ol style="list-style-type: none"> 5.1. Performing well on the quizzes was important to me 6. I would like use Quizizz on the future <ol style="list-style-type: none"> 6.1. I would like to do these types of quizzes in the future 7. Quizizz has helped me revise <ol style="list-style-type: none"> 7.1. The quizzes have helped me revise 8. I was nervous playing Quizizz <ol style="list-style-type: none"> 8.1. I was nervous doing the quizzes
Open-ended questions
<ol style="list-style-type: none"> 1. Can you shortly explain your previous answer? (Follow-up to statement 2) 2. Could you name at least one thing that you enjoyed about playing Quizizz? <ol style="list-style-type: none"> 2.1. Could you name at least one thing that you enjoyed about doing the quizzes? 3. Could you name at least one thing that you disliked about playing Quizizz? <ol style="list-style-type: none"> 3.1. Could you name at least one thing that you disliked about doing the quizzes?

4.4 Academic performance

Academic performance was measured by means of three Quizizz tests (or the respective printed version of the same quizzes) and a Writing exam – contained in Annexes.

The Quizizz tests were self-developed in accordance with the didactic unit at hand, attempting to target each sessions' key points, especially in terms of vocabulary and grammar. The exam to evaluate the Writing skill was also self-developed, following the

official template provided by the EOI Madrid-Embajadores as well as, as well as drawing inspiration on how to formulate the guidelines from other previous official exams, some of which were provided by the center itself while others were found in the *Comunidad de Madrid* website.

The results of the quizzes as well as the result of the written task were averaged to obtain a mark for each group on a 1 to 10 scale, from lowest to highest mark respectively. While the web-app Quizizz already provided the research group's averaged mark, the following mathematical operation was employed to manually obtain the average mark of each printed quiz completed by the control group: learner's individual marks were added up, and then divided by the number of learners who completed each quiz. This same operation was employed to acquire both group's average marks in the Writing task. Consequently, the obtained average marks from the three quizzes and the Writing exam were added up to obtain one total average grade per group – significative of the group's overall academic achievement.

Finally, these total average grades of the research and control group were contrasted between to observe if any given variation had been caused by the different teaching and assessment materials employed in each of them.

4.5 Averaging and comparison

As has been already mentioned, both the initial and the final questionnaire have the same 1-to-5 scale as their answer system, wherein 1 represents the lowest possible level of motivation on the part of the learner while 5 stands for the opposite. Thus, considering the numerical values provided by learners' answers to each specific item from the initial questionnaire, the group's average motivation can be obtained. This is done by adding up the percentages from answer, then dividing the result by 1600 and multiplying it by 100, thus merging the group's total answers into one single response. Therefore, using the aforementioned formula, answers to the different items composing the two surveys are transformed to produce the groups' average responses.

In other words, each group's level of motivation was measured by averaging the percentages of the individual answers, thus obtaining one class-representative graph wherein all learners' responses to the whole questionnaire are enmeshed to provide just one percentage per each possible response (within the measuring scale).

Subsequently, the groups' average percentages from the initial and final questionnaire were contrasted to observe if motivation level had fluctuated in each group, as well as to observe if there was any variation between group exposed to Quizizz-based instruction and the one engaging with more *traditional* materials.

Additionally, the open-ended questions in the final motivation questionnaire were used for explanatory purposes. In other words, these were employed to provide learners with a space wherein they could articulate the reason behind their final motivation percentages. Besides, these inquiries also allowed specification of the liked and disliked aspects within the received instruction. These were not included in the final average for obvious reasons (i.e.: they are not numerical) but rather employed for the future reflection on the percentage itself and the discussion of the results from the two groups.

5 Results

The results of the conducted tests and surveys are followingly presented according to what they measure, so that motivation and academic performance are differentiated. Besides, the results of the initial and final motivation surveys are presented separately, while the results from the Quizizz tests and the Writing exams are also shown in their respective distinct sections.

5.1 Motivation

Two surveys – explained in detail within the Methodology section (pages 7 – 9) – were conducted in order to measure learners' motivation levels: one before implementing the respective didactic unit, and another one afterwards; the results of which will be followingly displayed in detail.

5.1.1 Pre-survey

The initial motivation questionnaire was intended to measure learners' base levels of motivation to provide an initial point with which a comparison could be established to analyze the future measurements derived from the final motivation questionnaire.

The subsequent graphics display learners' answers to the different questions composing the initial motivation questionnaire, both in the control group (Figure 5) and within the experimental group (Figure 6).

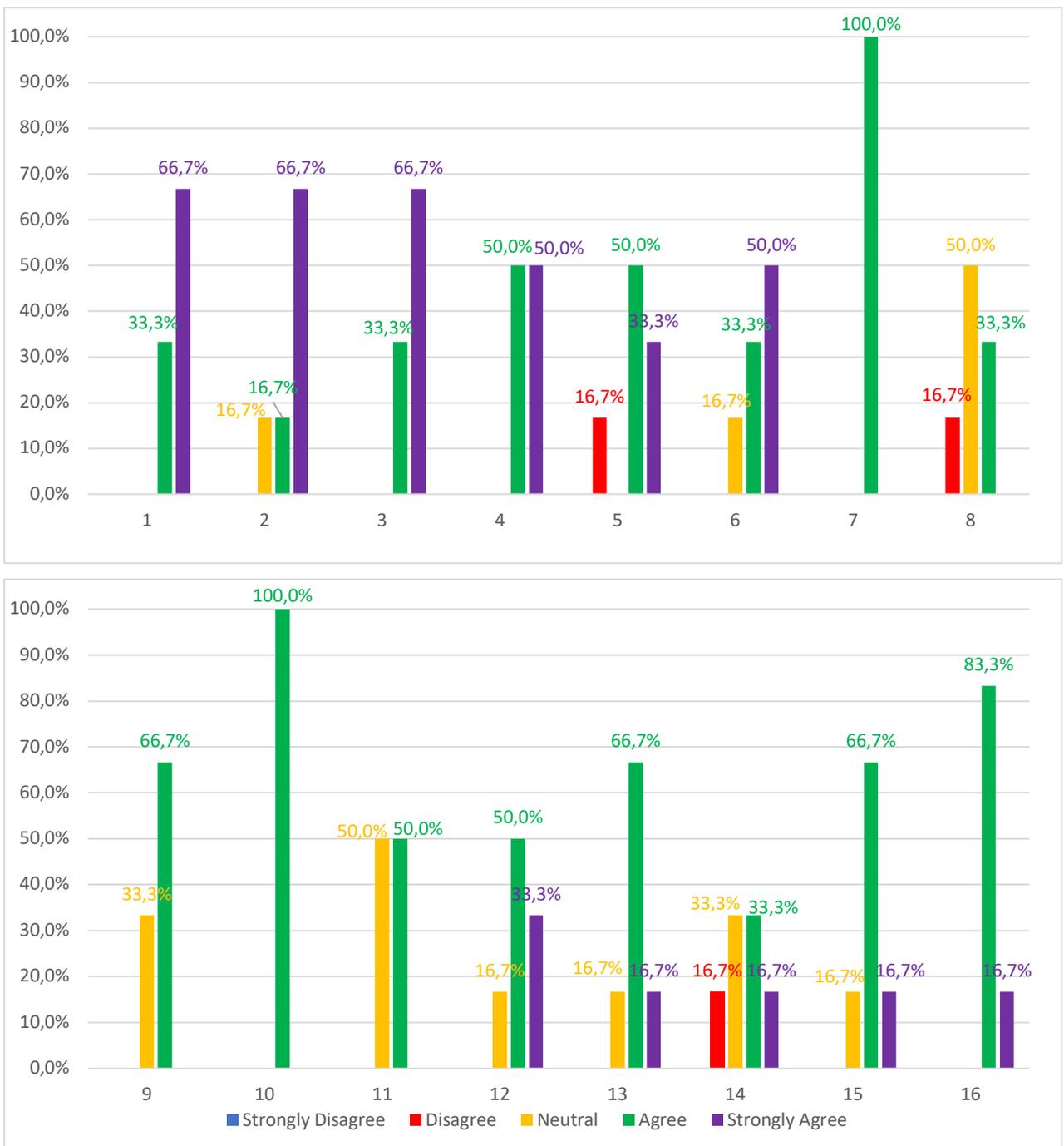


Figure 5. Responses from the control group to the sixteen items found in the initial motivation survey. X axis represents the number of the survey's statement that is being answered, while Y axis displays the percentage of answers given by the learners. Statement numbers correspond to the ones displayed in Figure 2 (Methodology section, page 6).

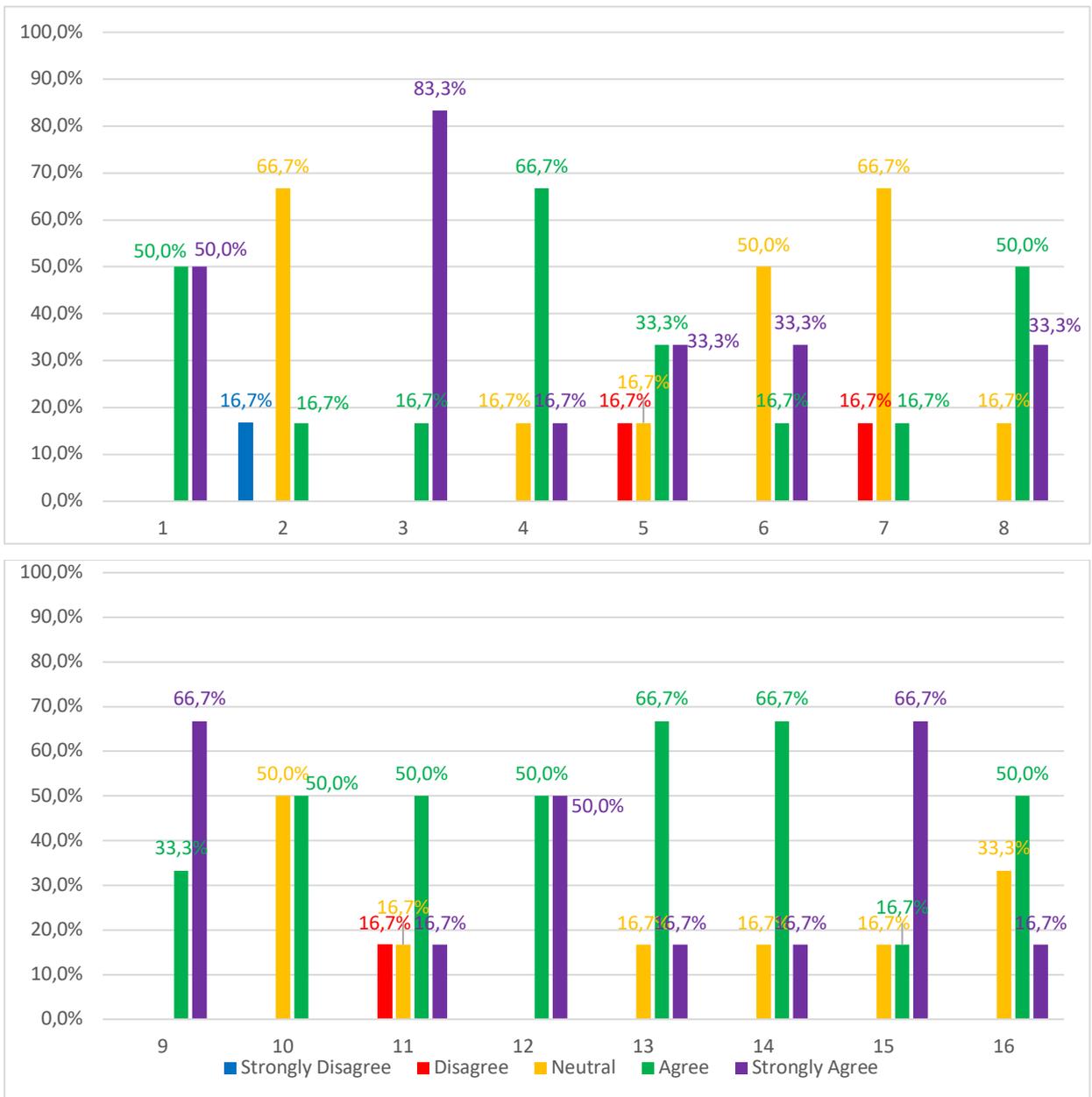


Figure 6. Responses from the experimental group to the sixteen items found in the initial motivation survey. X axis represents the number of the survey’s statement that is being answered, while Y axis displays the percentage of answers given by the learners. Statement numbers correspond to the ones displayed in Figure 2 (Methodology section, page 6).

Followingly. the created graphics – Figures 7 and 8 – portray the averaged percentage of agreement or disagreement to the previous statements, which can also be translated as the level of motivation displayed by the control group and the research group, with a bigger presence of agreement signifying a higher amount of motivation and a greater display of disagreement alluding to a higher level of demotivation.

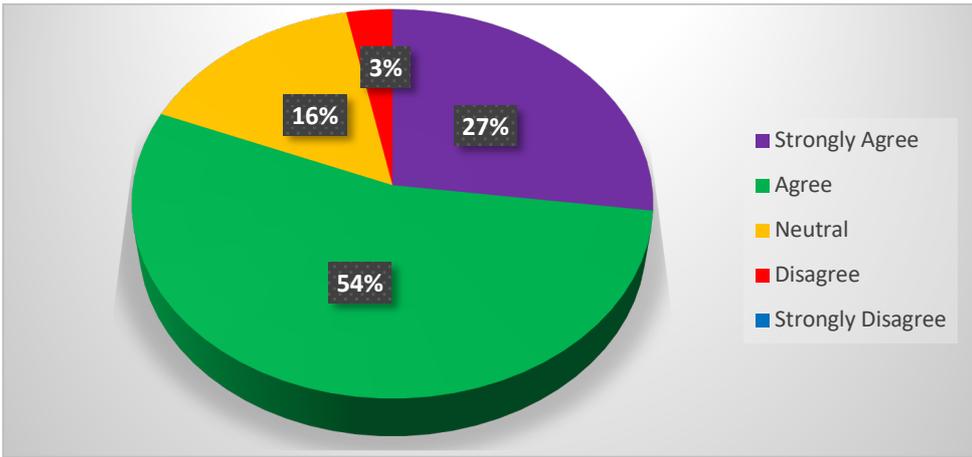


Figure 7. The control group's averaged response to the initial motivation questionnaire.

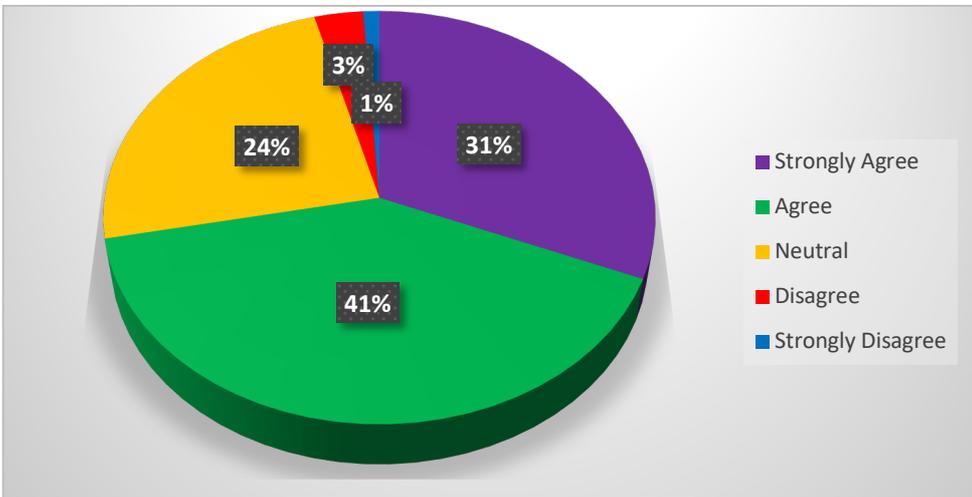


Figure 8. The experimental group's averaged response to the initial motivation questionnaire.

5.1.2 Post-survey

The exact same method was employed to record and display the results of the final questionnaire, which was particularly focused on recording learners' experience manipulating Quizizz in the research group – as reflected in Figure 9 – or engaging with printed quizzes in the control group – as displayed by Figure 10. These were then averaged to obtain each group's overall final motivational levels (Figures 11 and 12).

As happened in the initial questionnaire, there is a proportionate relation between the expression of agreement and the level of motivation, so that responses closer to “strongly

disagree” represent a lower level of motivation than those proximate to the other end of the answering scale.

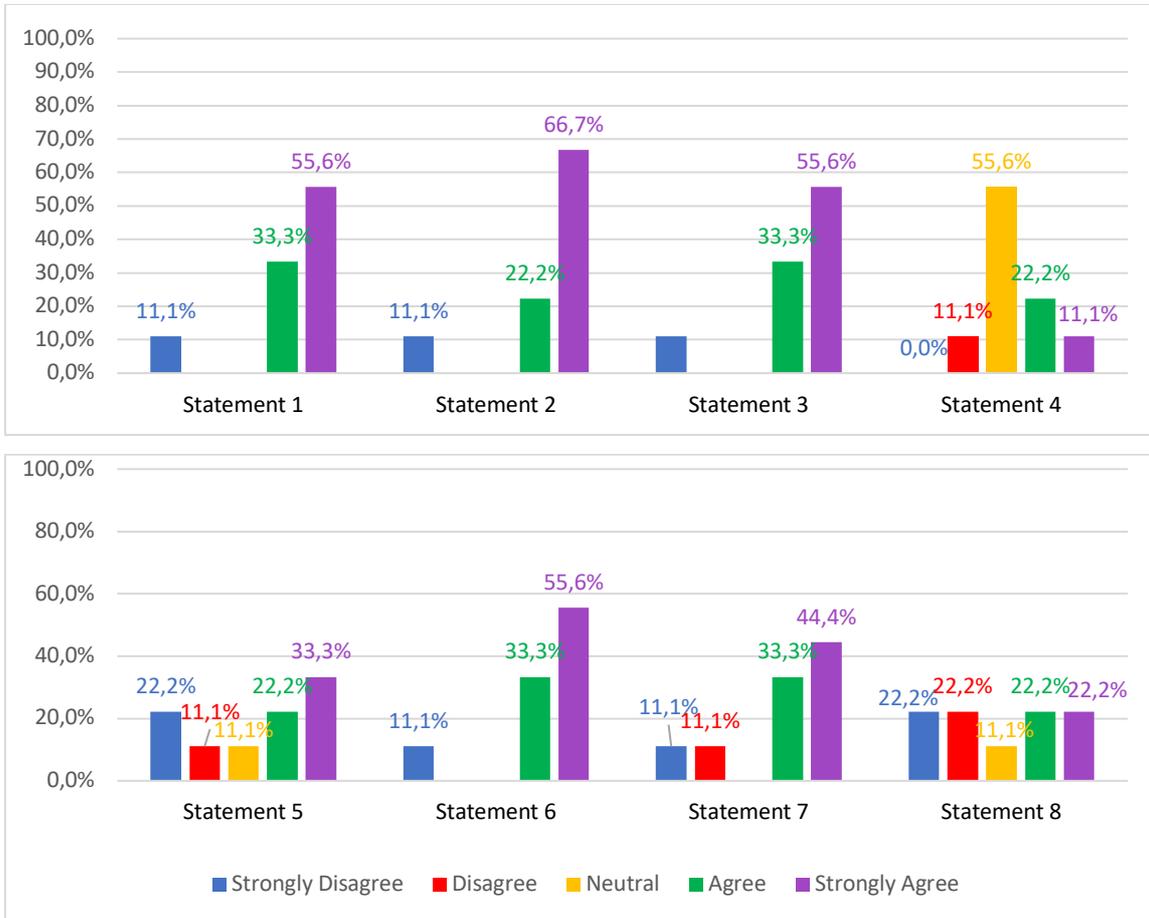


Figure 9. Responses from the experimental group to the eight items found in the final motivation survey.

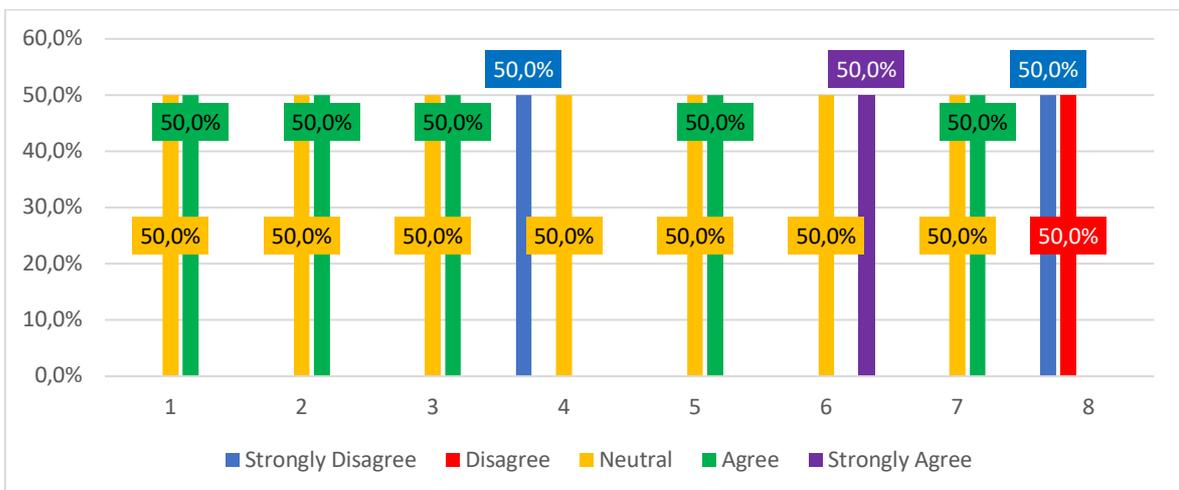


Figure 10. Control group’s learners’ responses to each of the statements within the final motivation survey.

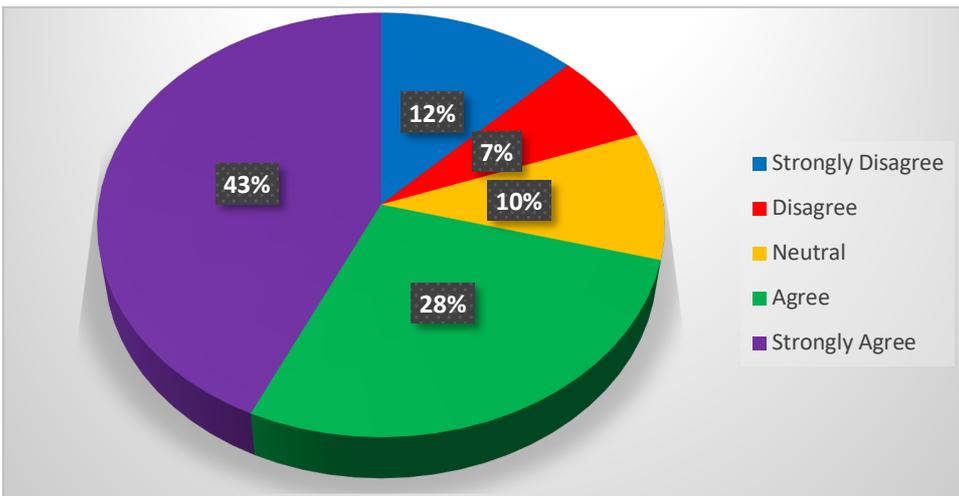


Figure 11. The experimental group's averaged response to the final motivational questionnaire.

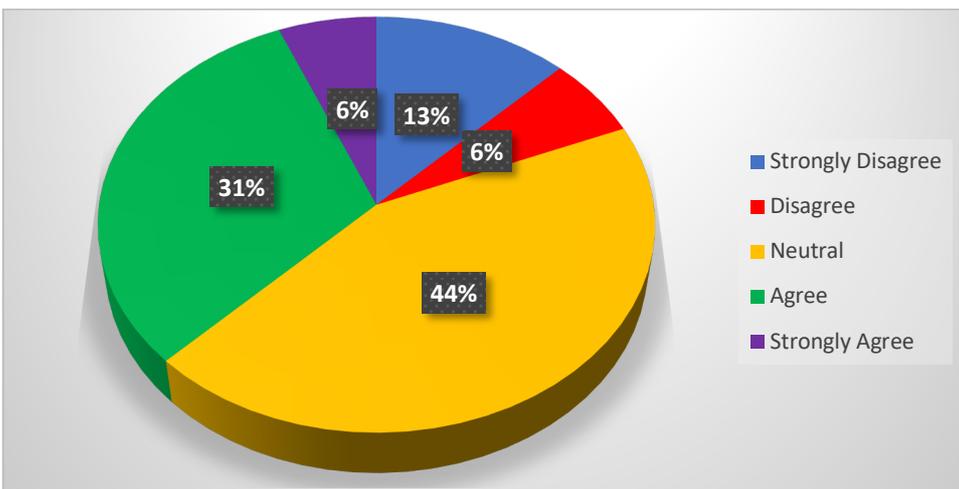


Figure 12. The control group's averaged response to the final motivational questionnaire.

These final questionnaires also included short open-ended questions – items 9, 10 and 11– that were not intended to be part of the group's *motivation percentage* but rather employed for explanatory reasons regarding the quality of the received instruction and overall experience.

In fact, for practical purposes, some of the most prominent responses provided by students from both groups are followingly disclosed in the table below, having been transformed into adjectives that were deemed to clearly express the full meaning of what learners' slightly longer answers intended to describe. Item 9 refers to why learners find

Quizizz/quizzes motivating or not, item 10 alludes to what they enjoy about them and item 11 targets what they dislike.

Table 4. Learners' answers to the open-ended questions contained within the post-survey used to measure motivation.

ANSWERS	ITEM 9	ITEM 10	ITEM 11
Control Group	Fun Repetitive Potentially boring	Fun	Frustrating Difficult
Experimental Group	Fun Helpful (revision) Competitive	Competitive Fun Feedback	Frustrating Stressing Demoralizing (for losers)

5.2 Academic Performance

Followingly, the results from the three quizzes and the Writing exam will be presented in their respective graphics, without establishing a division between the groups, so that both the results of the research group and the ones belonging to the control group will be displayed jointly.

5.2.1 Quizizz

Since the responses to each individual question of each quiz would amount to a total of 56 items, it has been deemed more appropriate to forego their individual display and directly provide the overall mark of both groups in the several undertaken quizzes, be it digitally or not – as can be appreciated in Figure 11.

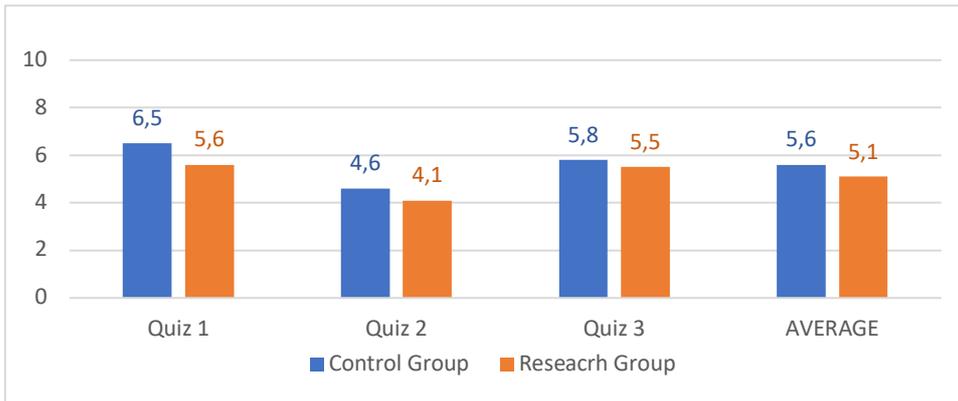


Figure 11. The compared grades of the control group and the experimental group in each of the three quizzes performed in class, and the subsequent average grade.

5.2.2 Writing exam

The blueprint for the official Writing exam that learners were presented with has been included in Annex 3. Thus, the tables below display the grades obtained from the correction of this task, showing not only the results from all learners belonging to both taught groups, but also including each groups' average grade at the end of each table.

Table 5. Experimental group's Individual and average grades from the Writing exam, color-coded to signal pass (green) or fail (red).

EXPERIMENTAL GROUP	
Student 1	6,50
Student 2	6,50
Student 3	4,25
Student 4	5,75
Student 5	4,25
Student 6	8
Student 7	6,50
Student 8	4,25
Group's average	5,75

Table 6. Control group’s Individual and average grades from the Writing exam, color-coded to signal pass (green) or fail (red).

CONTROL GROUP	
Student 1	6,50
Student 2	5,50
Student 3	4
Student 4	7,25
Student 5	5,50
Student 6	4,25
Student 7	6
Student 8	4,25
Student 9	3,75
Group’s average	5,22

6 Discussion of results

Having objectively presented the tables and figures containing the detailed results, it is consequently necessary to analyze them with the intention of establishing a somewhat coherent relationship between practice and theory. Thus, the following sections are dedicated to contrasting and discussing the results from the control group and the experimental group, firstly in terms of motivation and then in relation to their academic performance, so as to observe whether any given variation can be attributed to the use of gamified ICT tools – namely, Quizizz – or not.

Subsequently, the implications of the discussed results for the development of the teaching practice will be explored, as well as the limitations that have accosted this study and the derived possible future lines of work within the discussed realm of language teaching activity.

6.1 Motivation

In general terms, the average results from the pre-survey display slightly higher motivational levels in the control group in comparison to the experimental one, with the former registering an overall 81% of their responses above “neutral” (middle ground

between the positive and negative levels of motivation in the 1-to-5 measuring scale) and the latter displaying a 72% of motivation by the same parameters. Meanwhile, solely 3% and 4% in the control and experimental group, respectively, show *below-neutral* levels of motivation. Thus, since the differences are rather minimal learners' initial motivational levels can be regarded as practically even.

However, delving into the specificities of the pre-surveys, one thing does seem to stand out between the two groups' responses. On the one hand, at least half of the experimental group strongly agrees with statements 1, 3, 9, 12, and 15. Curiously, only the latter targets extrinsic motivation, while the other previous four directly allude to intrinsic variables. On the other hand, the control group's responses suggest a less intrinsically motivated nature, with more extrinsically driven statements (e.g.: 2, 4, 6) having been found strongly agreeable.

Regarding the results of the post-survey, which focuses on daily experience of engaging with the quizzes or Quizizz, there many more observable differences between the two groups in the final averaged responses. The control group displays here a staggeringly low motivation, with solely 37% of agreement above neutral. A figure that is practically doubled by the 71% displayed in the experimental group. In terms of disagreement, the results do remain very similar, but neutrality experiences the most interesting fluctuations in both groups, with a tremendous growth in the control group and a big decrease in the Quizizz-exposed one. The lack of motivation represented by neutrality can be equated to what Ryan & Deci (2000) defined as amotivation in their model of the Self-Determination Theory, since there is no perceived connection – neither good nor bad – between an action and its results.

Therefore, it can be concluded that the group exposed to Quizizz experimented an observable decrease in amotivation, directly connecting their positive motivational levels to the use of the gamified app, while the control group did not positively experience such connection between the printed quizzes and their motivation – a variable which decreased not only in comparison to the other group but also in relation to the initial questionnaire.

In general lines, learners from the experimental group enjoyed the quizzes more than the ones from the control group, finding them more motivating and helpful in terms of learning English and revising, and displaying a higher preference for a future manipulation of Quizizz inside the classroom.

As for the mode, only 11,1% of learners from the experimental group strongly agreed to item 4 about preference of digital mode over paper. Coincidentally, the ones who solely engaged in printed tasks did express a stronger opinion on said issue, with 50% strongly disagreeing to preferring printed quizzes over digital ones.

Finally, in terms of nervousness tied to performance, the control group was calmer, which could most probably be due to the fact that they had done traditional quizzes before and were familiar with them, while learners from the other class had no manipulated Quizizz prior to the implementation of this unit.

Scrutinizing these results more closely, let focus be drawn to statement 2 – “I find Quizizz/quizzes motivating”, wherein the experimental group registered 88,9% of agreement while the control group remained in 50%, with the other remaining percentage falling into the aforementioned neutrality, and further proving the amotivation tied to this group. This specific statement also deserves special attention because it had a follow-up open question, wherein students could express why they felt motivation – or a lack thereof. While both groups mentioned the fun that could be involved in taking these little tests, the control group raised concerns about the possible repetitiveness and boredom that comes along with it, while the research group rather focused on positive qualities related to Quizizz’s helpfulness to revise English while engaging in competitive and interactive games.

Additionally, the responses to the two other open-ended questions also shed a lot of light over the discussed differences in motivation. Thus, responses to item 10 (positive things about Quizizz/quizzes) in the control group veered more towards tangential agents such as the fun situations created during the posterior correction of the quizzes, while the experimental group directly related Quizizz to the adjective fun, as well as mentioning the appreciation of the instant feedback and the competitive/collaborative atmosphere created by the gamified app. Nonetheless, answers to item 11 (negative things) did display similarities in terms of the difficulty and potentially frustrating implications of failing the quizzes or appearing low on the leaderboard, which could even be demoralizing enough to the point of becoming unmotivating.

6.2 Academic Performance

Reviewing the results from the three quizzes and the written exam, it can be seen how the control group performed better in the quizzes while the experimental group had a

higher average grade in the written exam. These data, though seemingly contradictory at first, can easily be connected to the results in motivation discussed in the previous section.

At a first glance, it is undeniable that the research group fell behind in all the quizzes in comparison to the control group; however, upon closer scrutiny, a progression can be perceived, whereby the Quizizz-exposed group inched closer to the other one in each game. Thus, while the average grade of the first quiz displays a 0,9 difference between the classes, the following one records only a 0,4 variation, which is even further reduced in the final one – 0,3. Furthermore, there is only a 0,1 decrease between the first and last Quizizz game, while the control group displays a 0,7 decline in grade between said tests.

Arguably, the only characteristic that changed in-between these results was familiarization with the newly introduced educational app, which implies that – as mentioned in Zhao's study (2019) – frequent engagement with *Quizizz* played a big role on the grades, exponentially lessening the gap between them. Therefore, it is not outlandish to assume that, given more time, individuals belonging to the experimental group would have surpassed the results of the control group in the daily quizzes.

As a matter of fact, the aforementioned occurrence actually took place in the written exam, wherein the research group's grade was over 0,5 points better than the one belonging to the control group. Coincidentally, this aligns perfectly with learners' perceptions reflected in the motivational post-survey, as the experimental group alluded to the helpfulness *Quizizz* to revise content and memorize vocabulary and grammar, while the control group did not perceive the printed quizzes as such.

Therefore, it is safe to say that the implementation of an educational app did enrich the learning process of the students enrolled in the research group, especially in the field of revision, assessment, and feedback, as reflected not only in their opinions but also in their increases in performance.

6.3 Implications for the teaching profession

The results of this study attest to the already existing theory and practice on the benefits of introducing and bolstering the use of educational apps such as *Quizizz* inside the language classroom to excite and maintain learners' motivation.

However, in order for this reality to come into fruition, there is a mandatory requirement on the part of the teaching faculty: instructors need to be digitally literate and understand the potential risks and benefits of using web-apps and online tools with the students, so as to make these exercises fruitful for all the agents involved.

This holds a clear implication tied to the education and preparation received by teachers. The use of ICTs needs to be taught in a manner that adapts to the demands and possibilities of this era, awarding the future instructors the possibility to engage with all existing and future digital resources with the confidence that warrants a proper digital literacy as not only passive receiver but active creator.

Thus, the too-often demonized social media or mobile phones, need to be destigmatized within the language classroom, and be seen as the helpful devices they can potentially be; since, in the end, they are entirely devoted to the business of communication – much like the languages themselves and the educational environment at large.

6.4 Limitations of the study

The biggest limitations of this study can be summed up in the concept of *frequency*, which was deeply affected by the lack of enough time and the rates of absenteeism, ultimately resulting in milder variations of results than expected – as will be followingly explained.

Time has been targeted because Quizizz is an app that relishes on frequency of usage over an extended period of classes, with the literature reviewed including studies ranging from a couple months to a full academic year. Unfortunately, circumstances did not allow for the implementation of this didactic intervention for such an extended period of time, or with a higher frequency than twice-a-week, due to the Language School prototypical schedule. Thus, Quizizz was employed solely throughout two weeks – with only two session per week, which evidently did not accomplish as much fluctuations as previous literature could suggest, especially in terms of academic achievement.

To make matters worse, absenteeism was extremely high in both of the groups used as sample, mostly because attendance was not mandatory nor graded. So much so, that there was not even one session with complete attendance within the 2 months of my stay in the *EOI*. In fact, only a couple students from each group were actually present in

all the sessions that composed the didactic unit, and some only ever came for the official written exam.

Due to the exposed reasons, and despite the fact that all content and tasks were uploaded to the virtual classroom, there was an obvious hindrance of the expected progression.

6.5 Future lines of work

There is still a lot to be done in terms of research in the field of digital gamification, motivation, or the use of new digital resources to improve the learning process, especially with the ongoing frenetic development of technology. Thus, in order for Quizizz and any other digital resource to be exploited to their fullest potential, educational centers and governments need to push projects which investigate to which extent “traditional” means can be substituted by ICTs, in a manner that does not compromise the quality of instruction.

Inclusivity needs to take a centerstage in future studies on Quizizz and ICTs, especially taking into account how personality variables – such as age, ethnicity, age, etc. – can affect results regarding the use of educational apps, since these qualities are extremely related to motivation and performance. Reaching an understanding of how certain tests and games need to be tailored to appeal and adapt to the needs of each specific student could unleash a world of possibilities, awarding the learners the ability to study under complete equity. Furthermore, the use of technology and digital games should not be discarded in adult education, but rather bolstered by the government and the ministry of education in particular, since it holds incomputable potential in many interrelated areas within the realm of learning and living in the current globalized and technology-ridden world.

Following this line of thought, research about the use of educational apps in Language Schools (*EOIs*) should be prompted in future investigations, since the differing contextual and individual features of these spaces deserve their own separate exploration.

Finally, an idea that seems to hold great potential is the creation of *virtual classrooms* of sorts inside apps like Quizizz, wherein users do not only have access to all the lessons and tasks done in class and uploaded by their educator, but they can also seek the ones uploaded by other users, as well as create and share their own. It should be investigated

whether this actually awards more autonomy to the learners and increases their motivation by allowing self-regulation of learning inside and outside the classroom, or rather becomes overwhelmingly demanding and produces the contrary effect.

7 Conclusion

This comparative study set out to prove the hypothesis that engaging with a gamified educational web-app – Quizizz – would improve adult learners' motivational levels, which would consequently be reflected in their academic performance, resulting in an overall enhanced learning experience for the students.

On the one hand, regarding motivation, the measurements derived from the different surveys and tests conducted throughout the span of two weeks do show slight variations which fall in line with the hypothesized results, proving that learners exposed to Quizizz improved their motivational levels in comparison to those who did not engage with the app.

On the other hand, regarding the area of academic performance, the fluctuations extracted from the numerical data were not conclusive enough to confidently ascribe the merit to the use of Quizizz. They did, however, show an increasing tendency towards improvement, which suggests potential in a more extended usage of the app. Similarly, learners did perceive aid and enhancement of their language skills thanks to the repeated use of the gamified application.

Therefore, circling back to the initial research questions it can be affirmed that Quizizz did improve adult learners' motivation, while it did not display any significant effects in their academic performance, which entails that the initial hypothesis has only been partially proven.

To conclude, the web-app Quizizz – as any other ICTs nowadays – may be regarded as a very powerful tool, which becomes a possible alternative to more analogic resources in adult education, providing a bigger adaptability and allowing the instructor the possibility to tailor lessons and tests to the individual learner without as much effort. In the end, however, all available resources should be combined and employed flexibly to offer the most qualitatively satisfying experience for learners and teaches while relying on efficacy and efficiency of means.

8 Bibliography

- Ahl, H. (2006). Motivation in adult education: a problem solver or a euphemism for direction and control? *International Journal of Lifelong Education*, 25(4), 385-405, DOI: 10.1080/02601370600772384
- Al-Hoorie, A. and MacIntyre, P.D. (2019). *Contemporary Language Motivation Theory: 60 Years Since Gardner and Lambert (1959)*. Bristol: Multilingual Matters.
- Amrai, K., Motlagh, S.E., Zalani, H.A., & Parhon, H. (2011). The relationship between academic motivation and academic achievement students. *Procedia Social and Behavioral Sciences* 15, 399 – 402.
- Anak Yunus, C. C., & Hua, T.K. (2021) Exploring a Gamified Learning Tool in the ESL Classroom: The Case of Quizizz. *Journal of Education and e-Learning Research*, 8 (1), pp. 103 – 108.
- Aşıksoy, G., & Sorakin, Y. (2018). The effects of clicker-aided flipped classroom model on learning achievement, Physics anxiety and students' perceptions. *International Online Journal of Education and Teaching (IOJET)*, 5(2), 334- 346. <http://iojet.org/index.php/IOJET/article/view/389/238>
- Ayub, N. (2010). Effect of intrinsic and extrinsic motivation on academic performance. *Pakistan Business Review*.
- Basuki, Y., and Hidayati, Y.N. (2019). Kahoot! or Quizizz: The Students' Perspectives. *Proceedings of the 3rd English Language and Literature International Conference, ELLiC*). EAI. <http://dx.doi.org/10.4108/eai.27-4-2019.2285331>
- Bower, W. S., Boyer, J. L., & Scheirer, E. A. (1970). Research Related to Academic Achievement Motivation: An Illustrative Review. *Theory Into Practice*, 9(1), 33–46. <http://www.jstor.org/stable/1476059>
- Cadieux Boulden, D., Hurt, J. W.; & Richardson, M.K. (2017). Implementing Digital Tools to Support Student Questioning Abilities: A Collaborative Action Research Report. *i.e.: inquiry in education*, 9(1) <http://digitalcommons.nl.edu/ie/vol9/iss1/2>
- Dąbrowska, E., Becker, L. & Miorelli, L. (2020) Is Adult Second Language Acquisition Defective? *Front. Psychol.* 11:1839. doi: 10.3389/fpsyg.2020.01839
- Dewi, K.S., Myartawan, I.PN.W., Swari N.K.T.A., & Sugihartini, N. (2020). QUIZIZZ EFFECT ON STUDENTS' GRAMMAR MASTERY IN HIGHER EFL CLASSROOM BASED MOBILE ASSISTED LANGUAGE LEARNING (MALL). *Language and Educational Journal Undiksha*, 3(1), 15 – 24.
- Dhamayanti, F. (2021). EFL Students' Perception and Motivation Toward Quizizz as E-Learning Media in English E-Classroom. *EDUCAFL: Journal of Education of*

- English as Foreign Language, 4(2), 70-77. doi:
<http://dx.doi.org/10.21776/ub.educafl.2021.004.02.03>
- Escuela Oficial de Idiomas de Madrid-Embajadores. (2021). *Proyecto Oficial de Centro: Curso 2021-2022*. EducaMadrid.
- Fadhilawati, D. (2021). Using Quizizz Application for Learning and Evaluating Grammar Material. *JOSAR (Journal of Students Academic Research)*. 6. 85-94.
- Figuroa, J. (2015). Using Gamification to Enhance Second Language Learning. *Digital Education Review* 27, pp. 32 – 54.
- Glynn, S. M. (2011). *SCIENCE MOTIVATION QUESTIONNAIRE II (SMQ-II)*. STELAR. Retrieved February 22, 2022, from <http://stelar.edc.org/sites/stelar.edc.org/files/SMQII-Glynn.pdf>
- Göksun, D. O., & Gürsoy, G. (2019). Comparing success and engagement in gamified learning experiences via Kahoot and Quizizz. *Computers & Education* 135, 15 – 29.
- Gobierno de España. (2020). El Gobierno lanza el programa educa en digital para impulsar la Transformación Tecnológica de la educación en España. Ministerio de Educación y Formación Profesional. Retrieved May 20, 2022, from <https://www.educacionyfp.gob.es/en/prensa/actualidad/2020/06/20200616-educaendigital.html>
- Gobierno de España. (2021). *Digital Economy and Society index (DESI) 2021 Spain*. España Digital 2025. Retrieved May 2, 2022, from https://espanadigital.gob.es/sites/agendadigital/files/2022-01/DESI_2021_Spain_eng.pdf
- Gobierno de España. (2022). *Enseñanzas no universitarias. Enseñanza de Lenguas extranjeras: Curso 2020-2021*. Ministerio de Educación y Formación Profesional. Retrieved May 12, 2022, from <https://www.educacionyfp.gob.es/servicios-al-ciudadano/estadisticas/no-universitaria/alumnado/lenextran/2020-2021.html>
- Hamilton-Hankins, O. J. (2017). *The Impact of Technology Integration on the Engagement Levels of Ten Second Grade Students in an English Language Arts Classroom*. (Doctoral dissertation). <https://scholarcommons.sc.edu/etd/4343>
- Handoko, W., Mizkat, E., Nasution, A., Hambali, & Eska, J. (2021). Gamification in learning using Quizizz application as assessment tools. *Journal of Physics: Conference Series*, 1783(1), 012111. <https://doi.org/10.1088/1742-6596/1783/1/012111>
- Huang, W.H., & Soman, D. (2013). *A Practitioner's Guide to Gamification of Education*. University of Toronto.

- Hung, A.C.Y. (2017). A Critique and Defense of Gamification. *Journal of Interactive Online Learning*, 15(1), pp. 57 – 72, ISSN: 1541-4914.
- Hymes, D.H. (1972) "On Communicative Competence" In: J.B. Pride and J. Holmes (eds) *Sociolinguistics. Selected Readings*. Harmondsworth: Penguin, pp. 269-293
- Inocencio, F. (2018). Using Gamification in Education: A Systematic Literature Review. *Thirty Ninth International Conference on Information Systems*.
- Irwansyah, R., & Izzati, M. (2021). Implementing Quizizz as Game Based Learning and Assessment in the English Classroom. *Tefla Journal*, 3 (1), pp. 13 – 18.
- Jimenez-Sánchez, M., & Gargallo Camarillas N. (2020). GAMIFICATION AND STUDENTS' MOTIVATION: USING QUIZZZ IN THE ENGLISH AS A FOREIGN LANGUAGE (EFL) CLASSROOM. *Acta Marisiensis. Philologia*, 2, 143 – 157.
- Johnson, R. (1996). The Adult Student: Motivation and Retention. *American Music Teacher*, 46(2), 16–61. <http://www.jstor.org/stable/43546103>
- Kawalilak, C. & Groen, J. (2021). Adult Learning. In T. S. Rocco, M. C. Smith, R. C. Mizzi, L. R. Merriweather & J. D Hawley (Ed.). *The Handbook of Adult and Continuing Education* (pp. 73 – 80). Stylus Publishing, LLC.
- Knowles, M.S., Holton III, E.F., & Swanson, R.A. (2015). *The Adult Learner: The Definitive Classic in Adult Education and Human Resource Development* (8th ed.). Routledge.
- Koivisto, J., & Malik, A. (2020). Gamification for older adults: A systematic literature review. *The Gerontologist*, 61(7). <https://doi.org/10.1093/geront/gnaa047>
- Krashen, S.D. 1982. *Principles and Practice in Second Language Acquisition*. University of Southern California: Pergamon Press, Inc.
- Littlewood, W. (1981). *Communicative Language Teaching: An Introduction*. Cambridge University Press.
- Mahadi, T.S.T., & Jafari, S.M. (2012). Motivation, Its Types, and Its Impacts in Language Learning. *International Journal of Business and Social Science* 3(24), 230 – 235.
- Marinova-Todd, S. H., Marshall, D. B., & Snow, C. E. (2000). Three Misconceptions about Age and L2 Learning. *TESOL Quarterly*, 34(1), 9–34. <https://doi.org/10.2307/3588095>
- Masgoret, A.M., & Gardner, R.C. (2003). Attitudes, Motivation, and Second Language Learning: A Meta-Analysis of Studies Conducted by Gardner and Associates. *Language Learning* 53, 167 – 210.
- Mateos de Cabo, E., & Mateos de Cabo, R. (2015). An application of the English Language Learner Motivation Scale (ELLMS) among Spanish Primary ELLs. *SSRN Electronic Journal*.

- Merriam, S.B., & Bierema L.L. (2014). *Adult Learning: Linking Theory and Practice*. California: Jossey-Bass
- Nah, F.FH., Zeng, Q., Telaprolu, V.R., Ayyappa, A.P., & Eschenbrenner, B. (2014). Gamification of Education: A Review of Literature. In: Nah, F.FH. (eds) *HCI in Business. HCIB 2014. Lecture Notes in Computer Science, 8527*. Springer, Cham. https://doi.org/10.1007/978-3-319-07293-7_39
- National Academies of Sciences, Engineering, and Medicine [NASEM] (2018). *How People Learn II: Learners, Contexts, and Cultures*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/24783>.
- Newton, E. S. (1977). Andragogy: Understanding the Adult as a Learner. *Journal of Reading, 20*(5), 361–363. <http://www.jstor.org/stable/40032981>
- Papadima-Sophocleous, S., Giannikas, C. N., & Kakoulli-Constantinou, E. (2014). ICT in EFL: The global effect of new technologies in the language classroom. In S. Jager, L. Bradley, E. J. Meima, & S. Thouèsny (Eds), *CALL Design: Principles and Practice; Proceedings of the 2014 EUROCALL Conference, Groningen, The Netherlands* (pp. 296-300). Dublin: Research-publishing.net. doi:10.14705/rpnet.2014.000234
- Prince, M.J. & Felder, R.M. (2006). Inductive Teaching and Learning Methods: Definitions, Comparisons, and Research Bases. *Journal of Engineering Education 95*, 123-138. <https://doi.org/10.1002/j.2168-9830.2006.tb00884.x>
- Ryan, R., & Deci E. (2000). Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions Richard M. Ryan and Edward L. Deci. *Contemporary Educational Psychology 25*, 54–67.
- Sanmartín, O. R. (2020). España es el país donde menos se incentiva a los profesores para que usen la tecnología en sus clases. *El Mundo*. <https://www.elmundo.es/espana/2020/09/29/5f71cf82fc6c8334568b4652.htmlb>
- Sansone, C & Harackiewicz, J.M. (2000). *Intrinsic and Extrinsic Motivation: The Search for Optimal Motivation and Performance*. Academic Press.
- Shopova T. (2014) “Digital Literacy of Students and Its Improvement at the University”, *Journal on Efficiency and Responsibility in Education and Science, 7*(2), pp. 26-32, online ISSN 1803-1617. printed ISSN 1803-1617, doi: 10.7160/eriesj.2014.070201.
- Suo Yan, Z., & Mei, S.Y. (2018). Implementing Quizizz as Game Based Learning in the Arabic Classroom. *European Journal of Social Science Education and Research, 12*(1), 208-212. <https://doi.org/10.26417/ejser.v12i1.p208-212>
- Taylor, G., Jungert, T., Mageau, G.A., Schattke, K., Dedic, H., Rosenfield, S., & Koestner, R. (2014). A self-determination theory approach to predicting school

- achievement over time: the unique role of intrinsic motivation. *Contemporary Educational Psychology* 39, 342 – 358.
- Valerio, K. (2012). Intrinsic motivation in the classroom. *Journal of Student Engagement: Education Matters* 2(1), 30 – 35.
- Wang, W. (1999). Age and Second Language Acquisition in Adulthood: The Learning Experiences and Perceptions of Women Immigrants. *TESL Canada Journal*, 16(2), 01–19. <https://doi.org/10.18806/tesl.v16i2.715>
- Wilkins, D.A. (1972). *Linguistics in language teaching*. MIT Press.
- Wigfield, A., & Eccles, J. S. (2000). Expectancy–value theory of achievement motivation. *Contemporary Educational Psychology*, 25(1), 68–81. <https://doi.org/10.1006/ceps.1999.1015>
- Wolfgang, M. E., & Dowling, W. D. (1981). Differences in Motivation of Adult and Younger Undergraduates. *The Journal of Higher Education*, 52(6), 640–648. <https://doi.org/10.2307/1981772>
- Zhao, F. (2019). Using Quizizz to Integrate Fun Multiplayer Activity in the Accounting Classroom. *International Journey of Higher Education*, 8(1), 37 – 43.
- Zuhriyah, S. & Pratolo, B.W. (2020). Exploring Students' Views in the Use of Quizizz as an Assessment Tool in English as a Foreign Language (EFL) Class. *Universal Journal of Educational Research*, 8(11), 5312 - 5317. DOI:annex10.13189/ujer.2020.081132

ANNEX 1: Quizizz 1 (printed version)

- The object of an active sentence appears as the ___ in a passive sentence.

<input type="checkbox"/> A SUBJECT	<input type="checkbox"/> B COMPLEMENT
<input type="checkbox"/> C AGENT	<input type="checkbox"/> D OBJECT
- Select the correct pattern of the simple passive.

<input type="checkbox"/> A verb <i>to be/to get</i> + past participle + (by agent)	<input type="checkbox"/> B verb <i>to be/to get</i> + past participle + (by subject)
<input type="checkbox"/> C verb <i>to be</i> + past participle + (by agent)	<input type="checkbox"/> D verb <i>to get</i> + past participle + (by agent)
- The agent can be omitted if it is unimportant or already implied/known.

<input type="checkbox"/> A TRUE	<input type="checkbox"/> B FALSE
---------------------------------	----------------------------------
- A ditransitive verb is...

<input type="checkbox"/> A A verb which has two object(s)	<input type="checkbox"/> B A verb which has no object(s)
<input type="checkbox"/> C This is a trick question. They do not exist.	<input type="checkbox"/> D A verb composed of two particles (pheasant verb)
- WHY is the passive voice used?

<input type="checkbox"/> A Because it draws importance to the object	<input type="checkbox"/> B Because it draws importance to the action
<input type="checkbox"/> C Just because.	<input type="checkbox"/> D Because it sounds fancier than the active voice.
- An impersonal passive follows this pattern:

<input type="checkbox"/> A It + verb to be + past participle	<input type="checkbox"/> B It + verb to be in infinitive + past participle
<input type="checkbox"/> C It + past participle	<input type="checkbox"/> D It + verb to be + infinitive
- People say crime rates are on the rise.

<input type="checkbox"/> A Crimes rates are said to be on the rise.	<input type="checkbox"/> B It is said that crime rates are on the rise.
<input type="checkbox"/> C According to people, crime rates are on the rise.	<input type="checkbox"/> D People beliefs are that crime rates are rising.
- The suspect ____ (future, *arrest*) (by the police).

- They have given him a good deal.

<input type="checkbox"/> A He was given a good deal.	<input type="checkbox"/> B A good deal has been given to him.
<input type="checkbox"/> C He has been given a good deal.	<input type="checkbox"/> D A good deal was given to him.

ANNEX 2: Quizizz 2 (printed version)

1. What are causatives used for? (2 correct)

- A To express that the subject did the action. B To express that the subject caused the action to happen.
 C To express that the action was performed by the subject. D To express that the subject did not do the action himself/herself.

2. Choose the correct *passive causative* pattern

- A Subject + have/get + object + P.P (by agent) B Subject + have/let/make + object + verb
 C Subject + Be/Get + P.P D Subject + be/get + object + P.P (by agent)

3. Make this sentence passive causative: *The president had the secretary arrange his schedule.*

4. Make it passive: She made the waiter reheat her food.

5. Someone stole his bike because he left it unchained. >>
He _____ because he left it unchained.

6. Create sentences with the passive causative pattern. Change the verbs accordingly.

Mery / roof / to repair.

John / picture / to take.

Sam / nails / to do.

The government / citizens / to inform.

7. _____: try every possible course of action in order to achieve something.

8. _____: to do something perfunctorily to save time or money.

9. Alibi:

- A The institution and conduct of legal proceedings against a defendant for criminal behaviour. B One who helps or encourages or incites another.
 C A defence by an accused person purporting to show that he or she could not have committed the crime.

10. Choose the correct synonym(s) of "I don't know"
- A I don't have a clue B Your guess is as good as mine
- C I have no idea D I couldn't tell you
11. Buildings are set on fire by....
- A a burglar B an arsonist
- C a mugger D a fraudster
12. Substitute with an idiom/phrase: The situation is becoming unmanageable.

13. Substitute with an idiom/phrase: People blamed the victim's partner.

14. to smuggle:
- A to make a statement of what you believe to be true, especially in support of something or someone or when someone has been accused in a law court B to demand payment or another benefit from someone in return for not revealing compromising information about them
- C to attack and rob someone in a public place D to take things or people to or from a place secretly and often illegally
15. Paraphrase: The police told the witness to cut to the chase. The witness.....by the police.

16. Paraphrase: Governments often allow big companies' illegal acts to go unpunished. _____ by governments.

17. Paraphrase: The boss thinks that hiring an investigator is a bad idea. _____(should), according to the boss.

18. Paraphrase using the passive causative: My mom made me clean the kitchen.

19.  What is this specific crime called exactly?

20.  Create a headline for this image (use the passive voice).

ANNEX 3: Report Writing (exam)

WRITING TASK

Write about 150-180 words following the instructions.

The suggested time for this task is: 40 minutes.

MARK

The government is interested in making Madrid more secure for its residents, so they want to know the opinion that locals hold about criminality in the city. You have been asked to investigate around your neighborhood and write a report for the mayor.

Address the following points:

- What crimes are the most worrisome for local people?
- What measures could be implemented to make the city more secure?

Use the space below to note down and organise your ideas.

These notes will not be marked.

ANNEX 4: Quizizz 3 (printed version)

1. We often *see eye to eye* on controversial topics.

<input type="checkbox"/> A debate	<input type="checkbox"/> B discuss
<input type="checkbox"/> C agree	<input type="checkbox"/> D disagree

2. *The bottom line* means:

<input type="checkbox"/> A the important thing	<input type="checkbox"/> B the last thing
<input type="checkbox"/> C the first thing	<input type="checkbox"/> D the most unimportant thing

3. A way of expressing partial agreement:

<input type="checkbox"/> A I wholeheartedly disagree	<input type="checkbox"/> B I beg to differ
<input type="checkbox"/> C you're wrong	<input type="checkbox"/> D I see your point up to a certain extent

4. Choose the only grammatically correct sentence:

<input type="checkbox"/> A I had my father to fix my car	<input type="checkbox"/> B I got my father fixed my car
<input type="checkbox"/> C I had my car fixed to my father	<input type="checkbox"/> D I got my father to fix my car

5. Choose the correct causative passive of "My house will be painted"

<input type="checkbox"/> A I will have my house painted	<input type="checkbox"/> B My house will get painted by someone else
<input type="checkbox"/> C I will get my house painted myself	<input type="checkbox"/> D I will have someone paint my house

6. The terrorists the plane to get a million dollar ransom.

<input type="checkbox"/> A got in	<input type="checkbox"/> B broke
<input type="checkbox"/> C hijacked	<input type="checkbox"/> D robbed

7. It was impossible to accuse him of the crime thanks to his ironclad.....

<input type="checkbox"/> A smuggling	<input type="checkbox"/> B offence
<input type="checkbox"/> C alibi	<input type="checkbox"/> D lawyer

8. Choose the simple passive (2 correct): she told him my story

<input type="checkbox"/> A I was told his story	<input type="checkbox"/> B He was told my story
<input type="checkbox"/> C My story was told to him by her	<input type="checkbox"/> D My story was told to him by me

9. Choose the correct impersonal passive: People believe this rumour is true.
- A People say this is rumoured to be true. B This rumour is said to be true by people.
- C It is believed that this rumour is true
10.  Choose the option(s) that best describes this.
- A cut your hair B get a haircut
- C have your hair cut D have someone cut your hair
11. People tend to ___ when they are nervous
- A smile B shriek
- C jump D fidget
12. to stop an activity, business, etc., that is failing before suffering more harm or loss
- A risk aversion B bankruptcy
- C get off the hook D cut your losses
13. Choose the correct passive transformation(s) of "People often say he is a liar".
- A He is often said to be a liar. B It is often said that he is a liar.
- C He is getting said to be a liar. D It is being said that he is a liar.
14. Choose the simple causative (active voice, not passive)
- A Tom had his hair cut by his mom. B Tom had his mom cut his hair.
- C Tom got a haircut. D Tom cut his hair.
15. Make it passive: People say she is rude.
-
16. Choose the synonym: "That idea is *preposterous*"
- A reasonable B sensible
- C ridiculous D genius