

UNIVERSIDADE FEDERAL DE PERNAMBUCO CENTRO DE ARTES E COMUNICAÇÃO DEPARTAMENTO DE LETRAS LICENCIATURA EM LÍNGUA INGLESA

AMANDA GABRIELA VALÉRIO DA SILVA

THE IMPACT OF GAME-BASED QUIZZES ON STUDENTS' MOTIVATION IN ONLINE TEACHING: A SURVEY OF TEACHERS' VIEWS

AMANDA GABRIELA VALÉRIO DA SILVA

THE IMPACT OF GAME-BASED QUIZZES ON STUDENTS' MOTIVATION IN ONLINE TEACHING: A SURVEY OF TEACHERS' VIEWS

Article written as a requirement for the attainment of the degree Bachelor in English Language Teaching.

Supervisor: Prof. Dr. Heri Ramos de Oliveira Pontes

AMANDA GABRIELA VALÉRIO DA SILVA

THE IMPACT OF GAME-BASED QUIZZES ON STUDENTS' MOTIVATION IN ONLINE TEACHING: A SURVEY OF TEACHERS' VIEWS

Artigo apresentado ao Programa de Graduação em Letras da Universidade Federal de Pernambuco, Centro de Artes e Comunicação, como requisito para a obtenção do título de Licenciatura em Língua Inglesa.

Aprovado em:

BANCA EXAMINADORA

Prof^a. Dr^a. Heri Ramos de Oliveira Pontes (Orientadora) Universidade Federal de Pernambuco - UFPE

Prof^o. Dr^o. Marcelo Augusto Mesquita da Costa (Examinador Externo) Universidade Federal de Pernambuco - UFPE

Abstract

Considering that students' engagement in online classes is usually lower than in in-person classes, the purpose of this research is to examine teachers' perceptions of the affordances of online game-based quiz platforms in online teaching and their contribution to students' motivation. The study is based on Sailer et al. (2017), Farber (2017), and Deterding et al. (2011) to define the elements of game-based learning and gamification; Kress (2010) to define multimodal elements, which are key in quizzes; Nucci et al. (2021) reflections on their benefits in online teaching; and on Deci and Ryan (2000) work on motivation. Data collection was based on a questionnaire answered by twelve teachers of English from different levels of education and language courses in Recife. The analyses made were qualitative and interpretative. The responses showed that the research participants used guizzes in online classes for different purposes, including fostering motivation, practicing the content, and changing the class dynamic. According to the informants' experiences, quizzes may have positive effects on fostering students' motivation, due to their game design and multimodal elements. They also pointed out that there are some difficulties, such as technology issues, students may perceive quizzes as a distraction, and quizzes may hinder second language socialization. Therefore, to use these platforms in class, teachers should be aware of their potential and constraints and align them with their own lessons' objectives.

Keywords: game-based learning; online game-based quizzes; motivation; teachers; online teaching and learning.

Resumo

Considerando que engajamento dos alunos em aulas online é geralmente menor que em aulas presenciais, o propósito desta pesquisa é examinar as percepções dos professores sobre as "affordances" (possibilidades) das plataformas de quizzes baseadas em aprendizagem em jogos no ensino online e sua contribuição para a motivação dos alunos. O estudo é baseado em Sailer et al. (2017), Farber (2017) e Deterding et al. (2011) para definir os elementos de aprendizagem baseada em jogos e gamificação; Kress (2010) para definir elementos multimodais, que são essenciais em quizzes; reflexões de Nucci et al. (2021) sobre seus beneficios no ensino online; e no estudo de Deci e Ryan (2000) sobre motivação. A coleta de dados foi baseada em um questionário respondido por doze professores de inglês de diferentes níveis de ensino e cursos de idiomas em Recife. As análises feitas foram qualitativas e interpretativas. As respostas mostraram que os participantes da pesquisa usaram quizzes em aulas online para diferentes propósitos, incluindo estimular a motivação, praticar o conteúdo e modificar a dinâmica da aula. De acordo com as experiências dos informantes, os quizzes podem ter efeitos positivos no estímulo à motivação dos alunos, devido ao seu design de jogo e elementos multimodais. Eles também destacaram que existem algumas dificuldades, como em relação a tecnologia, a percepção dos alunos dos quizes serem uma distração e que quizzes podem prejudicar a socialização em segunda língua. Portanto, para usar essas plataformas em sala de aula, os professores devem estar cientes de seu potencial e limitações e alinhá-los aos objetivos de suas próprias aulas.

Palavras-chave: aprendizagem baseada em jogos; plataformas de quizzes baseadas em aprendizagem em jogos; motivação; professores; ensino e aprendizado online.

¹ Undergraduate student in English Language Teaching at Universidade Federal de Pernambuco (UFPE).

1. INTRODUCTION

Since the outbreak of the Covid pandemic in 2019, many institutions (both educational and non-educational) have changed and adapted their activities to remote environments. According to a survey² by the *Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira* (Inep) during the academic year of 2021, 78,7% of public schools adopted online synchronous classes during the pandemic. As a result, according to Hodges *et al.* (2020), teachers and institutions were not only forced to substitute many of the tools and pedagogical resources they were familiar with in in-person classes but also to learn and adopt more suitable new technologies and learning strategies for the new environment of Emergency Remote Teaching (ERT).

Game-based learning (GBL), as pointed out by Farber (2017) and Pimentel *et al.* (2020), is a learning strategy that has been around since the twentieth century, allowing digital games into the classroom, but it has only recently been accepted and implemented in learning environments. Another similar learning strategy is Gamification, which, unlike GBL, is "the use of game design elements in non-game contexts" (Deterding *et al.*, 2011, p. 1). Game-design elements are defined differently by several authors, but these are the primary ones: rewards, leaderboards, points, and teammates, which are also present in game-based platforms (Deterding *et al.*, 2011; Robson *et al.*, 2015; Farber, 2017).

Developed with aspects from GBL and Gamification, online game-based quiz platforms combine different types of questions with multimodal elements (text, audio, video, etc) with game-design elements in a learning competition. According to Nuci *et al.* (2021), these aspects might have helped increase students' motivation in class during ERT. Regarding motivation, it is an intrinsic, personal factor. Deci and Ryan (2000) define motivation as the energization and direction of behavior toward particular goals; thus, the game-design elements present in these platforms assisted in this energization, increasing the students' attention span and engagement in class (Bhat *et al.*, 2023).

During the shift to ERT, teachers faced challenges in adapting their teaching methods for virtual classrooms. This included maintaining student engagement and effective content delivery. According to Nuci *et al.* (2021), this transition demanded quick adaptation to digital tools and platforms, which was often difficult due to unfamiliar technology. The lack of

²Avalaible on:

< https://www.gov.br/inep/pt-br/assuntos/noticias/censo-escolar/pesquisa-revela-resposta-educacional-a-pandemia-em-2021>.

in-person interaction and immediate feedback made it challenging for teachers to assess student understanding and adapt their teaching. In this sense, game-based quizzes gained importance as helpful tools for educators, leading to discussions about their affordances.

Affordances, as defined by Kress (2010), refer to the potentials and constraints of various modes like texts, images, audio, video, and interactive elements. These modes, found in analyzed quiz platforms, become *multimodal elements* when used to convey information in specific contexts. Multimodal elements enhance communication in online settings, in online education, these elements in digital tools offer students new ways to engage with content, enabling teachers to reach various learning styles (Moreno & Mayer, 2007). In this way, this study aims to describe and contribute to these discussions with some English teachers' views on the use of online game-based quiz platforms in online teaching with the purpose of fostering students' motivation.

These discussions progressed to new reflections on the affordances of online quizzes during ERT and Online Teaching. Nuci *et al.* (2021) highlight their potential as engaging and rich multimodal tools, but they also consider their constraints, as they may be presented as technically challenging and not reliable assessment tools. As a result, it is necessary to consider the best strategies for pedagogical resources in online teaching in our current scenario. Thus, this paper considered teachers' experiences in online teaching (before, during, and/or after the pandemic) and how they currently perceive the affordances of using game-based quiz platforms in classes.

This article is divided into three sections. The first section is an overview of how online teaching was affected because of the COVID-19 pandemic. Section two introduces aspects of GBL and how it fosters students' motivation. And section three discusses how teachers and students may be affected by the implementation of quizzes in online classes. The final sections consist of the methodology used, data analysis and results, followed by the final remarks.

2. ONLINE TEACHING & THE COVID-19 PANDEMIC

Remote learning, as defined by the *United Nations Educational, Scientific and Cultural Organization* (UNESCO) is "learning that occurs when the learner and the instructor, or source of information, are separated physically and hence cannot meet in a

traditional classroom setting [...]".³ The instruction is delivered via information and communication technologies (ICTs) and can occur synchronously and asynchronously often in response to external factors such as a pandemic.

During the COVID-19 pandemic, the world experienced what Hodges *et al.* (2020, p. 6) define as *Emergency Remote Teaching* (ERT). According to the authors,

The primary objective in these circumstances is not to re-create a robust educational ecosystem but rather to provide temporary access to instruction and instructional support in a manner that is quick to set up and is reliably available during an emergency or crisis.

The authors argue that the initial implementation of ERT during the pandemic lacked proper planning and preparation seen in pre-pandemic online teaching. This led to challenges for both teachers and students, including limited interaction, adaptation to new technologies, and resource constraints in public institutions. For teachers, this caused confidence and motivation issues, particularly if they were learning these technologies later in life. Students also faced reduced motivation with "difficulty focusing on major concepts resulting from a lack of active learning, and lack of engagement in lectures" (Penã-Lévano, 2020 apud Nuci et al., 2021, p. 2).

Moreover, several students could not participate in classes due to a lack of access to the necessary technology. According to a report⁴ issued by the *Instituto Brasileiro de Geografia e Estatística* (IBGE) in 2021, only 54% of 15-17-year-old students had a computer and internet access during ERT. On the other hand, data about teachers' access to resources in ERT was far more optimistic. A survey⁵ by *Centro Regional de Estudos para o Desenvolvimento da Sociedade da Informação* (Cetic.br) showed that 60% of teachers from both public and private institutions received free access to apps, platforms, and educational resources from schools, allowing them to make full use of the online environment.

³Available on:

https://en.unesco.org/sites/default/files/unesco-covid-19-response-toolkit-remote-learning-strategy.pdf.

⁴Available on:

< https://static.poder 360.com.br/2021/12/S intese-de-Indicadores-Sociais-Uma-analise-das-condicoes-de-vida-da-população-brasileira-2021.pdf>.

⁵Available on:

< https://www.nic.br/noticia/releases/no-segundo-ano-de-pandemia-a-maioria-dos-professores-realizou-atividade s-pedagogicas-de-forma-remota-ou-hibrida-aponta-tic-educacao/#:~:text=A%20falta%20de%20dispositivos%20e,de%20dispositivos%20e%20de%20conectividade>.

Despite the numerous challenges and difficulties, many Brazilian private institutions adapted their teaching methods and discovered in the online environment of ERT, advantages that were in fact the primary characteristics of Online Teaching, as stated by Schlemmer and Moreira (2020, p. 9):

In this modality [Online Teaching], in-person classes [...] are transposed to digital means, in a network. [...] Although there is a geographic distance, the sharing of the same time is privileged, that is, the class takes place in synchronous time, following principles of face-to-face teaching. [...] Thus, the physical presence of the teacher and the student in the geographic classroom space is replaced by a digital presence in a digital classroom (free translation).

Furthermore, online education after the pandemic is seen as a possibility for teachers and students to progress at their own pace and access a wealth of digital resources without geographical barriers. For teachers, online platforms can facilitate content delivery, which enables them to experiment new teaching strategies and engage students through interactive multimodal content with the possibility of reaching different learning styles (Moreno; Mayer, 2007).

2. GAME-BASED LEARNING IN THE CLASSROOM

The debate over digital games as educational resources has raged on for a long time. Games have the potential to provide effective and engaging learning experiences (Abt, 1970, *apud* Farber, 2017). However, it was not until the early twenty-first century, with the introduction of the internet and new technologies aimed at teaching and learning that digital games began to be used in educational settings, breaking taboos that considered them to be solely for entertainment. (Saccol; Schlemmer; Barbosa, 2011 *apud* Pimentel *et al.*, 2020).

Deterding et al. (2011), Farber (2017), Sailer et al. (2017), and Nuci et al. (2021) define game-based learning (GBL) as an instructional method that combines game-design elements present in a game, such as points, leaderboards, rewards, and teammates, with content delivery, in order to primarily engage and motivate students through accomplishment and cooperation while promoting a healthy competitive environment. Points serve as immediate feedback on a player's achievements; Leaderboards are graphical representations of rankings that display the top players or teams; Rewards are incentives or benefits given to players for successfully completing tasks; Teammates collaborate and communicate as part of a team and can also influence conflict and competition.

Moreover, the authors conclude that *points* provide students with a sense of accomplishment as they accumulate them for correctly answering questions. *Leaderboards* encourage healthy competition by motivating students to outperform their peers and achieve a higher rank. *Rewards* generate an extrinsic motivation that drives students to actively participate in and excel at quizzes. Furthermore, the presence of *teammates* fosters a sense of camaraderie and shared responsibility, compelling students to participate more deeply in order to positively contribute to the success of their team.

Other fundamental features in the constitution of quizzes are the multimodal elements. They are visual, auditory, textual, or interactive components proven to increase the overall communication experience in online environments (Moreno; Mayer, 2007; Kress, 2010). Visual elements (such as images, gifs, icons, timer animations, and questions layout), for example, can make questions more intuitive, audio (such as sound effects and background music) can elicit excitement, and interactive components (such as game modes, progression systems, and avatar customization) can keep participants actively engaged. Such multimodal features are then used combined with game-design elements to create a gamified experience that motivates, challenges, and rewards participants, ultimately improving their learning and retention.

Furthermore, with regard to the aforementioned elements, Sailer *et al.* (2017, p.374) conclude that they play an important role in modifying the environment to foster students' motivation. The authors conducted an experiment demonstrating that game-design elements such as *points*, *leaderboards*, *and rewards*, "can evoke feelings of competence, as this directly communicates the success of a player's actions". The experiment also demonstrated that the element *teammates* expresses a need for social integration, "[...] a sense of relevance [that] can be evoked by emphasizing the importance of the players' actions for the group's performance."

Similarly, in relation to the definition of motivation and how it is cultivated, Deci and Ryan (2000, p. 55) say:

The most basic distinction [between different types of motivation] is between *intrinsic motivation*, which refers to doing something because it is inherently interesting or enjoyable, and *extrinsic motivation*, which refers to doing something because it leads to a separable outcome.

Therefore, game-based quizzes tend to motivate students primarily by extrinsic factors. Even though they might be enjoyable, students usually take them for the grades,

rewards, or positions they can earn in competitions. This perspective emphasizes the distinction between engaging in an activity for the pure joy of it, and doing so to obtain specific external benefits, as pointed out by Deci and Ryan (2000). Accordingly, extrinsic motivation should be properly used and dosed by the teacher.

Ultimately, motivation can come from a variety of sources in a game-based or gamified learning experience, and it is usually driven by reinforcements and emotions (Robson *et al.*, 2015). Moreover, according to Robson *et al.*, teachers should ensure that extrinsic motivation does not undermine students' intrinsic motivation through the use of excessive rewards, and instead foster a game-based or gamified learning experience in a healthy competitive environment with balanced motivational reinforcements that encourage respectful behavior, fairness, and collaboration.

3. IMPLEMENTING QUIZZES IN ONLINE CLASSES

Implementing online quizzes as GBL tools in the classroom can present significant challenges for teachers and students. Online classes demand access to technology as well as specific digital literacy. Simultaneously using various interactive tools strains connections and devices, negatively influencing learning. Unstable internet connections and device incompatibility with the platforms may cause problems related to the class' time management, frustrating both students and teachers. As a result, these technical problems may prompt educators to opt for alternative teaching tools over online quizzes (Nuci *et al.*, 2021).

Integrating games or gamified tools into the curriculum, while respecting the lesson plan, requires careful planning by teachers. This involves understanding the game platform and subject matter, which can be time-consuming and may not align with the teacher's style (Farber, 2017). Thus, depending on the language ability emphasized (speaking, writing, listening, reading), some teachers might not view online quizzes as beneficial.

Moreover, before the class, teachers must carefully consider the *game design* of the platforms. It is critical to ensure that games are compatible with the student's devices and level of technological knowledge, as well as having a backup plan that provides alternative means of participation. Furthermore, the quiz content should be aligned with learning objectives and accurately measure student knowledge and skills (Farber, 2017; Pimentel *et al.*, 2020). Previously defining the objectives, balancing the difficulty of the questions, and

providing clear instructions should ensure that the quiz can be successfully aligned with the class.

Teachers also must weigh the benefits of integrating online game-based quiz platforms (and digital tools in general) into education and second-language (L2) socialization. Educator of Stanford University, Antero Garcia recognizes digital tools' positive impact on engagement and technology's role during the pandemic,⁶ even though some highly digitalized countries like Sweden are concerned about potential drawbacks, especially from digital platforms, as echoed by Swedish Minister of Education Lotta Edholm. Sweden's recent decision to slow down digitalization apparently stems from worries about declining reading skills in children, as highlighted by the Progress in International Reading Literacy Study (PIRLS), which revealed a drop from high to intermediate levels in the past five years.⁷

However, research on L2 socialization, which considers learning language abilities in social and cultural contexts, has shown otherwise. Duff (2012, p. 575-576) states that:

Thorne, Black, and Sykes (2009) described socialization through the affordances of digital tools for L2 learners into voluntary [...] virtual worlds (e.g. 'Second Life') as well as through online games in the Web 2.0 environment. They describe a number of studies illustrating how English L2 learners can be socialized into and through digital narratives based on popular culture [...]. Often, [...] they incorporate a variety of other linguistic forms, symbol systems, and orthographies from their L1 to create hybrid texts, reflecting and performing their hybrid linguistic identities and investments.

The author suggests that digital practices in L2 contexts can involve innovative multimodal literacy such as game-based quiz platforms, which through game-design elements like points, leaderboards, and rewards encourage participation and a sense of accomplishment. Therefore, teachers should balance game elements with pedagogical goals to prioritize language learning to foster a dynamic language learning environment that encompasses all language abilities.

4. METHODOLOGY

This study employs a qualitative method to analyze teachers' perspectives on using game-based quiz platforms in online classes. Their viewpoint is relevant to this analysis by several factors: their understanding of learning objectives and curriculum necessities aligned

⁶ Available on: https://news.stanford.edu/report/2023/04/10/technology-might-be-making-education-worse/.

⁷ Available on: https://worldcrunch.com/culture-society/screens-education-digital-deescalation>.

with the use of these platforms, insights into elements that foster student engagement, their knowledge of how quizzes can be implemented to diverse learning styles, and lastly their awareness to evaluate whether game-based quizzes authentically measure desired knowledge and abilities.

As the main social actors in this article, some teachers were asked to provide the data required for this study through a questionnaire (Appendix A). It was distributed via Google Forms between July 11th and 17th. The questionnaire, encompassing open-ended and multiple-choice inquiries, focused on teachers' online teaching experiences and the affordances of online game-based quizzes. The data was analyzed through an interpretative perspective and the framework that grounds this work consists of the theoretical proposal of Sailer *et al.* (2017), Farber (2017), and Deterding *et al.* (2011) on game-based learning and gamification, Kress's (2010) definition of multimodality and Nuci *et al.* (2021) on the benefits of quizzes in online teaching.

Twelve teachers from Recife, aged 20 to 30 participated; eight were female, and four were male. While all teach English, only eight of them do it online. Their teaching experience ranges from three to over eleven years. Educational backgrounds vary, with some having an ongoing Master's degree, others a Master's degree, or not having an English teaching degree.

The game-based quiz platforms selected for this study include Kahoot!, Quizziz, Baamboozle, Wordwall, and Quizlet, with different game-design elements as affordances. They share the same goal: to allow teachers and students to participate in interactive quizzes. Since they use game-based and gamification principles to create quizzes, they have some minor differences regarding their affordances. The respondents' opinions helped in identifying whether the features present - or not - in the quizzes directly contribute to modifying the environment to foster students' motivation.

5. DATA ANALYSIS: WHAT DO TEACHERS SAY?

This analysis aims to demonstrate how teachers use online game-based quizzes as a pedagogical resource in online teaching, highlighting their purposes, particularly in enhancing student motivation. Furthermore, it delves into descriptions of their use, along with potentials and constraints associated with it.

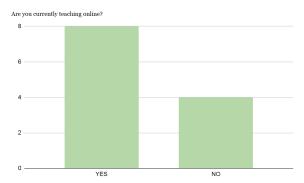


Figure 5.1 helps see that 8 participants said they were teaching online during the pandemic. As 11 respondents admitted they had never taught online classes prior to the pandemic, this represents a significant change from their prior experiences. This increase in the use of online teaching shows how quickly educators responded to the crisis. It's interesting to note that 8 teachers continue to teach online despite the difficulties faced in ERT. This shows that even though some institutions and educators completely switched back to using traditional in-person teaching methods as conditions improved, a significant portion has kept using the advantages of online instruction after the pandemic.

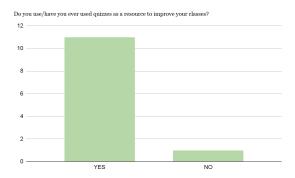
Figure 5.2



Figure 5.2 shows that 7 teachers responded to not having any difficulties adapting to ERT. Due to the participants' age (ranging from 20-30 years) it is reasonable to assume that most digital tools were not new to them, as they belong to a generation in which technology is an integral part of their daily life. Regarding the 5 informants who had difficulties, they listed and shared several factors. The respondents shared issues with connection, digital tools, and the platform where the classes were held. They also brought up the difficulty of transferring in-person methods and exercises from the textbooks to the online setting. Lastly, they claimed that the level of interaction was poor, which negatively impacted the motivation of the students.

However, when questioned about difficulties in online teaching after the pandemic, all the participants said to had none. Only one participant who taught online before the pandemic said to had difficulties but did not provide any further explanation. This shows that the initial difficulties were most likely caused by a lack of preparation due to the abrupt change to ERT. Apparently, there was an increase in experience and development in online pedagogy, better resources, and support which contributed to the shift in this perception, even with the return of in-person classes. However, students and teachers who lacked adequate resources in the online environment were likely to return to in-person classes.

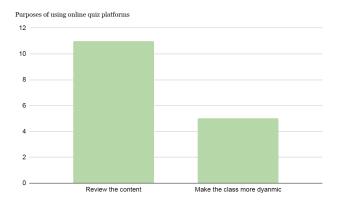
Figure 5.3



As can be seen in Figure 5.3, 11 participants confirmed using online tests in the classroom. The single respondent who answered "no" explained their decision by pointing out that the English book's publisher already had a platform for activities. All respondents said they used multiple platforms in their classes. Kahoot! was mentioned by eight teachers, Quizziz by five, Wordwall by four, Quizlet by two, and Baamboozle by one.

The use of more than one platform demonstrates how teachers use them differently in the classroom depending on their affordances. Platforms like Quizziz, Wordwall, and Kahoot!, for instance, may be ideal for boosting motivation and participation due to their complex gamification features while Baamboozle and Quizlet, which focus on flashcards and not so much on the interactive aspect of GBL, may be effective for vocabulary building and visual learning. Therefore, by switching between platforms and considering their affordances, educators can create a more varied and thorough online teaching experience.

Figure 5.4



As for the purposes of using quizzes, Figure 5.4 shows that all the informants cited using them as a resource to promote controlled practice, with a focus on reviewing vocabulary or grammatical patterns. Among them, 5 informants also responded to using quizzes to foster engagement and to bring dynamicity to their classes. A teacher said to use them as an alternative tool to break the pattern of what they called book-repeat-book in their classes, therefore, in their words, doing something funnier. The other responses were very similar, often bringing the fun element, an interesting factor of online quizzes to foster student engagement and motivation.

A respondent also pointed out the use of quizzes as a tool to deal with the constraint of online classes which, in their view, are not as dynamic as in-person classes. While online classes offer their own benefits, such as convenience and accessibility, the dynamic nature of in-person interactions can be difficult to replicate for some teachers in the virtual environment, contributing to this perception. However, considering the potential of the virtual environment, interactive tools such as chat rooms and video conferencing can be used to encourage participation.

Lastly, it can be argued that the fun aspect of quizzes mentioned by the teachers is created through the interactive game-based and multimodal elements of these platforms which positively influences the classroom atmosphere. As aforementioned in this study, online quiz platforms are game-based, which means that they are built around elements such as leaderboards, teammates, and modes such as visual and audio, all of which contribute to fostering students' motivation and facilitating content delivery to diverse learning styles, that is also why all the respondents affirmed that quizzes were a reliable tool to practice the student's retention of the subject.

Figure 5.5

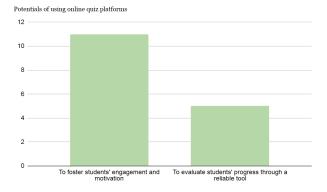


Figure 5.5 indicates that all teachers pointed out the same two responses: the motivational character in quizzes, and how this affects student participation. Also, the reliability of quizzes seems to be a tool to check students' progress and understanding in

class. Moreover, two teachers mentioned the impact that visual aids present in the platforms in the process of learning. As previously discussed in this study, the visual mode plays a crucial role in learning by enhancing comprehension, retention, and engagement. Images, gifs, videos, timers, leaderboards, and avatars are all examples of visual stimuli in game-based quiz platforms. In addition, two respondents mentioned how the element *teammates* present in game-based quiz platforms is important not only to provide a moment of interaction between the students but to also foster a respectful competitive atmosphere in the classroom.

As for considering the platform's assessment reliable, a teacher cited them as memorable and effective, and another as a quick solution, when it comes to checking students' progress. In this case, it is possible to explain that because teachers can design quizzes with a mix of question formats, including multiple-choice, true/false, and matching, catering to diverse learning styles. The real-time nature of these platforms allows teachers to instantly assess student responses and identify areas of strength and weakness. Furthermore, some platforms like Kahoot! and Quizziz, generate detailed reports and analytics on student performance, helping teachers pinpoint specific learning gaps that require further attention.

Figure 5.6

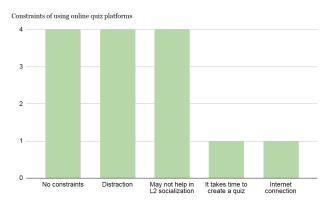


Figure 5.6 indicates that several issues were shared between multiple respondents, ranging from the lack of constraints in quizzes to issues with internet connection. The most common responses were that quizzes had no constraints, quizzes could be a distraction, and quizzes might not contribute to second language socialization.

Regarding the respondents who stated that quizzes had no constraints, it can be argued that their perception, which might not accurately reflect the reality of the other respondents, is influenced by their access to resources at their workplaces as well as their use of what the platforms provide, such as the flexibility in question types, the immediate feedback, and the integration of multimedia.

In the issue of distraction, teachers said that since students most often attend online classes through their cell phones, the resource of 'notifications' was a distraction during the use of the platforms. Moreover, because of their gamification and game-based elements, some students may not think quizzes are a serious activity during class.

Other informants said that quizzes may not be reliable tools to practice or assess L2 socialization. As mentioned before, L2 socialization can happen through digital tools, should teachers balance the game-design elements with their own pedagogical goals. It is important to take this aspect into consideration, because depending on the platform and their perceived potential, teachers may not notice how they could create questions to practice all language abilities, and instead only focus on multiple-answer questions, only assessing writing and reading skills, therefore, not contributing to L2 socialization, which is the focus in most English courses.

Regarding the issue of connectivity, teachers stated that unstable internet connections and incompatible devices can negatively influence learning, which may prompt educators to opt for alternative teaching tools over online quizzes.

One respondent said that looking for a quiz that fits the lessons' content or creating your own quiz, demands too much time, bringing light to the previous discussion that integrating games or gamified tools into the curriculum, requires extensive planning by teachers, which some of them are not willing to do.

Lastly, as far as the teachers' thoughts and experiences, all responses were positive. Four teachers reported that when their students knew they were taking a quiz in class, they acquired content in less time. They also said that the fun aspect of these quizzes contributed to that. The positive feedback from students and the increase in engagement were common factors attesting to that. Two respondents cited that, although these platforms are not the most innovative way to retain content, they often work due to their competitive nature, making students motivated and looking forward to playing with their classmates. Finally, a teacher mentioned that the platforms helped to combine the lessons' content with something the students like, such as TV shows, music, movies, etc. In this way, the lessons' content would relate to students' interests, motivating them through online quizzes.

6. CONCLUDING REMARKS

The insights provided by the twelve teachers who participated in this study shed light on the multifaceted role of online game-based quiz platforms in online teaching. A consistent pattern emerged as educators highlighted the motivational character of quizzes and their impact on student engagement. The presence of gamified elements, such as leaderboards, avatars, and timed challenges, creates an environment that propels students to actively interact with the learning content. Additionally, the reliability of these platforms as assessment tools stood out in the responses. Teachers found them memorable, effective, and a quick solution to grasp students' progress and understanding.

Moreover, the significance of multimodal and game-design elements in game-based quiz platforms cannot be overlooked. Visual elements, ranging from images and gifs to videos and timers, along with audio and text, were told to enhance comprehension, retention, and overall engagement. Furthermore, considering game-design elements, and the mention of teammates as a valuable component highlights the importance of fostering a respectful competitive atmosphere that not only encourages interaction among students but also aligns with the objectives of gamified experiences.

However, challenges and concerns were also raised. The possibility of distraction due to notifications on students' devices emerged as a prevalent issue. Some educators noted that the gamification/game-design elements might not be perceived as a serious activity by students, impacting the effectiveness of quizzes as a learning tool. Connectivity issues were also considered a constraint, potentially leading to technical problems during class. The time-consuming nature of finding or creating suitable quizzes, and the varying affordances of different platforms presented additional challenges for teachers. Furthermore, the reflection on L2 socialization within the context of quizzes highlighted that while these platforms offer opportunities for language practice, their design might not always align with the comprehensive development of language abilities, especially in social and cultural contexts.

Finally, teachers unanimously reported positive impacts on motivation in their classes. The competitive nature and engaging features of online quizzes led to improved content acquisition in less time. The fun aspect and alignment with students' interests, such as popular media and entertainment, contributed to student engagement and motivation. The perspectives of educators on online game-based quiz platforms reveal an emphasis on motivation, engagement, assessment, and the incorporation of technology in modern education. These platforms offer a unique opportunity to create dynamic, interactive, and student-centered learning experiences. However, careful consideration must be given to their integration into the curriculum to ensure their alignment with pedagogical goals and optimal outcomes in the process of teaching-learning English as a foreign language.

REFERENCES

BHAT, Anjum Zameer et al. A Game Based Innovative teaching and learning environment to enhance progression and performance of students. In: **SHS Web of Conferences**, no 156, 2023, Oman. Article. Oman: EDP Sciences, 2023, p.1-6. Available on: https://www.shs-conferences.org/articles/shsconf/pdf/2023/05/shsconf_ictl2023_01001.pdf. Accessed on: 24/04/2023.

DECI, Edward L; RYAN, Richard M. Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. **Contemporary Educational Psychology,** n. 25, p. 54-67, 2000.

DETERDING, S. et al. From game design elements to gamefulness. **Proceedings of the 15th International Academic MindTrek Conference on Envisioning Future Media Environments - MindTrek '11**, p. 9–15, 2011.

DUFF, P. A. Second Language Socialization. In: DURANTI, A.; OCHS, E.; SCHIEFFELIN, B. (Eds.). **The Handbook of Language Socialization.** UK: Blackwell Publishing Limited (A John Wiley & Sons, Ltd., Publication), 2012. p. 564–586.

FARBER, M. Gamify your classroom: a field guide to game-based learning. New York: Peter Lang, 2017.

KRESS, G. Multimodality. A social semiotic approach to contemporary communication. London: Routledge, 2010.

HODGES, et al. The difference between emergency remote teaching and online learning. **Educause Review**, 2020. Available on: https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-a nd-online-learning. Accessed on: 24/04/2023

MORENO, R.; MAYER, R. Interactive multimodal learning environments. **Educational Psychological Review**, p. 309-326, 2007.

NUCI, K. P. et al. Game-Based Digital Quiz as Tool for Improving Students' Engagement and Learning in Online Lectures. **IEEE ACCESS**. 2021. Available on: https://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=9452076. Accessed on: 06/04/2023.

PIMENTEL, et al. Jogos digitais, tecnologias e educação [recurso eletrônico]: reflexões e propostas no contexto da covid-19. Maceió: EDUFAL, 2021. E-book (160 p.). ISBN 978-65-5624-032-9.

ROBSON, K. et al. Is It All a Game? Understanding the Principles of Gamification. **Business Horizons**, v. 58, n. 4, p. 411–420, jul. 2015.

SAILER, M. et al. How gamification motivates: An experimental study of the effects of specific game design elements on psychological need satisfaction. **Computers in Human Behavior**, v. 69, n. 69, p. 371–380, abr. 2017.

SCHLEMMER, E. e MOREIRA, A. Por um novo conceito e paradigma de educação digital online. **Revista UFG**. 2020. Available on https://revistas.ufg.br/revistaufg/article/view/63438/36079. Accessed on: 24/04/2023.

APPENDIX A

Dear participant, this questionnaire aims to collect data for the research entitled: "The impact of game-based quizzes on students' motivation in online teaching: a survey of teachers' views".

ews'	· · · · · · · · · · · · · · · · · · ·		<i>G</i>	
1.	What is your educational background?			

3. Were you an online teacher during the pandemic? () Yes () No

2. Were you an online teacher before the pandemic? () Yes () No

- 4. Are you currently teaching online classes? () Yes () No
- 5. If you started teaching online classes during the pandemic, did you have difficulties adapting? () Yes () No
- 6. If you answered "Yes" to the previous questions, please explain the difficulties.
- 7. If you started teaching online classes before or after the pandemic, did you have difficulties adapting? () Yes () No
- 8. If you answered "Yes" to the previous questions, please explain the difficulties.
- 9. Do you use or have you ever used quizzes as a resource to improve your classes? () Yes () No
- 10. If you answered "Yes", specify the platforms you have used.
- 11. If you answered "Yes" to the previous question, for what purposes did you use the quiz platforms?
- 12. What are the potentials of using quizzes in the classroom?
- 13. What are the constraints of using quizzes in the classroom?
- 14. Share your thoughts and/or experiences on how quizzes have influenced or affected motivation in your class.