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THE USE OF QUIZIZZ AS A GAME-BASED LEARNING TOOL IN IMPROVING THE MASTERY OF GRAMMAR: LOW- PROFICIENT L2 LEARNERS' PERCEPTIONS

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Abstract:

It is indubitable that in this digital age, a plethora of game-based platforms have been used globally to teach students English at all levels. It is also imperative to explore the degree of effectiveness of using gamification in English language acquisition so that its benefits in educational settings can be boosted to the fullest. In congruence with that, this paper gleans into low-proficient L2 learners' perceptions towards the use of Quizizz, a game-based learning tool, towards improving their mastery of English grammar, a pivotal element of acquiring English at the tertiary educational level. This study employed a questionnaire to collect quantitative data from 65 students at Universiti Malaysia Sabah who took the Essential Communication Skills subject. Two parts of the questions posed in the questionnaire are Part A, which is on a 5-point Likert scale and comprises ten questions on students' perceptions of Quizizz features and grammar mastery, and Part B, which consists of one checkbox question with four options on the challenges of using Quizizz. The data yielded positive perceptions that the use of Quizizz is indeed a helpful tool to improve students' grasp of English grammar, and most respondents perceived internet connection issues, distraction from the timing and touch screen's sensitivity that led to accidental incorrect responses, and jitters when answering questions as the central challenges of using Quizizz. Positive feedback obtained from this study serves as supportive evidence that Quizizz should be constantly and broadly used at the university level for low-proficient students to learn and practise grammar lessons and ultimately level up their comprehension of English grammar. At the same time, educators and educational institutions can take some apt measures to address the challenges so that the benefits of learning English grammar through Quizizz can be optimised.

Keywords:

Low-Proficient L2 Learners, English Grammar, Tertiary Educational Level, Quizizz

Introduction

Online applications undoubtedly have given a helping hand to educators to kindle students' motivation to learn English since the arrival of the COVID-19 pandemic. Now that most classes are back to the face-to-face grind, educators are doing their best to immerse students back in classroom activities, including adopting blended learning by utilising multifarious online tools to make lessons more engaging and livelier. Quizizz is one of them. Quizizz is a free and easy-to-use educational app with an interactive interface that was founded by Ankit and Deepak, two Indian teachers, while they were teaching remedial math at a school in Bangalore, India, in 2015 (Zhao, 2019; Lim & Yunus, 2021; Quizizz Inc., 2022). This technology-assisted teaching tool is also widely used in teaching foreign languages, and various studies have proven its effectiveness in teaching and learning English through the lenses of educators and students (Rahayu & Purnawarman, 2018; Amalia, 2020; Dewi, Myartawan, Swari & Sugihartini (2020); Mohamad, Arif, Alias & Yunus, 2020; Zuhriyah & Pratolo, 2020; Anak Yunus & Hua, 2021; Anh, Hoai & Tanh, 2021; Degirmenci, 2021; Dhamayanti, 2021; Fadhilawati, 2021; Huei, Yunus & Hashim, 2021; Lim & Yunus, 2021; Yong & Abdul Halim, 2021; Prasongko, 2021; Asmara, Muhammad & Almubarakah, 2022; Pham, 2022; Sulaiman & Ramadhana, 2022; Wen & Abdul Aziz, 2022).

Grammar is unquestionably one of the most fundamental components to be mastered in order to be proficient in English. It is still evident that even in this digital era, many low-proficient L2 learners still face challenges in comprehending basic grammar concepts. Those concepts consist of a set of rules and systems for producing correct sentences, and if such systems are not abided by, it is improbable to meaningfully construct a sentence of lucid meaning (Larsen-Freeman, 2021). The issue of low proficiency in English is highly likely to occur for second-language learners because English is not their mother tongue. Often in classroom settings, the complexity of learning grammar causes the L2 learners to get uncomfortable orating some English words and feel pressured to learn English (Al-Mekhlafi & Nagaratnam, 2011; Mohd Ali & Ismail, 2022).

In correspondence to such grammar acquisition issues, more and more educators attempt to come up with technological-based applications to supplement the use of textbooks so that a fun, interesting, and interactive learning environment can be created, thus motivating students, and spurring their grammar mastery. Quizizz is often opted for as one of the suitable platforms to serve that purpose, and many studies have proven its effectiveness at all educational levels. This study henceforth aims to attain a better comprehension of the positive responses on Quizizz as an effective teaching tool for reinforcing L2 learners' English grammar grasp through the lenses of low-proficient students (those who achieved Bands 2-3.5 in the Malaysian University English Test, or MUET). Apart from that, this study also aims to gain insight into the challenges they face while using the app. This paper therefore raises the following research questions:

1. What are students' perceptions towards the use of Quizizz to reinforce grammar knowledge?
2. What are the challenges students face when using Quizizz?

Literature Review

Gamification Amplifies Learning Participation

Yong and Abdul Halim (2021), through their study, cited the meaning of "gamification," as defined earlier by Deterding, Khaled, Nacke and Dixon (2011), as "using game design elements in non-game contexts," which can be interpreted as incorporating game-based elements into academic circles' practices. They further explained that games aid learning in terms of prompting active learning, piquing motivation, permitting meaningful play, and functioning as learning technologies, which concur with Whitton's (2014). In addition, foreign language interaction and learning engagement, as denoted by Reinders and Wattana (2015), are also enhanced when lessons take place via games. Game features, for instance, the leaderboard, badges, and points, have positive impacts on learners' engagement, contentment, attentiveness, delight, and perceived learning in the teaching and learning process, as asserted by Wang (2015) and Jeyaprakasam (2019). Quizizz is an excellent example of a game with such features. Alike findings from other studies (Vogel, Greenwood-Ericksen, Cannon-Bower & Bowers, 2006; Gikandi, Morrow & Davis, 2011; Wood, Teras, Reiners & Gregory, 2013; Rahayu & Purnawarman, 2018) indicate that games' features encourage player interactivity, spur a sense of positive competitiveness, and stimulate learning motivation better when employed in authentic lesson contexts. Even though game-based educational tools are admitted to have lots of advantages, their challenges should not be left out in the quest for the most useful educational tool (Kapp, 2012; Yong & Abdul Halim, 2021).

Overview of Quizizz in Enhancing Grammar Learning

Fadhilawati (2021) defined Quizizz as "one of the educational applications that applies the concept of gamification" equipped with fancy features such as "avatars, music, a leaderboard, and a theme" that lead learners to experience as if they are in a game world to learn something (Mac, Namara & Murphy, 2017). This brings out exciting feelings in them to learn and practise their English knowledge, such as grammar. Moreover, Quizizz, as noted by Asmara et al. (2022) in their study, is "one of the digital and online learning media that consists of the quiz, survey, game, and discussion feature," which can swiftly transform activity reviews into prodigious ones played by many players freely (Chandler, 2015). Multiple devices can be used to play Quizizz, such as smartphones, laptops, and tablets, with different browsers to conveniently allow instructors to use existing activities or create their own to cater to their students' lesson and practice needs. Various fun features of Quizizz, such as the leaderboard showing students' ranks right after completing an activity, also create a competitive environment in the classroom, which leads to positive learning experiences and ingrains enthusiasm for lessons. Considering this, Quizizz is undeniably a suitable platform for students to reinforce their grammar knowledge by practising game-like activities. Furthermore, Quizizz's feature of revealing marks shortly after completing a practice such as grammar generates enjoyable and meaningful learning experiences for learners (Mohd Ali & Ismail, 2022).

Mohd Ali and Ismail (2022) furthered the point that, as Quizizz allows participants to attempt a practice more than once, low-proficient students can eventually achieve their target score in the subsequent attempts if they failed to do so in their first. Such customs induce the active participation of learners, in line with the constructivism learning theory, which postulates that "learners build new knowledge upon the foundation of previous learning" (Bada & Olusegun, 2015). This theory is relatable in a way that students, upon becoming cognizant of their wrong answers in the first attempt, would try again and again to achieve their desired score, which indirectly ameliorates their knowledge and understanding of a grammar lesson. On the teacher's part in a classroom, Quizizz allows them to track students' performances shortly after a quiz is over, hence enabling them to identify students' strengths and weaknesses (Anh et al., 2021). Quizizz's manners, as previously discussed, make teaching and learning enjoyable and fun for educational agents (teachers and students). Other studies have also depicted that Quizizz is certainly helpful in improving the grammar mastery of students due to various aspects such as fun and interactive features, engagement, competitiveness, better concentration, motivation, enthusiasm, and meaningfulness (Fadhilawati, 2018; Rahayu & Purnawarman, 2018; Dewi et al., 2020; Mohamad et al., 2020; Anh et al., 2021; Fadhilawati, 2021; Mohd Ali & Ismail, 2022; Sulaiman & Ramadhana, 2022).

Method

Research Approach and Design

This study employed a quantitative research design by crafting a questionnaire (Johnson & Larry, 2017), which was then administered via Google Forms to the respondents through the Telegram app. The researcher used convenient sampling in this study—a sampling that represents the population that fulfils the required conditions in terms of convenient access and opportunity to engage (Dornyei, 2007). Students who were invited to be respondents agreed to participate in the research.

Participants

There were 65 respondents involved, all first-semester students who were taking a 14-week Essential Communication Skills subject—a grammar-embedded proficiency course that the researcher taught and chaired in the Center for the Promotion of Knowledge and Language Learning (CPKLL) at Universiti Malaysia Sabah. At the time of implementing the study, Quizizz had been used as an auxiliary mechanism to help students learn English grammar by doing practices shortly after a lecture every week for 10 weeks.

Instrument

The questionnaire utilised as a research instrument in this study was adapted and modified from (Fadhilawati, 2018; Amalia, 2020; Mohamad et al., 2020; Anh et al., 2021; Dhamayanti, 2021; Fadhilawati, 2021; Prasongko, 2021; Yong & Abdul Halim, 2021; Pham, 2022; Sulaiman & Ramadhana, 2022; Wen & Abdul Aziz, 2022). It took approximately 5 minutes for the respondents to complete the questionnaire. The instrument encompasses two parts, as follows:

1. Part A: To what extent do you agree or disagree with the following statements on Quizizz? – 10 items.
2. Part B: What are the challenges you face when playing Quizizz? Tick off all the challenges you face. You can add your own challenges in the space given – 4 items (three boxes of options and a space to add their own challenges, should they have any).

Part A of the questionnaire provides a 5-point Likert scale of "strongly disagree," "disagree," "neutral," "agree," and "strongly agree" to elicit students' perceptions on the following statements:

- Item 1: Quizizz is easy to access and promotes a fun learning environment.
- Item 2: I like the features of Quizizz, such as the interactive interface to compete with classmates and the leaderboard, which displays the score rank in a lively manner.
- Item 3: Quizizz is an interesting and effective educational tool to test my knowledge and understanding after a grammar lesson.
- Item 4: Some of the grammar questions in Quizizz make me think critically.
- Item 5: Quizizz helps improve my knowledge of English grammar.
- Item 6: I feel motivated and confident enough to use Quizizz to assess my grammar knowledge.
- Item 7: I expect Quizizz to be used in every grammar lesson.
- Item 8: I am keen on using Quizizz more frequently in the future.
- Item 9: Input provided by the teacher on questions that I got wrong in Quizizz helped me better understand the correct use of grammar.
- Item 10: Performing grammar exercises through Quizizz is easy and enjoyable.

Part B, meanwhile, comprises one checkbox question on challenges when playing Quizizz, which allows respondents to choose multiple options (three) that best correspond to their choice. There is also a space given for them to state their own challenges, should they have any. They are as follows:

- Item 11: Internet connection issues.
- Item 12: The timing and the touch screen's sensitivity distract me and lead to clicking incorrect responses.
- Item 13: I am nervous when answering questions in Quizizz.
- Item 14: Other (state any additional challenges).

The quantitative data obtained from both parts were then analysed using descriptive analysis in the form of frequency counts and percentages. They were presented in tables; Table 1 and Table 2. After that, the tabled data were sequentially described in narrative form by the researcher.

Findings

The findings serve to support the applied method and conclusion. This study was to cater to the research questions as follows:

1. What are students' perceptions towards the use of Quizizz to reinforce grammar knowledge?
2. What are the challenges students face when using Quizizz?

Questionnaire Data

The questionnaire data in relation to the research questions were tabled as follows:

Table 1: Students' Perceptions on Quizizz (N = 65)

Item	Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	Quizizz is easy to access and promotes a fun learning environment.	5 (7.7%)		4 (6.2%)	13 (20.0%)	43 (66.2%)
2.	I like the features of Quizizz, such as the interactive interface to compete with classmates and the leaderboard, which displays the score rank in a lively manner.	5 (7.7%)		3 (4.6%)	19 (29.2%)	38 (58.5%)
3.	Quizizz is an interesting and effective educational tool to test my knowledge and understanding after a grammar lesson.	5 (7.7%)		2 (3.1%)	14 (21.5%)	44 (67.7%)
4.	Some of the grammar questions in Quizizz make me think critically.	4 (6.2%)	3 (4.6%)	7 (10.8%)	17 (26.2%)	34 (52.3%)
5.	Quizizz helps improve my knowledge of English grammar.	5 (7.7%)	1 (1.5%)	1 (1.5%)	12 (18.5%)	46 (70.8%)
6.	I feel motivated and confident enough to use Quizizz to assess my grammar knowledge.	5 (7.7%)	1 (1.5%)	4 (6.2%)	17 (26.2%)	38 (58.5%)
7.	I expect Quizizz to be used in every grammar lesson.	5 (7.7%)	1 (1.5%)	3 (4.6%)	23 (35.4%)	33 (50.8%)
8.	I am keen on using Quizizz more frequently in the future.	4 (6.2%)	1 (1.5%)	5 (7.7%)	20 (30.8%)	35 (53.8%)
9.	Input provided by the teacher on questions that I got wrong in Quizizz helped me better understand the correct use of grammar.	5 (7.7%)		3 (4.6%)	13 (20.0%)	44 (67.7%)
10.	Performing grammar exercises through Quizizz is easy and enjoyable.	5 (7.7%)		2 (3.1%)	15 (23.1%)	43 (66.2%)

Source: Adapted and Modified from (Fadhilawati, 2018; Amalia, 2020; Dhamayanti, 2021; Mohamad et al., 2020; Anh et al., 2021; Fadhilawati, 2021; Prasongko, 2021; Wen & Abdul Aziz, 2022; Pham, 2022; Sulaiman & Ramadhana, 2022)

Table 1 reflects that almost all respondents perceived Quizizz as a positive grammar learning platform and experience. With regards to Quizizz accessibility and environment, 43 respondents (66.2%) strongly agreed that "Quizizz is easy to access and promotes a fun learning environment" (item 1), which was the highest among the other four scales. Quizizz's features, such as the interactive interface to compete with classmates and the leaderboard that displays the score rank (item 2), were liked by most respondents (57 students chose "strongly agree" and "agree"). As for item 3, most respondents (89.2% of the total population) agreed that Quizizz is a fascinating and effective educational tool to test their knowledge and understanding after a grammar lesson. Quizizz was also thought to promote critical thinking, with 51 respondents (78.5%) agreeing that some of the grammar questions on Quizizz make them think critically (item 4). A similar trend applies to item 5, where most respondents agreed that Quizizz helps improve their knowledge of English grammar (46 students "strongly agree" and 12 students "agree," totalling 58 respondents, or 89.3% of the total sample). Likewise, most of the participants assented to the statement "I feel motivated and confident to use Quizizz to assess my grammar knowledge" (item 6), where 84.7% of them (55 students) selected "strongly agree" and "agree." Another positive feedback was harvested in terms of anticipating Quizizz to be used in every grammar lesson; 56 respondents equated to 86.2% agreement on item 7. A positive notion was also spotted in Item 8, where most students (55 respondents, which equals 84.6%) agreed to the statement, "I am keen on using Quizizz more frequently in the future." It was also indicated by the positive finding that learners (87.7%, or 57 respondents) comprehend the correct use of grammar better when instructors provide input on the incorrect answers on Quizizz (item 9). As for Part A's last item (item 10), most respondents (58, or 89.3%) agreed that performing grammar exercises via Quizizz is easy and enjoyable.

Table 2: Challenges when Using Quizizz (N = 65)

Item	Challenges	Frequency	Percentage (%)
11.	Internet connection issues.	42	64.6
12.	The timing and the touch screen's sensitivity distract me and lead to clicking incorrect responses.	30	46.2
13.	I am nervous when answering questions in Quizizz.	39	60.0
14.	Choosing the correct answers.	1	1.5

Source: Adapted and Modified from (Fadhilawati, 2018; Mohamad et al., 2020; Fadhilawati, 2021; Yong & Abdul Halim, 2021; Wen & Abdul Aziz, 2022)

Table 2 displays the challenges respondents faced while using Quizizz. The findings revealed that all the checkboxes on the Quizizz challenges were checked. The biggest challenge was "internet connection issues" (item 11), which plagued 42 respondents (64.6%), followed by anxiety when answering questions in the game-like platform (item 13), as chosen by 39 students (60.0%). The statement "the timing and the touch screen's sensitivity distract me and lead to clicking incorrect responses" (item 12) was also viewed as a challenge by almost half of the respondents (30 students; 46.2%). Also, only one respondent (1.5%) remarked on an additional challenge of her own: "Choosing the correct answers" (item 14).

Conclusion

To encapsulate, it was implied by the findings that L2 learners perceived Quizizz as positively impacting their grammar practices and knowledge, which indirectly amplified their English language skills. Their positive views on Quizizz in terms of an easy accessibility and a fun learning environment, interactive features, a leaderboard showing live ranks, a fascinating and an efficient tool to gauge knowledge and understanding after a grammar lesson, promoting critical thinking, enhancing grammar knowledge, lifting motivation, boosting confidence, being anticipated to be used in every grammar lesson, being expected to be used frequently in the future, and instructors' input to facilitate the learning process such as clarifications on incorrect answers, and being easy and enjoyable, are in tandem with and support the findings of ample studies (Fadhilawati, 2018; Rahayu & Purnawarman, 2018; Amalia, 2020; Dewi et al., 2020; Mohamad et al., 2020; Rerung & Hartono, 2020; Zuhriyah & Pratolo, 2020; Anak Yunus & Hua, 2021; Anh et al., 2021; Degirmenci, 2021; Dhamayanti, 2021; Fadhilawati, 2021; Huei et al., 2021; Lim & Yunus, 2021; Prasongko, 2021; Yong & Abdul Halim, 2021; Yong & Abdul Halim, 2021; Asmara et al., 2022; Pham, 2022; Sulaiman & Ramadhana, 2022; Wen & Abdul Aziz, 2022).

Nevertheless, the challenges encountered by students along the way also ought to be considered in order to optimise the usage of Quizizz for improving English grammar acquisition. As depicted in the findings, the primary challenges faced by the respondents were issues with internet connection, distractions from timing and screen sensitivity which result in the selection of incorrect responses, and a slight challenge in selecting the correct answers. Those challenges corroborate those found in other studies (Fadhilawati, 2018; Rahayu & Purnawarman, 2018; Göksün & Gürsoy, 2019; Mohamad et al., 2020; Rerung & Hartono, 2020; Anh et al., 2021; Lim & Yunus, 2021; Yong & Abdul Halim, 2021; Pham, 2022; Wen & Abdul Aziz, 2022) which to some extent deter learners from maximising the benefits of learning and practising grammar via Quizizz. This study also discovered that one of the main challenges in playing Quizizz is anxiety, which contradicts previous research that found Quizizz reduced anxiety levels (Aşıksoy, & Sorakin, 2018; Pitoyo, Sumardi & Asib, 2019; Zhao, 2019; Fadhilawati, 2021; Dhamayanti, 2021; Wen & Abdul Aziz, 2022). This issue could be contributed by the social pressure students experience because the Quizizz leaderboard might induce their anxiety of losing face if they get lower ranks due to incorrect answers. Another reason could be that "for students who are suffering from learning anxiety, distractions could easily aggravate their condition as it becomes more difficult for them to focus and retain the learned content" (Mohamad et al., 2020).

Such challenges could possibly be addressed by improving internet access at educational institutions, upskilling educators' upper-hand technical knowledge of Quizizz to maximise its benefits as a lesson and practise tool, such as by providing a sufficient amount of time for students to answer questions and opting not to display the leaderboard yet to familiarise students with the nature of Quizizz, and once they get accustomed to its nature, teachers can show the leaderboard sparingly to spark some motivation and thus minimise anxiety. Overall, Quizizz is one of the most useful educational apps that should be used on a regular basis because it will eventually help realise the Fourth Industrial Revolution (IR 4.0) by producing more and more English-proficient students for better job prospects (Lim & Yunus, 2021).

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