



The influence of Quizziz-online gamification on learning engagement and outcomes in online English language teaching

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Abstract

Game-based English learning was considered as one of the effective techniques to develop student learning motivation and engagement. It is popular due to today's more advanced gadget technology and the COVID-19 pandemic requiring students to study from home. Much research on the gamification of English learning in various countries involving different age levels was conducted. However, very few research focused on Quizziz-online gamification for English learning purposes in the context of junior high students. This research investigated the level of students' engagement and learning outcomes of Quizziz-online gamification on English learning development in junior high school. This case study involved a secondary school English teacher and 62 students in the 9th grade at a private junior high school in Batu City, East Java Province, Indonesia. The data collection methods were observation, interview, and students' test results. Based on the descriptive and thematic analysis, it was found that gamification affected students' engagement, better active participation, and discipline. However, their English learning outcomes were dynamic. Thus, integrating an internet-based game, Quizziz, in English instruction with more cognitively driven approaches is worth implementing for better English outcomes.

Keywords: COVID-19 pandemic; game-based English learning; learning engagement; learning outcomes; online learning

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Introduction

Gamification is an instructional technique that facilitates learning, encourages motivation, increases engagement and participation, improves lesson interactivity, and stimulates learning that leads to learners' knowledge expansion (Lopez & Tucker, 2019; Orhan Göksün & Gürsoy, 2019; Zainuddin & Perera, 2019). It is a relatively new term specifically used to refer to the game elements used in various situations that commonly do not include ones, such as learning, to create more positive learning experiences (Baptista & Oliveira, 2019). Teachers and education experts believe that properly implementing games as part of instructional activities can help increase learners' intrinsic motivation and engagement in all levels of education (Clark et al., 2011; Jurgelaitis et al., 2019; Kuo & Chuang, 2016). In fact, a number of studies in English language instruction have noted that gamification is one of the most enjoyable, engaging, and effective methods (Munday, 2016; Nahmod, 2017; Perry, 2015). Online gamification has been gaining popularity recently due to the study-from-home policy during the COVID-19 outbreak.

In fact, the use of games in language teaching is not a new phenomenon; it has been long acknowledged to be the solution to learners' low motivation and engagement in learning (Lo & Hew, 2020; Millis et al., 2017; Noroozi et al., 2016; Zainuddin & Perera, 2019). Language teachers have used popular traditional games in teaching English, such as word guessing games or scrabble. However, gamification in learning has picked a new momentum as it is increasingly conducted in an online format with the occurrence of more and more online platforms designed for the gamification of learning, such as Quizziz, Socrative, and iSpring Learn (Zainuddin & Perera, 2019). Especially now that the COVID-19 pandemic has forced most teachers and students worldwide to conduct the teaching and learning activities online, more and more teachers are increasingly aware of and open to the use of online games in learning to engage students in learning better. Gamification of learning in an online setting involves various features which allow immediate feedback to be offered right after students finish,

such as through badges scores, rewards, and ranking (Zainuddin et al., 2020). This friendly competition in learning is believed to be one factor facilitating higher engagement in learning. In addition, teachers can monitor and even assess students' learning progress by observing their game performance and providing meaningful feedback (Hassan et al., 2021). In addition, it is also acknowledged to offer explorative opportunities to students as they are free to try without pressure to avoid failure. These reasons explained above may explain why the interest in gamification of learning has been noted to increase in the literature (e.g., Dehghanzadeh et al., 2021; Ge, 2018; Huang & Hew, 2018; Kyewski & Krämer, 2018), with studies confirmed the positive influence of the use of games in online learning contexts (Groening & Binnewies, 2019; Lopez & Tucker, 2019).

In addition to the use of online-based English learning, nowadays, gamification for English learning at various levels of education has gained higher popularity. Game-based English learning was effective in developing university students' motivation and engagement in their English learning (Chen & Hsu, 2020). A holographic application and gaming for English learning can greatly impacts young learners' motivation to pronounce English words (Cerezo et al., 2019). Furthermore, Topîrceanu (2017) found college students' participation, grades, interest, and attitudes toward English learning were improved when gamified learning approach was used in an English learning activity. Learning engagement in English learning through gamification creates a ludic atmosphere. Thus, this technique fosters an enjoyable English classroom. Ludic pedagogy is an appropriate technique because it emphasizes enjoyment, playfulness, and excitement in the English learning activities without ignoring academic or pedagogical rigor (Calleja, 2011). In other words, this learning activity promotes ludic engagement in the English learning setting.

Quizziz is categorized as an e-learning app (Degirmenci, 2021). Quizziz offers a handy online game-based activity and assessment tool for teachers and students in any subject, including the English language. It allows users to create and use one another's quizzes simply and straightforwardly due to its user-friendly interface. In other words, teachers can develop the quiz by themselves or use other teachers' already-made quizzes that they can distribute to their students using unique codes. Quizzes are becoming more popular these days, particularly for teachers. The quiz can be administered as a timed live competition during synchronous online learning or used as homework during the asynchronous learning mode. Interestingly, during a live quiz, teachers, and students can see the leader board which displays their level of performance relative to the other players (Yan et al., 2018). This feature increases the feeling of lucid competition in online learning, adding to the enjoyment and interactivity

of the platform resulted from the catchy visual and user-friendly interface. Once the quiz is completed, students can directly review their answers, providing them with immediate feedback on their learning performance. Furthermore, teachers can easily view the students' results report in a spreadsheet which gives a clear visual of the students' individual and collective performance, allowing them to analyze trends and identify areas that require improvement or clarification.

As a game-based learning platform, Quizziz is gaining increased popularity due to the COVID-19 pandemic requiring students to study from home. Quizziz offers users a simple interface that learners can easily use and navigate, even those with very limited online gaming experience. This function falls into what Aarseth (1997) called an interpretive function, which allows users to use its interface with relative ease to play the game and use it in the teaching and learning activities. Quizziz offers users a non-diegetic interface which allows them to recognize their achievement level relative to their classmates easily. Here, multiple players—e.g., learners of the same class—can play and compete using the same Quizziz game played live by the teacher about a certain topic. During the online quiz, learners can see their progress through the leader board during the live Quizziz game, which is believed to facilitate better engagement and motivation in English online instruction (Zhao, 2019).

Furthermore, research on Quizziz in the ELT context was increasingly carried out in various countries involving different age levels as the study participants. The use of Quizziz is quite helpful for vocabulary attainment in engineering faculty students in Turkey (Bal, 2018). EFL university students had a positive perception and high motivation when Quizziz was applied to online English learning (Damayanti, 2017). In terms of reading comprehension skill improvement, Quizziz could gradually improve students' reading performance (Priyanti et al., 2019). Huei et al. (2021) found vocabulary of primary students was positively improved through Quizziz game for online study during the COVID-19 pandemic. Also, Quizziz improves English learners' irregular past verbs and motivation (Yunus & Hua, 2021). Nevertheless, the researchers found a scarcity of this subject carried in junior high school students in the Indonesian context which was a completely contrasting situation for cases in non-Indonesian context. In fact, English teachers in secondary levels often use game-app to engage their students' attention in synchronous and asynchronous learning activities. Still, very little research focused on Quizziz-online gamification for English learning purposes. So, the researchers investigated the level of student engagement and the impact of Quizziz-online gamification on junior high school

English learning development. To answer this issue, two research questions were proposed:

- (1) How does the use of Quizziz-online gamification affect junior high school students' active engagement in the online English learning context?
- (2) How does the use of Quizziz-online gamification affect junior high school students' learning outcomes in the online English learning context?

Method

Research design

This case study is descriptive in nature in the way that it aims to explore how the use of gamified quizzes is utilized in online teaching and learning design as it naturally occurs. This design is considered appropriate for the current study since, as suggested by Cook and Cook (2016), it describes a phenomenon as it naturally exists in the field. To be more specific, this study investigates and analyses the influence of gamification with the use of Quizziz on some aspects of online English language instruction, namely, the students' engagement and learning outcomes. Students' engagement was analyzed using observation and interviews, and their learning outcomes were examined based on their Quizziz test performances—all of which will be elaborated in the data collection section.

Participants

The current study involved a secondary school English teacher and two of his 9th grader cohorts in a renowned private school in Batu City, Malang, East Java Province, Indonesia, as the study subjects. The teacher was male, aged in his mid-40s, with over a decade of experience teaching English to secondary school students. As for the two student cohorts, each consisted of 32 and 30 students—totaling 62 students—all of whom were classified by the teacher as beginners in their English language proficiency (see Table 1 for the detailed demographic profile of the participants). They were chosen as the subjects of the study as the preliminary study suggested that they faced the common challenges in online English language instruction during a pandemic, such as generally low student engagement and learning outcomes due to the abrupt changes of learning mode from offline to online. It is also important to note that consent was obtained from all the participants through the teacher who aided the researchers in explaining the study to the students involved and securing their consent to participate.

Table 1. Participants demographic profile

Participants	Gender	Ages	Class A	Class B
Students	Male	15-16	17	15
	Female	15-16	15	15
		Total	32	30
Teacher	Male	The mid-40s	Teaching experience:	>10 years

Data collection

The data collection methods to answer the two aforementioned research questions (RQs) were observation, interview, and students' test results. The observation of the online instruction process was conducted to investigate the students' engagement in the online English course. The students' engagement was analysed using two indicators; active participation in Quizziz and their discipline or punctuality in doing the online quiz. These engagement criteria were based on Apicella et al. (2022) indicators of learners' engagement, namely concentrated attention, commitment, and active involvement. The observation was conducted six times using the observation checklist containing both criteria of engagement to observe any trend of improvement. During observation, the researchers looked closely at the teaching and learning process and took notes of the two engagement indicators; discipline and active participation—see Appendix 1 for the summary of the observation checklist. Second, to answer the second research question, the students' score results for the Quizziz activities were analysed to see if there was any trend of improvement. To do that, the researchers analysed each quiz's mean and observed the students' performance trends in each chapter.

In addition to observation and test, the interview was conducted after each unit of discussion—based on the textbook chapter—was finished to investigate the reasons for the occurring trends from the teacher's point of view. The interview was semi-structured, with five questions (see Appendix 2) as the core of the discussion and the students' data as they emerged. In other words, prior to conducting the interview, the researchers first identified the general trends of findings based on the observation and test results; and then, during the interview, the trends were discussed, and the teacher's points of view about the reasons for the occurring trends were explored. In total, there were three interviews conducted. At the end of the data collection process, the study covered three chapters with six meetings and six gamified quizzes. The three chapters were chosen as they were deemed representative already, and the data was

considered well saturated. The summary of the data collection process is shown in Table 2.

Table 2. Summary of the data collection process

Meeting	Chapter	Topics	Quizziz	Data collected		
				RQ1	RQ2	
				Observation	Inter view	Test result
1	1	Congratulations!	Quiz 1	√	√	√
2			Quiz 2	√		√
3	2	Let's live a healthy life!	Quiz 1	√	√	√
4			Quiz 2	√		√
5	3	Be healthy, be happy	Quiz 1	√	√	√
6			Quiz 2	√		√

Data analysis

Once the data were collected, they were analysed descriptively. First, the observation checklist (see Appendix 1) was tabulated and analysed for the trend (discipline and active participation). For this, a three-column table (see Appendix 1) containing the students' names and the two indicators of engagement—active participation and discipline—was created to aid the analysis of students' active engagement. Next, the interview transcripts were coded for thematic analysis (active engagement and learning outcomes), focusing on the relevant information about the two research questions. Next, the students' quiz results were analysed using descriptive statistics by means of general tendency; in this case, the average score of each class in each quiz was calculated to observe the occurring trends. The results of the data analysis were then cross-checked with the teacher to validate the correctness and trustworthiness of the findings. The detail of the findings is presented in the next section.

Findings

This section discusses the data analysis results concerning students' engagement and learning outcomes following the regular use of Quizziz in online English language instruction.

The influence of Quizziz-online gamification on students' learning engagement

In general, the trend of increasing learning engagement was noted in the current study. This trend can be seen from the analysis of the observation checklist, which showed a constant increase in both indicators of learning engagement. As noted in Figure 1, the analysis of the students' active engagement in Chapter 1 was noticeably low, with the discipline aspect scored and the active engagement aspect scored 63.7%. More specifically, Figure 1 (55.6%) noted that out of the total of 62 students, 43 did the first quiz of Chapter 1, with 35 of them doing it punctually, and 8 did it late. While in the second quiz of Chapter 1, 36 students did the quiz at the designated time, with two students doing it late.

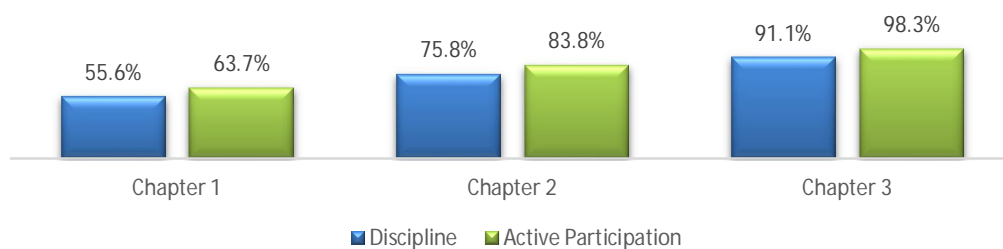


Figure 1. Summary of students' engagement

Further analysis of Figure 1 shows that Chapter 2 saw an increase in both indicators of students' discipline and active participation in the gamified language quizzes via Quizziz. The active participation indicator scored 83.8%, with 52 students taking both quizzes, while the discipline indicator scored 75.8%, with 47 students taking both quizzes punctually. Finally, another increase was noted in the final chapter observed, Chapter 3. The score for the active participation indicator was almost perfect, with 98.3%, meaning that only one student was missing. While for the discipline indicator, 91.1% score was noted with 57 and 56 students doing the quizzes punctually in Quizzes 1 and 2 respectively. The observation checklist results are shown in Table 3.

Table 3. Observation checklist results

Indicators	Chapter 1		Chapter 2		Chapter 3	
	Quiz 1	Quiz 2	Quiz 1	Quiz 2	Quiz 1	Quiz 2
Discipline	35	34	47	47	57	56
Active participation	43	36	52	52	61	61

An interview with the teacher regarding the use of Quizziz in his class provided a clearer narrative of how the gamification of the language learning through Quizziz platform has facilitated the increase in engagement in an online

class. First, during the teaching of Chapter 1, the teacher recounted that the students were generally familiar with the platform's features but that the teacher himself was still learning and experimenting on how to use it more effectively during instruction. In addition, he also noted that the low engagement was probably due to the technical challenges faced during Quizziz implementation on the synchronous instruction activity via Google Meet, which arguably limited the flexibility of the quiz, especially in terms of timing and solving of technical problems.

The students knew Quizziz 1 think, from another subject, it's me who is still learning. But they seemed to enjoy it, so I think it's good to continue using it for English subject. Perhaps not during Google Meet, though, because a lot of students got (technical) problems, maybe during asynchronous learning through Google Classroom. (Teacher)

Next, regarding the use of Quizziz in Chapter 2, where the students' active participation was found to increase, the teacher noted that it was due to the asynchronous implementation of the game. This afforded students more flexible time to play the game, allowing them and the teacher more opportunities to get around technical problems. However, the teacher also expressed concern that the students' discipline was still under his expectation (75.8%). According to the teacher's accord, this problem was probably due to the flexibility of the asynchronous mode of online learning, which made it possible for students to do it close to or even past due time. Therefore, a regular reminder was considered necessary.

Finally, the students' engagement was noticeably improved in Chapter 3, with both indicators meeting the teacher's expectations of above 80% target achievement. During the interview, the teacher noted that the reasons, he believed, were due to his and the students' increased familiarity with the platform, as well as the regular reminder to do the quizzes on time. To be more specific, he stated:

There were some technical problems too, like bad signal and Quizziz notice saying 'See teacher's page', etc., but since we'd had that (problems) before, we knew better about how to get around them. I guess familiarity with the activities and the Quizziz are two big factors which helped us here. That and a regular reminder to do the activities in Google Classroom. (Teacher)

So, technical issues were no longer problems when the teacher and students were familiar with the Quizziz app features. As a result, they were more likely to

engage in English learning. English instruction became easier through the help of Quizziz as long as the teachers kept reminding them via Google Classroom.

The influence of Quizziz-online gamification on students' learning outcomes

With regards to the learning outcomes, the general trend found based on the data analysis fluctuated. To arrive at a conclusion about how gamification of language learning influences the students' learning outcomes, analysis of their performance on Quizziz was conducted. Figure 2 presents the mean scores of each quiz conducted in each of the three chapters under observation. The quiz was closely based on the students' English textbook, and the quiz was administered as part of the teaching and learning activities (Quiz 1) and formative assessment (Quiz 2). The six Quizziz quizzes followed the same template to ensure that the changes made were only the content or topic based on the designated chapter. In other words, after an initial introduction to the Quizziz activities, the students were expected to be familiar with each quiz format.

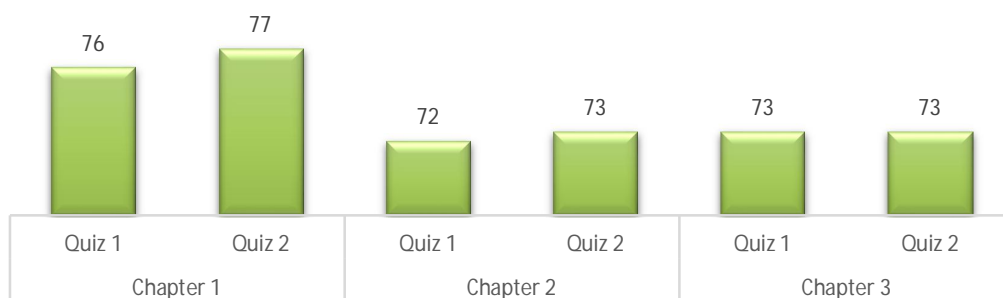


Figure 2. Average score of the quizzes

As noted in Figure 2, the fluctuating trend does not indicate a consistent increase in students' learning outcomes. Chapter 1, which is about 'congratulation' with the linguistic focus on various expressions of congratulation and well wishes in English, received the highest means of 76 and 77 for Quizzes 1 and 2 respectively. Next, Chapter 2, which is about a healthy lifestyle with a specific linguistic focus on expressing intentions and agreement, received the lowest means among the three chapters analysed, with 72 and 73 for Quizzes 1 and 2 respectively. Finally, Chapter 3, which topic is about reading product descriptions, showed a stagnant means of 73 in both quizzes.

There were two main reasons for the fluctuation of the learning outcomes found based on the interview with the teacher, namely the different levels of difficulty of each chapter and the different instructional designs used. First, the

topics and English expressions used in Chapter 1 are relatively easier than those in Chapters 2 and 3. The expressions found in Chapter 1, which revolves around various expressions used to congratulate someone and to wish someone well in English, are relatively more popular than students were arguably more familiar with compared to the more serious topics presented in Chapter 2 (Healthy Lifestyle) and Chapter 3 (Product Description). Second, as noted in the previous section, In Chapter 1, the gamified quizzes were conducted as part of the synchronous teaching and learning activities via Google Meet. Although fewer students took the test, the teacher argued that they were generally the better performers who were more active during synchronous meetings, which explains why the mean score is higher. However, Chapters 2 and 3 are considered more representative of the whole class population performance as the quizzes in both chapters are conducted asynchronously via Google Classroom, and more students did the Quizziz.

Chapter 1 is the easiest one because it still serves as an introduction. The expressions are easier there; I think that's why. But I think it doesn't represent the whole class performance as the active students in Google Meet are usually the smarter ones anyway. When the Quizziz was moved to Google Classroom in Chapters 2 and 3, almost all students joined, and the topics got more difficult; I think that was why the means decreased until it reached a stable point at the end at 73. (Teacher)

There are some reasons why students obtained good scores in Chapter 1 while doing the quiz. Actually, there were two main reasons. First, the quiz was still easy because it was the introduction part of the next topic, which is considered more difficult. Second, only high achiever students were active in the online meeting.

Discussion

This section focuses on discussing crucial findings interwoven with relevant literature to underpin the study's highlights. In addition, some practical suggestions on how to implement the findings into English instruction are also offered.

Quizziz-online gamification and learning engagement

This research found that the educational game administered through Quizziz was highly engaging for secondary school EFL students to learn English online.

They were excited to learn English materials and finished the exercises on their smartphone. One factor that contributes to increased engagement is the user-friendly interface, which makes it easy to operate (Lim & Yunus, 2021). Thus, students can easily familiarize themselves with this e-learning gamification. The students showed increasing active engagement when the English subject was delivered through a game-like approach, as the game was something that attracted their attention. Consequently, the learner's active participation is more likely to occur (Belova & Zowada, 2020). The student engagement could also be the contribution of the features, such as images, voices, and colours provided by Quizziz. For instance, an English teacher can put various pictures to represent the discussed topic. Also, those images can be chosen based on learner preferences and needs. That is in line with the research conducted by Prasetyawati and Ardi (2020). They found pictures on Instagram engaged English learners better when improving their writing skills. Interestingly, image is so powerful for L2 lexical attainment as English learners can easily retrieve words through images (Morett, 2019). Thus, EFL teachers could create more engaging English learning by intertwining a game-based app into classroom instruction. They have to also attach some colorful images and voices in the learning gamification app to gain students' greater attention.

The study also found that gamification of learning through Quizziz platform indicated higher student active learning participation. That was an improved result from the previous online class, which was conducted via the WhatsApp platform, allowing faster responses but with limited two-way communication about the materials between teacher-students and student-student. This is different from a previous study by Fattah (2015), which found that WhatsApp enhanced English learners' active participation because they could express themselves more easily. To cover for the limit, the teacher used Google Classroom as the main learning management system in the online class, but with relatively slower student-teacher responses. However, asynchronous platforms such as WhatsApp and Google Classroom could lead to boredom as learners mostly read, communicate and express their ideas and complete the exercises through smartphones or laptops with very limited or no face-to-face interaction. E-learning generally facilitates the English learning process in various situations, including the disastrous moment due to the COVID-19 pandemic (Inayati & Karifianto, 2022; Nurbuat et al., 2022). Therefore, Quizziz implementation for English learning progress is highly recommended as Quizziz is easily applied as long as the internet connection is accessible.

Furthermore, EFL students experienced more positive emotions, such as excitement and happiness, during using WhatsApp in their learning (Aktas &

Can, 2019). Another study found WhatsApp made students more confident and increased their motivation to read English more (Alshammari et al., 2017). The contrast finding could be due to different time frames when conducting research. Previous research was carried out before the COVID-19 outbreak, when applications, such as WhatsApp, Google Classroom, Edmodo, etc., were not as massive and intense as now. Thus, their excitement and joy turn to boredom due to their intensive use. Pawlak et al. (2020) note repetitive, lack of challenge, and monotonous activities lead to boredom. That happened with WhatsApp, Google Classroom, and Edmodo use in instruction. Then, Quizziz promotes a new excitement due to its gamified-learning approaches with interesting features.

With Quizziz-online gamification, the students in this study developed increased discipline in online learning activities. The finding shows that they gradually became more punctual, and eventually, nearly all students became disciplined to complete all the practices in Quizziz. Self-responsible initiation given by the teachers could cause their improved commitment to be more disciplined. So, learners feel their teachers trust them and want to prove that they are trustworthy and more autonomous. So, teachers can teach students self-discipline by reminding them orally to be more disciplined and by using an up-to-date tool, such as Quizziz, which was proven to improve their self-discipline in an online learning context effectively. One of the main reasons is that this approach is relevant to their current situation and close to their daily life. Taking their learning responsibility and being more autonomous can make them better learners in terms of choosing the correct materials and progressing their English more (Huang, 2020). Therefore, educational-gamified Quizziz should be intertwined into the online class. However, it does not mean the teacher left the class unguided. He ought to keep supervising and interacting with the students to know their progress and see their discipline. Student-to-student and student-to-teacher interaction should be emphasized because autonomous learning is conducted in a social setting (Suvorov & Carrillo, 2017).

During the initial implementation, this study found that the Quizziz activities did not really engage students well. This was caused by the teacher with a low proficiency level in operating this education game platform. It is a clear signal that English teachers who teach in this disruptive era should keep up with technological advancements to create effective and successful English teaching. The teacher's mastery of technology integration into English instruction is a crucial issue in class. Taopan et al. (2020) found that integrating information and technology (IT) into English teaching requires more effort due to its complexity. They added teachers' issues when using IT as part of their learning tool are their lack of IT literacy, unstable internet connection, and creating interesting tasks. So,

it would be helpful for English teachers at the secondary level to upgrade themselves with Technological pedagogical and content knowledge (TPACK). The TPACK framework underpins theoretical values describing how a teacher can construct and apply technology-enhanced instruction effectively and guides the knowledge needed for effective instructional practice in a technology-enhanced learning environment (Lehiste, 2015; Liu et al., 2014). As a result, this package will make them more able to create a fun, meaningful, flexible, and successful class. Schools or educational institutions are also in charge of facilitating teachers to improve their TPACK. They can provide sufficient IT facilities by conducting workshops, seminars, or informal forums as a means and space for the teacher TPACK progress.

Quizziz-online gamification impact on student learning outcomes

Student engagement through Quizziz educational platform was clearly noted. The two indicators, their active learning participation and discipline, show notable progress. However, students' learning outcomes did not show equal progress as their engagement level. The trend of their learning results using gamified instruction approach fluctuated. So, Quizziz integration is more likely to engage English learners, but they do not enhance their English proficiency.

Quizzes in Chapter 1 demonstrated the highest performance. This could be due to two factors; easy topics and students' high level of competence. Firstly, the easy topic could be due to learner familiarity with the given topic. There is growing evidence that topic familiarity and repetition could positively affect EFL learners' English performance. Furthermore, being familiarized with English topics cognitively improves learners' English skills (Qiu & Lo, 2016). So, an English teacher needs to familiarize their students with the topic for better learning outcomes. This could be done with more exercise. In other words, repeating the topic several times through various tasks could be done for better learning outcomes. Time limit could be an issue because one topic can only be delivered in the predetermined time frame in formal instruction. Thus, an asynchronous Quizziz with more exercises or activities could be a great option. Teachers should combine synchronous and asynchronous approaches when discussing a particular topic of English instruction for a better learning result. So, ICT tools should be well facilitated by schools. Here, Policy makers need to provide sufficient ICT services for the sake of better classroom instruction (Waloyo et al., 2021). Furthermore, repeating the discussed topic several times via different tasks is highly recommended for optimizing the result. Self-regulated learning (SRL) could be added as a part of the learning approach to promote more activities. SRL was found to be effective for successful online

learning (Kizilcec et al., 2017). Here, Quizziz, an online-based gamified educational website with extended English practices, will be more likely to enhance students' English competence. Through SLR, learners could revisit or redo the previous tasks or exercises. Guo and Reinecke (2014) highlight revisiting and reattempting the completed tasks or exercises lead to better learning outcomes.

Furthermore, this study found that the Quizziz activities in the last two chapters were relatively lower than in Chapter 1. This suggests that in addition to adapting the previously explained theoretical framework, topic familiarity, and SLR emphasis, the teacher could provide feedback to eliminate low English comprehension. Feedback is potentially considered crucial in game-based language instruction (Sykes & Reinhardt, 2013). The feedback on learners' linguistic performance can heighten their motivation and promote linguistic awareness, particularly when their English performance is under expected outcomes in gamified online instruction (Reynolds & Kao, 2019). So, English teachers should be more active in supplying feedback on student work in the Quizziz mode instruction. This approach will create a more personal and close relationship between the teacher and students. Students can learn and understand more comprehensively why their answers are wrong and know how to fix them through feedback. This way might result in English improvement using Quizziz's pedagogical game.

Conclusion

This study aims to investigate the influence of gamification on language learning using Quizziz on secondary school students' online learning engagement and learning outcomes. The findings reveal that a consistent increase in learning engagement was noted, but the same trend was not found in the learning outcomes. First, the students' learning engagement was observed from two indicators; discipline and active participation in conducting the online gamified quizzes. Both indicators showed a consistent increase in the three chapters observed, spanning six meetings and six gamified quizzes. Second, the learning outcomes were found to be fluctuating, suggesting that in this study, no positive influence was noted on the use of online gamification in language learning outcomes. In other words, this study found that gamified language learning has the potential to facilitate students to be more engaged in online instructional contexts. Still, a positive increase does not necessarily follow in their learning outcomes. Therefore, teachers are expected to use gamified learning platforms

strictly for engagement focus. Other approaches and methods that are more cognitively driven are still required to ensure that the balance between learning outcomes and positive learning experience is achieved.

This case study may be limited in terms of the subjects of study and the data analysed. However, the current study sheds important light on the influence of gamification efforts in online language teaching and learning among low-proficiency students in the context of English as a foreign language. Future studies could be directed towards investigating a wider subject area with a more experimental nature to validate or further scrutinize the current study's finding.

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Disclosure statement

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Appendices

Appendix 1. Observation checklist summary

Chapter 1:

Aspects		Chapter 1						Grand average
		Quiz 1	Quiz 1	Ave	Q2	Q2	Ave	
		Class A	Class B		Class A	Class B		
Discipline	n	22	21	43	19	17	36	
	%	68.7	70	69.3	59.3	56.6	58.0	63.7
Active participation	n	19	16	35	18	16	34	
	%	59.3	53.3	56.4	56.2	53.3	54.8	55.6
Total		32	30		32	30		

Chapter 2:

Aspects		Chapter 2						Grand average
		Quiz 1	Quiz 1	Ave	Q2	Q2	Ave	
		Class A	Class B		Class A	Class B		
Discipline	n	27	25		28	24		
	%	84.3	83.3	83.8	87.5	80	83.75	83.7
Active participation	n	25	22		24	23		
	%	78.1	73.3	75.7	75	76.6	75.8	75.7
Total		32	32	30		32	30	

Chapter 3:

Aspects		Chapter 3						Grand average
		Quiz 1	Quiz 1	Ave	Q2	Q2	Ave	
		Class A	Class B		Class A	Class B		
Discipline	n	31	30		32	29		
	%	96.8	100	98.4	100	96.6	98.3	98.3
Active participation	n	30	27		30	26		
	%	93.7	90	91.85	93,7	86.6	90.15	91
Total		32	32	30		32	30	

Appendix 2. Interview guide

1. Can you tell me how you conducted this chapter's teaching and learning activities in Meetings 1 and 2?
2. Based on the data from the observation, students' active participation in the quiz was x; what do you think were the reasons?
3. Based on the data from the observation, students' discipline in the quiz was y; what do you think were the reasons?
4. Based on the data from the quiz test results, students' learning outcome was z; what do you think about it?
5. In general, what do you think about using Quizziz for this chapter?
 - Are there any technical challenges from your (teacher) point of view?
 - Are there any technical challenges based on your observation from the students' point of view?
 - What do you think about the strengths of using Quizziz in this chapter?