



Research Article

## The Effect of Gamified and Blended Modules on English as a Foreign Language Learners' Language Skills\*

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*Abstract* – Gamification is among the trendiest topics in the context of English language teaching. Despite numerous studies on the impact of gamified language learning, further research is essential to comprehend its dynamics across diverse contexts. Therefore, this study aimed to explore high school language learners' certain language skills after seven weeks of gamified and blended language learning experience. A mixed-method research design was employed to understand the impact of gamified content on learners' reading, vocabulary, grammar, and writing skills. Students' reading, vocabulary, and grammar skills were measured with proficiency tests administered before and after the intervention whereas their writing competence was investigated through grading their written assignments. In addition, learners' opinions regarding the experience were collected to relate the statistical findings to qualitative data. As a result, it was found that the gamified learning experience improved language learners' language skills and learner opinions explained these outcomes adequately.

Keywords: blended learning, English as a foreign language, gamification, language skills.

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### Introduction

Gamification is the involvement of components that belong to playful states and serious games within the boundaries of solemn situations such as business, marketing, education, etc.

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to alter the behaviors of target groups for consumption or motivation purposes (Deterding et al., 2011a, 2011b, 2013). It is common to see the integration of game elements in many things in daily life. Collecting points or stars to earn free food or drinks in certain applications is the most obvious example of gamification (Nacke & Deterding, 2017). Nowadays, gamifying various content has become a widespread interest of entrepreneurs or even educators to raise motivation and engagement levels of target audiences (Miller, 2013). It is possible to see gamified platforms and classroom activities enriched with game elements more often because it is a promising technique to awaken learners' interest in the lesson and raise their motivation (Danelli, 2015; Devers & Gurung, 2015; Herzig et al., 2015; Landers et al., 2015).

In connection, it is acknowledged that the language skills of English as a Foreign Language (EFL) learners are well-researched in numerous contexts and settings (Apel & Werfer, 2014; Collins, 2010; Hu, 2012; Huifen & Tsuiping, 2007; Valizadeh, 2022). However, it is indicated that the trial of new approaches and techniques is always encouraged due to the dynamic nature of language learning and technological advancements (Howard et al., 2021; Mestan, 2019). For this reason, educators and policymakers alike have been attempting to come up with effective ways to teach students and equip teachers with useful online skills (Huifen & Tsuiping, 2007; Murphy, 2007). This has paved the way for additional online learning practices adopting new technological integrations (Aydın, 2010; Özdemir & Aydın, 2015).

Receptive skills such as vocabulary and reading set the foundation for the development of EFL learners' language skills in general. In principle, learners of the English language need to extend their vocabulary and lexical depth as well as comprehend the texts and become prominent in their first language (L1) basic language skills to be able to successfully produce the language (Brown et al., 2011; Kahn-Horwitz et al., 2005; Kieffer, 2012; Krashen, 1989; Sze, 1999). Krashen (1989) stated on the matter that vocabulary learning and accurate spelling can be best achieved through reading authentic language sources. In addition, Sze (1999) suggested that as the interest of learners in reading, in general, was reported to decline, tasks requiring extensive reading would provide EFL learners with opportunities to develop language skills, which supported Krashen (1989).

In the sense of vocabulary and reading skills, Roberts and Neal (2004) suggested that the vocabulary of EFL learners can be expanded with the extensive support and direction of the teacher as well as working with groups in small numbers. Literacy levels of EFL learners also play an important role in the reading skills of language learners. To hone the vocabulary

and reading skills of EFL learners, Kieffer and Lesaux (2007) proposed that teaching morphological techniques to EFL learners improves their chances of expanding their vocabulary, extracting desired meaning from texts, and comprehending reading texts better.

Sidek (2012), and Konstantakis and Alexiou (2012) reported certain problematic areas in terms of reading and vocabulary learning. In the Malaysian EFL context, Sidek (2012) reported that the Malaysian EFL curriculum for secondary-level education included reading activities that required learners to process information in the texts as they read and complete tasks related to the texts, which did not meet the standards for communicative language teaching models. For this, it was suggested that adding collaboration and communicativeness in the reading instruction would improve the reading skills of EFL learners more effectively. On the other hand, regarding the profile of vocabulary course books of EFL learners of young ages, Konstantakis and Alexiou (2012) found that books did not meet the necessary standards to equip learners with the necessary vocabulary. Considering this might be an issue for other contexts, it was proposed that the use of multiple course books to cover vocabulary would increase the quality of vocabulary acquisition.

Concerning the techniques to use for developing reading and vocabulary skills, Hu (2012) pointed out that fast-mapping tasks can enable students to obtain new vocabulary based on their initial mental word pools. Hu (2012) found that presenting unknown words in sentences beforehand can enable learners to match unfamiliar words to shown objects. In addition, rich definitions provided for new vocabulary increase the number of understood words in a text. These explanations can be made through gestures, definitions, statements out of context, synonyms of the words, and support by visuals and illustrations (Collins, 2010). On another note, Hsieh (2011) proposed that using established sequences and habitual tasks in the classroom improves the likelihood of learning the language. Additionally, depending on the ages of learners, introducing games and fun activities to language learning is beneficial for the learners.

Aside from the aforementioned techniques, methods, and approaches, Huifen and Tsuiping (2007) and Murphy (2007) advocated the use of multimedia tools and online platforms to enrich vocabulary and reading instruction. Murphy (2007) discovered that when the reading comprehension activities were presented on online platforms, elements such as feedback, online interaction, and pair-work can improve the reading comprehension levels of EFL learners. Similarly, Huifen and Tsuiping (2007) attempted to determine the effects of

multimedia tools such as animations, visuals, and question prompts as supports for the visuals on learners' reading comprehension. Contexts and questions accompanying the visuals or animations to invoke reading comprehension are necessary for learners.

Considering the writing skills of EFL learners, studies attempting to increase writing through the implementation of different techniques were presented. These studies report their findings of how their techniques affected the writing skills of EFL learners. The methods and techniques used to develop the writing skills of EFL learners in these studies are portfolios, blogging, wikis, morphology training, reviews and feedback, online learning, photographs, social media, collaboration, and literary works (Apel & Werfel, 2014; Aydin, 2010; Espinoza-Celi & Pintado, 2020; Kayacan & Razi, 2017; La Sala, 2018; Mazhar Hameed, 2021; Özdemir & Aydın, 2015; Savran Celik & Aydın, 2016; Valizadeh, 2022; Walter et al., 2019). Prior to discussing the repercussions of such methods and techniques, though, how EFL learners perceive the writing skill should be laid out.

Regarding the attitudes toward the EFL writing process, Aydın and Başöz (2010) revealed that pre-service teachers had positive attitudes toward writing activities in the EFL context. They valued feedback from peers and teachers, and the chance of making revisions. On another note, Duruk (2021) reported that consensus indicated the difficulty of writing skills. The participants found writing as the second easiest skill after reading.

In terms of methods and techniques used to improve writing skills of EFL learners, firstly, Aydın (2010) reported that portfolios were found to be effective in improving mechanics of writing such as paragraph development, essay writing, punctuation, etc. However, it was evaluated as a tiresome and dull process by participants, and it limited the creativity of learners due to the necessity to follow certain rules of writing. Similarly, as a process-based approach to writing, Özdemir and Aydın (2015) implemented blog writing activities and improved the achievement of EFL learners in writing skills. Thanks to this approach, the mechanics of writing were comprehended more thoroughly. However, using blogs did not particularly yield a superiority over conventional writing. One of the main reasons for this could be the technical difficulties faced by learners when using online tools. It can be inferred that using process-based approaches as in Aydın (2010) and Özdemir and Aydın (2015) for teaching writing mechanics can lead to boredom or technological barriers.

In another process-based writing study, Savran Celik and Aydın (2016) discovered that the use of wikis as a process-based writing activity provided more success for EFL learners compared to conventional writing activities. Moreover, Kayacan and Razi (2017) stated that

integrating technology into writing instruction in the EFL context mainly produced potent outcomes, revealing that using self-reviews and peer feedback in online platforms led to an increase in EFL learners' writing performance. Digital platforms and anonymity offered a promising mix to develop the writing achievement of language learners.

In another study, La Sala (2018) found that learners turned to different learning styles in the online platform when provided with independence opportunities. Accordingly, the content and task must be meaningful for learners to instigate sufficient work. Independent work on writing activities in an online platform mostly requires a rich and wide array of materials and resources provided by the teacher.

To continue with technological tools and online platforms, Espinoza-Celi and Pintado (2019) noted that Twitter as a language learning platform was regarded as a good way of improving writing skills by most learners. In terms of language learning and teaching, in particular, Twitter use increased learners' achievement levels. However, interest issues may pose a threat to the inclusion of everyone in the classroom willingly. Moreover, according to Valizadeh (2022), the use of collaboration and digital tools provided more positive contributions to learners in EFL writing activities thanks to online feedback and collaboration on a digital platform.

Gamification in the context of EFL is still a new concept and the number of empirical studies providing accounts of qualitative analysis is quite limited, which makes it difficult to reach generalizations and theoretical bases (Azzouz & Guiterrez-Colon Plana, 2020). Even though available studies on the effect of gamification on EFL learners' language skills revealed valuable insights into the issue (Flores, 2015; Hernández-Prados et al., 2021; Pham et al., 2021; Selvasli, 2018; Samosa et al., 2021; Yavuz et al., 2020), it is still difficult to observe a consensus over how game elements can be implemented effectively in EFL contexts. Regarding this, Baldauf et al. (2017) and Hamari et al. (2014) suggested that empirically designed, long-term, and mixed-method studies are constantly required in the field.

As an example of gamified studies, Alharthi (2020) found that Kahoot, FlipQuiz, and similar analog game elements used in language teaching can increase skill achievement. However, such elements can cause learners to lose their focus and act for the sake of rewards because such elements only nurture behavioristic dynamics.

On the other hand, Flores (2015) revealed that gamified environments affect the language skills and social interaction quality of learners positively while Hernández-Prados et al. (2021) found that language learners favored gamified activities over conventional face-to-face lessons. In addition, Pham et al. (2021) explored that game elements combined with mobile applications increased language learners' achievement levels. Similarly, Selvasli (2018) attempted to investigate EFL learners' homework engagement and motivation levels in a gamified learning environment, which indicated positive developments in learners' willingness to complete their assignments and their language competence.

On a skill-level investigation, Purgina (2020) found that game elements offered immense opportunities for learners to improve their grammar skills. Moreover, Samosa et al. (2021) and Yavuz et al. (2020) discovered that gamification techniques used in language teaching improved learners' writing process in terms of enjoyment and quality. It was also suggested that gamified techniques can be useful for both teachers and learners thanks to the online opportunities of practical feedback, grading, personal space, and improved performance.

As can be seen in related studies, many techniques and approaches have been employed to develop the language skills of EFL learners all over the world. Whereas many of these practices yield very promising results for future research to build upon, it is possible to trace problems related to the implementation of the techniques and methods, learners' responses, interest of learners, technical problems, apprehension, and so on. The main message of the related literature is to carry on trying different techniques and collect as much information as possible in different contexts. Therefore, all these studies are quite valuable to this study because they point to possible problems that may be encountered on the way of implementing technological tools and online platforms to develop language skills or they can underline what to be careful about during the practice of similar techniques in this study.

In this sense, the study aims to answer two main research questions related to the effect of gamification on EFL learners' language skills:

1. What is the impact of gamification on high school EFL learners' language skills?
2. What are the opinions of high school EFL learners about gamification as a language learning technique?

## Method

### Research Design

In the research, a mixed-method research technique in sequential explanatory design was employed as suggested by Creswell (2007) and Miles et al. (2014). According to this design, it is assumed that supporting the statistical findings with the qualitative data would lead to a more comprehensive understanding of students' language skill development.

The study utilized an experimental design without a control group due to restrictions from the school board requesting that classroom groups and a level-based system be maintained. The administrators of the high school dictated that every student must receive the same type of instruction in intact groups.

As for the qualitative data, the content analysis technique was employed. In the content analysis, the data are analyzed to detect recurring statements and they are categorized under themes and codes (Creswell, 2007; Miles et al., 2014).

### Participants

The study involved 72 high school students from a private high school in Turkey who were attending the 9<sup>th</sup> and 10<sup>th</sup> grades during the 2020-2021 academic year. For writing skills, 47 of these students were involved in measurement because only these students successfully submitted both their pre-test and post-test written assignments. The rest either had a completed assignment in the pre-test phase or the post-test. The convenience sampling method was used to select the study's participants. Table 1 demonstrates the participants' demographic characteristics in the sample.

**Table 1** Participants' demographic characteristics

Skills	Gender		Total
	Female	Male	
Grammar, Vocabulary, and Reading	43	29	72
Writing	24	23	47

### Data collection

For the collection of the data, two proficiency tests provided by the WEXT company which prepared Oxford-supported test content and used Common European Framework of Reference (CEFR) based grading were administered to the students to determine their language skill competence. This test package was bought by the school administration in collaboration at the beginning of the semester to ensure reliable and valid testing. These tests

included sixty questions in total and included grammar, vocabulary, reading, and listening sections each of which included 15 questions. Based on their answers in each section, students were assigned to level-based groups as follows: A1, A2, B1, and B2. This meant that their scores in the proficiency tests were of ordinal data because they were ranked based on proficiency.

The WEXT proficiency test is an artificial intelligence (AI) powered system that provides individuals with personalized content based on their performance. This way, one can learn their proficiency level by testing their knowledge in various questions in skill areas. For writing skill competence, students' written assignments before the intervention and their final module assignments were collected and graded based on a rubric (Table 2), and the scores were compared.

**Table 2** Paragraph Development Rubric

Criteria	Points Possible	Points Given
Topic sentence use	20	
Grammar	20	
Mechanics	20	
Development/Cohesion	20	
Vocabulary	20	
Total	100	

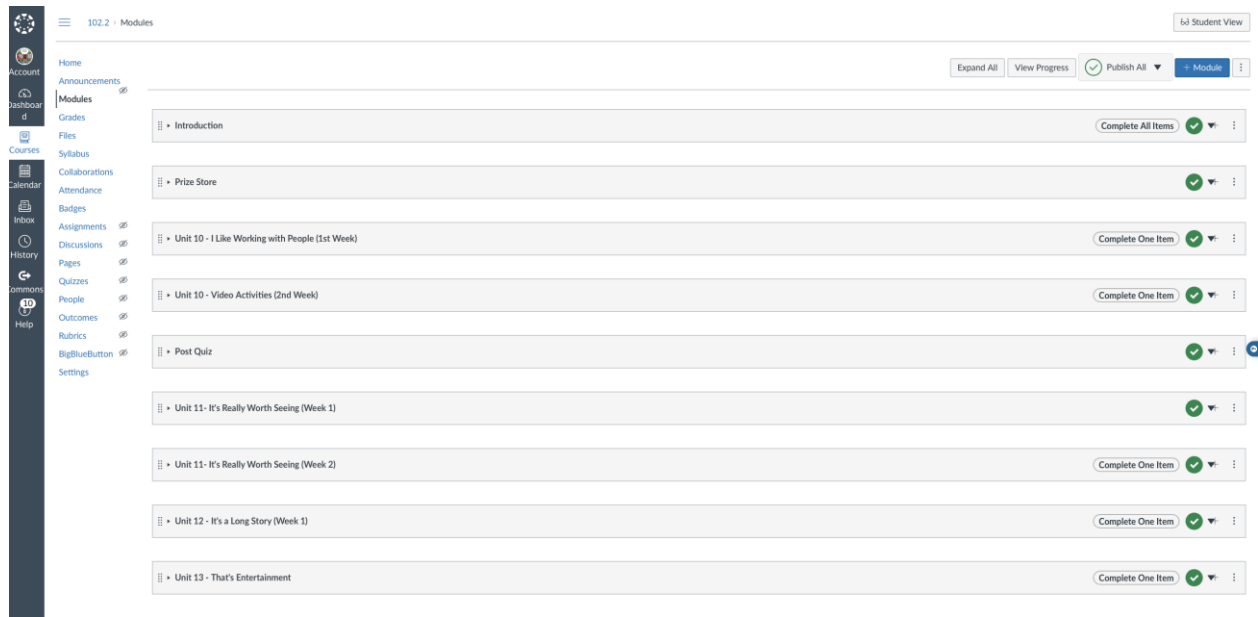
For the qualitative data, one semi-structured interview question was asked to learners after the gamified experience. They were asked about how they found the Canvas modules and the gamified experience related to language learning. The question was prepared with the consultation of two professors in the English Language Teaching (ELT) department. The posing of the question was decided to be a general statement because it would be more appropriate not to suggest anything related to language skills to learners. This way, their feelings related to their experiences would be unbiased and any relation to language skills could be their natural responses.

## **Procedure**

As the first step, after several meetings with administrators and teachers, the schedule of procedures was agreed upon. The teachers were given training about gamification and blended learning models so that they could give informed contributions during planning and direct their classes appropriately. Then, the modules were created through collaboration with teachers, holding weekly meetings to convert the national curriculum into a gamified and blended experience and matching the created content to learning outcomes. Students'



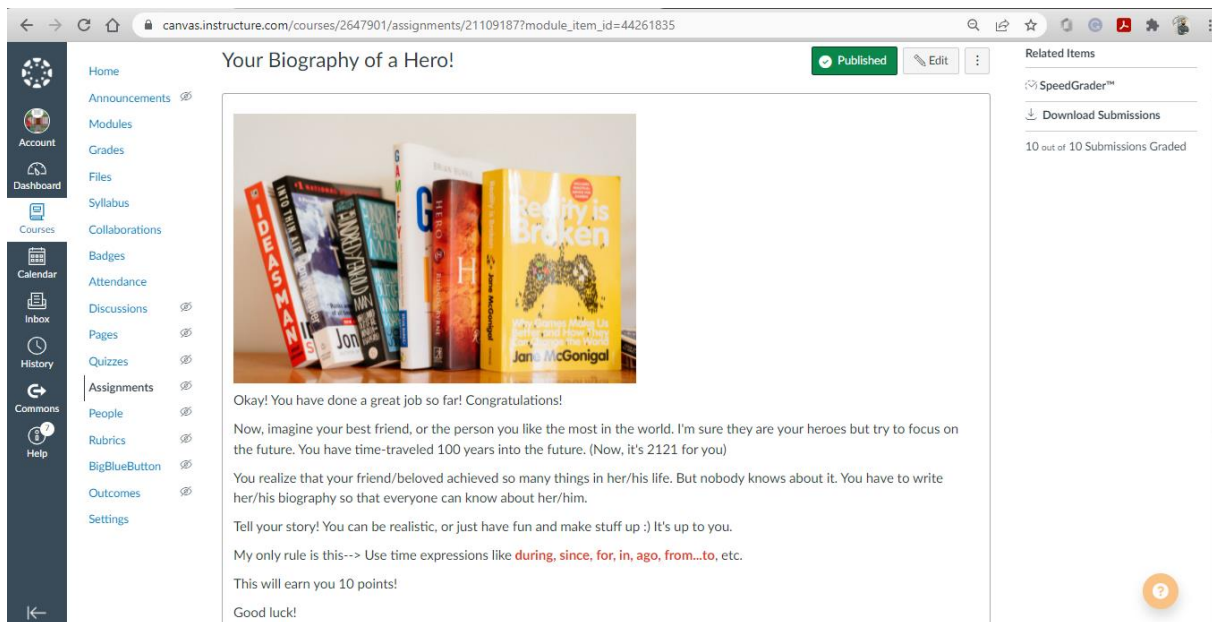
opinions about their expectations were asked and a prize store where they can spend their earned points and buy prizes was created. Subsequently, seven modules (Figure 1) were designed on Canvas learning management system (LMS). All modules were enriched with game elements such as points, badges, progress checks, immediate feedback, aesthetics, online interaction, prizes, and rewards.



**Figure 1** Sample structure of modules

The students were informed about the gamified process and asked to complete the modules. The modules involved reading, grammar, vocabulary, and writing activities as a complement to their face-to-face main course lessons. Once the preparations were complete, teachers ran their classes regularly in face-to-face sessions, covering the main course sessions in the book. After the completion of each module, students earned points which they could redeem for gifts at any point during the semester in the prize store. Each module typically started with a revision of face-to-face sessions, then introduced a revision quiz about the weekly topics. Then, students were asked to participate in online discussions related to the issues, read passages, and answer reading comprehension questions. Next, students were presented with videos related to the book unit and discussed the questions about those videos in online discussion sections. In some modules, learners were given collaborative tasks such as writing scripts for their friends to shoot videos. Finally, the modules were concluded with a written assignment (Figure 2), asking students to follow instructions and develop paragraphs

accordingly. For each module assignment, certain grammatical structures, paragraph development techniques, and pragmatic units were set as criteria.



The screenshot shows a Canvas LMS interface. The main content area is titled "Your Biography of a Hero!". It features a "Published" status and an "Edit" button. Below the title is a photograph of several books, including "IDEASMAN", "Jon", "G", "H", and "Reality is Broken" by Jane McGonigal. The text below the image reads: "Okay! You have done a great job so far! Congratulations! Now, imagine your best friend, or the person you like the most in the world. I'm sure they are your heroes but try to focus on the future. You have time-traveled 100 years into the future. (Now, it's 2121 for you) You realize that your friend/beloved achieved so many things in her/his life. But nobody knows about it. You have to write her/his biography so that everyone can know about her/him. Tell your story! You can be realistic, or just have fun and make stuff up :) It's up to you. My only rule is this--> Use time expressions like *during, since, for, in, ago, from...to*, etc. This will earn you 10 points! Good luck!". On the right side, there are "Related Items" including "SpeedGrader™" and "Download Submissions", with a note that "10 out of 10 Submissions Graded".

**Figure 2** Sample Weekly Written Assignment

After the implementation of modules in a blended and gamified instructional process, learners were presented with an online interview form inquiring about their experiences with the modules. Students were asked to answer the question, "What can you tell us about your language learning experience with the Canvas modules?". Their responses were used to inform the quantitative findings of the study regarding language skills.

## Data Analysis

Following the separate analyses of pre-test and post-test language competence levels of participants, comparisons were made between pre-test and post-test scores of EFL learners by utilizing the Wilcoxon Signed Rank test because the skill scores consisted of ordinal data. To make a comparison between students' writing skills before and after the module, previous written assignments of these 47 students which were written on certain topics were found by their teachers. After obtaining the assignments, one teacher was asked to collaborate with the researcher in scoring the assignments again based on the rubric for paragraph development.

In learners' language skill competence calculations, Wilcoxon Signed Ranks test as a non-parametric test was used since the learner data related to the language competence were of ordinal data type. For this reason, in the presentation and tabulation of the data, the statistical information about medians (Mdn) and the Z values was accounted for.

For the qualitative data regarding students' opinions about the module, a content analysis technique was used to identify certain themes and codes. Dedoose qualitative data analysis software was used to analyze qualitative data.

### Validity and reliability

The reliability score for the six-item rubric used in measuring (topic sentence use, grammar, mechanics, development/cohesion, vocabulary, and total score) was calculated with the formula proposed by Miles and Huberman (1994). The reliability score was found to be .75 (6/8). These values indicated that the rubric can be used to measure the writing skills of the students reliably. The scorers marked the assignments independently first, then the scores were compared in several meetings to see if there were big differences to ensure inter-rater reliability. All scores were compared one by one and the scorers compromised if necessary.

For qualitative data analysis's reliability, in addition to the researcher, an area expert independently coded the responses given by the participants. The clusters were compared, and the agreed clusters were given theme and code names. In terms of intercoder reliability, in accordance with the formula developed by Miles et al. (2014), the reliability score was calculated as .87 ( $105/122=0.87$ ). This indicated that the coding process indicated a reliability between two coders.

## Findings and Discussions

Considering the total language competence scores of participants, it was found that their language competence after the intervention ( $Mdn = 61.1$ ) was significantly higher than their pre-test competence level ( $Mdn = 44.4$ ), indicating a statistically significant improvement,  $Z = -4.54$ ,  $p = .000$ ,  $r = .37$  (Table 2).

**Table 2** Comparison of participants' general language competence score

Test	Ranks	N	Mean Rank	Z	p
Pre-test and post-test comparison	Negative Ranks	15	33,63	-4.54	.00
	Positive Ranks	57	37,25		
	Ties	0			
	Total	72			

Note. N=72

Regarding grammar, vocabulary, and reading skills, it was revealed by the tests that grammar and reading skills yielded statistically significant improvements while vocabulary skills did not show any statistical significance in the competence score difference (Table 3).

**Table 3** Comparison of grammar and reading competence

Test	Ranks	N	Mean Rank	Z	p
Grammar competence	Negative Ranks	7	13,86	-5.11	.00
	Positive Ranks	41	26,32		
	Ties	24			
	Total	72			
Reading competence	Negative Ranks	12	44,38	-3.80	.00
	Positive Ranks	55	31,74		
	Ties	5			
	Total	72			

Note. N=72

According to the table, participants received lower grammar scores in the test ( $Mdn = 50$ ) before the intervention compared to their scores after the module ( $Mdn = 50$ ), showing a statistically significant improvement,  $Z = -5.11$ ,  $p = .000$ ,  $r = .42$ . Similarly in their reading competence, EFL learners were significantly more successful after the implementation of the module ( $Mdn = 83.3$ ) in comparison to their pre-test performance ( $Mdn = 50$ ),  $Z = -3.80$ ,  $p = .000$ ,  $r = .31$ .

The writing competence of the participants was analyzed through a series of Wilcoxon Signed Ranks tests to see the differences in competence. In a general sense, the participants' writing competence did not show a statistically significant increase. However, their pre-test scores ( $Mdn = 72.5$ ) showed an increase in the post-test ( $Mdn = 75$ ). Therefore, it is possible to state that their writing competence improved despite not being statistically significant.

Regarding the opinions of learners about the module, responses to the open-ended question were analyzed and certain codes and bigger themes were generated based on the statements as shown in Figure 3.



**Figure 3** Opinions of learners

Under the theme of mechanics-related opinions, for instance, enjoyable (f=21) code was the most frequently recurring response from the learners. Many responders used the word *enjoy* in their opinions either as a standalone mood or as an accompanying feeling with other opinions. For instance, P17 said, “*It’s a nice and fun website. I enjoy and learn.*”, and similarly, P42 stated, “*I think Canvas module and activities are very nice. I really liked it. It’s a positive platform for learning and enjoying. I learn by having fun.*”. In addition to enjoyable code, in nine instances, participants mentioned the usefulness of the module. According to P66, the module was “*...a useful system with a very high function.*”, indicating that a considerable number of students found the module useful. Apart from finding it enjoyable and useful, participants also added the informative side of the module to their responses. In eight comments, students mentioned that the module was an educational experience for them aside from being fun and useful. For this, P27 remarked, “*I think it was useful. We have fun and we can improve our English*”.

For the remaining themes, learners compared the modules to coursebooks and normal lessons and found the modules sufficient and effective. However, 17 participants indicated

negative comments, finding the experience long or difficult. Some of them wanted to go back to their previous lesson style. Under the non-specific opinions, students mentioned unrelated things such as failing to find enough time for modules, so they did not experience everything to the fullest.

In the research, language skills of learners such as reading, grammar, vocabulary, and writing went through an affirmative change after the implementation of the modules. The use of a blended design and a gamified platform provided promising and potent results for the future of gamified language learning environments.

Recalling the findings related to language skills, it was found that the module increased the participants' grammar and reading skills at a statistically significant level, and their general language competence seemed to have increased significantly, as well. However, in terms of vocabulary and writing competence, even though students' scores showed an increase, it was not statistically significant. These increases experienced in students' measured language skills showed that gamified and blended learning settings can positively affect the language skills of EFL learners.

As the first focal point, it was seen that learners advanced in their grammar and reading skills at statistically significant levels. However, vocabulary skills did not indicate an improvement at the same rate as grammar and reading skills. Based on the qualitative responses of learners, it can be stated that learners preferred these modules for a variety of reasons such as teacher support, easy and organized access to the materials, alternative ways of communication, and opportunities unique to technological and digital platforms.

Going back to the related literature, Krashen (1989) pointed out that vocabulary acquisition and development are dependent upon the frequency and quality of reading. This outcome in vocabulary might be an indication that learners need to make reading a strict habit and they probably needed more time practicing reading. In addition, as Sze (1999) stated, interest in reading is always at risk of dropping over time, and it must be rekindled constantly through extensive reading activities. Therefore, it can be inferred that these learners must be exposed to more frequent reading and their teachers must provide their students with creative extensive reading opportunities. Just as Robert and Neal (2004) found, this study can conclude that teachers must be more present in supporting learners extensively to improve reading and vocabulary because it was found that making the learning blended and allocating activity time outside the classroom helped learners' reading, grammar, and vocabulary skills.

Additionally, it can be inferred from the findings that collaborative and communicative activities such as group projects, pretend interviews, online discussions, and role-playing activities were found useful in developing grammar, reading, and vocabulary skills by learners, which coincides with the findings of Sidek (2012). In connection, Sidek (2012) and Konstantakis and Alexiou (2012) complained that course books of the time were not comprehensive in covering all necessary vocabulary and communicative functions; therefore, they advocated using multiple textbooks or a variety of materials to improve vocabulary. In this direction, this study achieved good results because the number of materials and types of activities used in the modules were quite high, which was mentioned and commended by learners themselves in their qualitative responses.

In the sense of writing skills, learners emphasized the benefits of online platforms and technology use because these modules offered them alternative means to say what they wanted to say. According to one student, they were able to speak their minds in written statements even if they might normally feel shy in spoken communication. In addition, they underlined that writing activities helped them improve their skills. Another aspect that was mentioned by learners in the study was the opportunity to work independently (La Isla, 2018). This gave them time to think about their answers, making revisions before submitting when necessary. These results aligned with the findings and recommendations of several related researches (Apel & Worfer, 2014; Aydın & Başöz, 2010; Espinoza-Celi & Pintado, 2019; Kayacan & Razi, 2017; Savran Çelik & Aydın, 2016; Valizadeh, 2022). For instance, Aydın and Başöz (2010) found that giving students opportunities to make revisions and rewriting improved learners' opinions of writing.

As for the benefits of the module in improving students' writing skills, Apel and Worfel (2014) suggested teaching the mechanics of the language such as morphology, which reflected the nature of the modules used in this context. The modules included almost everything related to language structures and provided guidance for some writing mechanics such as developing paragraphs, writing summaries, and producing essays. Therefore, it can be inferred that just as Apel and Worfel (2014) found, introducing structural and mechanical knowledge to students can help them to improve their writing.

Furthermore, since the modules adopted process-based writing in principle and succeeded to some extent, this can be aligned with the findings of Savran Çelik and Aydın (2016) who revealed that process-based writing can lead to improvement in writing skills. In

addition, as revealed by Kayacan and Razi (2017), Espinoza-Celi and Pintado (2019), and Valizadeh (2022), the integration of technology and the use of technological tools genuinely increased the odds of improving writing skills because learners enjoyed the opportunities offered by online platforms and use of LMS platforms.

Concerning gamification, the findings of the study showed similarities to the related research in several ways. Initially, Flores (2015) and Pham et al. (2021) found that gamified language learning could increase learners' language skills and achievement, coinciding with the findings of this study. In the current study, learners' language competence showed an increase due to gamified and blended modules.

Additionally, the study found that the grammar skills of learners showed a statistically significant increase, and learners regarded the modules as informative, better than coursebooks and face-to-face activities, and effective. This outcome was relevant to the related research by Purgina (2020) who discovered that gamification could help increase grammar skills. On the other hand, even though no statistically significant improvement was detected, the study indicated an elevation in the writing skill. This showed parallels with the results of Samosa et al. (2021) and Yavuz et al. (2020), revealing that gamified lessons could enhance writing achievement and quality in language learning.

As indicated by Hernández-Prados et al. (2021), this study also found that EFL learners favored the learning experience where game elements enriched the process. Moreover, learners in the study mentioned engagement as one of the factors for their success, similar to the results of the study by Selvasli (2018) in which gamification increased learners' homework engagement and language achievement.

In short, it can be remarked that using technological tools, gamifying the process, providing students with constant support, and giving them opportunities to work independently and make revisions of their writing helped learners feel comfortable and motivated to work on their progress. A gamified and blended approach to language learning served greatly to EFL learners as a good mixture of language learning innovation. It can be inferred from this study that balancing out the incompatible parts of disruptive technologies and innovative techniques with close consideration for learners' needs can greatly improve the quality of language learning (Azzouz & Gutierrez-Colon Plana, 2020; Samosa et al., 2021; Yavuz et al., 2020).



## Conclusions and Suggestions

As can be seen in the findings and discussions section, learners' language skills showed promising improvements. Based on the views of students, providing alternative ways to communicate, offering a diverse range of activities, enabling students to practice language skills through extensive work, and providing constant and non-delayed feedback all function well with blended and gamified language learning environments. It can be concluded that the diversifying effect of blended learning and the engagement-invoking nature of gamification can work well in harmony to improve their language skills. Creating such blends that will ensure elevation in learner engagement, motivation, and language competence is possible through arduous instructional design processes during which researchers, teachers, students, and other possible stakeholders work in collaboration. Negotiations over the course contents and language learning procedures are crucial to reach the objectives of the lesson without discouraging stakeholders.

In light of the study's results, several suggestions can be made. First, true experimental research designs can serve better to understand the effect of blended and gamified instruction as this study employing a design without a control group was limited in this regard. Rather than comparing previous situations to the aftermaths of the intervention, making comparisons with a control group can work better. Second, studies with a large attendance of learners should be conducted to reach results with more generalizability. Third, teachers must be given more training sessions about gamification and blending of the learning because inaccurate or inappropriate actions during the instruction can damage the integrity of the study. Last, similar studies must be conducted in different contexts and with other variables.

## Compliance with Ethical Standards

### *Disclosure of potential conflicts of interest*

The authors declare that this study and no processes involved in conducting the study have the potential for conflicts of interest.

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### *CRedit author statement*

Author 1: Conceptualization, Data curation, Formal Analysis, Funding Acquisition, Investigation, Methodology, Resources, Software, Visualization, Writing - original draft, review, and editing

Author 2: Conceptualization, Methodology, Writing – review, editing

### *Research involving Human Participants and/or Animals*

The research was investigated by the Ethics Committee of Çanakkale Onsekiz Mart University School of Graduate Studies and approved with the reference number “08/20” dated 29.04.2021.

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## Oyunlaştırılmış ve Harmanlanmış Modüllerin İngilizceyi Yabancı Dil Olarak Öğrenenlerin Dil Becerilerine Etkisi

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### **Özet:**

Oyunlaştırma, İngilizce öğretimi bağlamında en popüler konular arasında yer almaktadır. Oyunlaştırılmış dil öğreniminin etkisi üzerine çok sayıda çalışma olmasına rağmen, farklı bağlamlardaki dinamiklerini anlamak için daha fazla araştırma yapılması gerekmektedir. Bu nedenle, bu çalışma lise öğrencilerinin yedi haftalık oyunlaştırılmış ve harmanlanmış dil öğrenme deneyiminden sonra belirli dil becerilerini keşfetmeyi amaçlamıştır. Oyunlaştırılmış içeriğin öğrencilerin okuma, kelime bilgisi, dil bilgisi ve yazma becerileri üzerindeki etkisini anlamak için karma yöntemli bir araştırma tasarımı kullanılmıştır. Öğrencilerin okuma, kelime bilgisi ve dil bilgisi becerileri, öğretim öncesinde ve sonrasında uygulanan yeterlilik testleriyle ölçülürken, yazma yeterlilikleri öğrencilerin yazılı ödevlerinin notlandırılmasıyla ölçülmüştür. Ayrıca, istatistiksel bulguları nitel verilerle ilişkilendirmek için öğrencilerin deneyime ilişkin görüşleri de toplanmıştır. Sonuç olarak, oyunlaştırılmış öğrenme deneyiminin öğrencilerin dil becerilerini geliştirdiği ve öğrenen görüşlerinin bu sonuçları yeterince açıkladığı bulunmuştur.

Anahtar kelimeler: dil becerileri, harmanlanmış öğrenme, oyunlaştırma, yabancı bir dil olarak İngilizce.

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