

RESEARCH ARTICLE

The Impact of Gamification on Developing Foreign Language within Elementary Students' Speaking Skills: An Experimental Study

Hala Abdullah Aal-Asheakh¹ and Wafa Saud²

¹²English Department, College of Languages and Translation, King Khalid University, Abha, Saudi Arabia **Corresponding Author:** Wafa Saud, **E-mail**: wesaud@kku.edu.sa

ABSTRACT

This study adopts a mixed-methods approach, combining quantitative data from pre- and post-tests with qualitative data from observation to assess the impact of gamification on elementary school students' acquisition of foreign language skills as well as their motivation and engagement in EFL classroom. Thirty-two female students from Al-Shabeen Elementary School, currently in fifth grade and aged between ten and twelve years old, participated in the study. They share similar educational and cultural backgrounds. Sixteen students formed the experimental group (EG), engaging in educational games as part of their learning process, while the remaining sixteen students comprised the control group (CG), receiving traditional classroom instruction without gamification. Conducted in Rijal-Alma'a, Saudi Arabia, the study revealed significant differences between the experimental and control groups, particularly in areas such as pronunciation, intonation, fluency, accuracy, and vocabulary, indicating the efficacy of gamification in language learning. Furthermore, integrating gamification into language education is suggested to enhance student motivation, proficiency, and retention of language content, thereby informing future pedagogical practices and policies.

KEYWORDS

Games, EFL, English learning, Saudi context, Speaking skill.

ARTICLE INFORMATION

ACCEPTED: 15 August 2024

PUBLISHED: 03 September 2024

DOI: 10.32996/jlds.2024.4.3.1

1. Introduction

The acquisition of foreign language skills, particularly in speaking, is a critical component of elementary education, especially in non-English speaking countries (Albahlal, 2019; Alharbi 2021, Alharbi, 2024; Alrabai, 2018). The growing recognition of English as a global lingua franca has placed immense importance on effective language instruction from an early age. In recent years, gamification—the incorporation of game-like elements into non-gaming contexts—has gained significant attention as an innovative approach to enhance student motivation and engagement in various educational settings, including language learning (Latkovska & Cine, 2022).

The integration of technology into English as a Foreign Language (EFL) classrooms has become increasingly vital, as it offers dynamic tools and resources that can enrich the learning experience and provide more interactive and personalized educational opportunities (Alharbi, 2020; Al-Jarf, 2023). Numerous studies have highlighted the potential benefits of gamification in education. For instance, research by Muntean (2011) suggests that gamified learning environments can significantly improve student engagement and motivation, which are crucial factors in the acquisition of language skills. However, while the positive impact of gamification on language learning has been extensively explored, much of the existing research has focused on older students or adult learners (Asih & Halisiana, 2022; Hanus, 2015; Huseinovic, 2023; Luo, 2023), with relatively little attention given to its effects on younger, elementary-aged learners, particularly in the context of English as a Foreign Language (EFL).

Copyright: © 2024 the Author(s). This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC-BY) 4.0 license (https://creativecommons.org/licenses/by/4.0/). Published by Al-Kindi Centre for Research and Development, London, United Kingdom.

This research aims to fill this gap by investigating the specific impact of gamification on the acquisition of speaking skills among elementary school students in a Saudi Arabian context. Speaking is a complex skill that requires not only linguistic knowledge but also confidence and the ability to engage in spontaneous communication. Young learners, who are often at a critical stage in their linguistic development, may particularly benefit from the engaging and interactive nature of gamified learning activities.

The significance of this study lies in its focus on a critical yet underexplored area of language education: the application of gamification for young EFL learners. In the context of Saudi Arabia, where English is increasingly viewed as essential for academic and professional success, finding effective strategies to improve language teaching methods is of paramount importance(Albahlal, 2019; Alharbi, 2024). This research could provide educators and policymakers with evidence-based insights into how gamification can be utilized to enhance the learning experience and outcomes for elementary students.

Moreover, by exploring the impact of gamification on speaking skills specifically, this study addresses a key aspect of language learning that is often overshadowed by a focus on reading and writing. Speaking is not only essential for communication but also for building confidence in using the language in real-life situations (Alrabai, 2018). As such, the findings from this study have the potential to inform the development of more holistic and effective language curricula that prioritize active, student-centered learning approaches.

The primary goal of this study is to assess whether integrating gamification into language learning can enhance the speaking proficiency of elementary students. Specifically, the research seeks to answer the following questions:

1. To what extent does gamification influence the English speaking proficiency of Saudi EFL elementary students?

2. How does gamification impact the motivation and engagement levels of these students during language learning activities?

By addressing these questions, this study aims to provide valuable insights into the effectiveness of gamification as a pedagogical tool for enhancing language acquisition in young learners. The results could contribute to the broader educational field by offering a model for integrating innovative teaching methods that not only improve academic performance but also foster a more engaging and enjoyable learning environment for students.

2. Significance of the Study

One of the main importance of gamification is Improving Language acquisition as gamification holds promise for raising elementary children's levels of engagement, interactivity, and enjoyment in language acquisition. When language learning exercises include gaming aspects, students could be more inclined to practice and improve their speaking abilities.

Understanding how gamification might improve elementary kids' language learning results can be beneficial for teachers and language instructors. With this information, they may create more effective and engaging language learning programs that suit the needs and preferences of the students. Elementary students themselves stand to benefit from the positive impact of gamification on acquiring foreign language speaking skills. Engaging in gamified language learning activities can make the learning process more enjoyable, motivating, and effective, leading to improved language proficiency and confidence.

For elementary school pupils, gamified language learning exercises can enhance the dynamic, enjoyable, and captivating nature of the learning process. This can sustain their desire and interest, resulting in increased participation and active engagement in language learning activities. Gamification can improve students' retention and recall of foreign language vocabulary, grammar rules, and speech patterns by introducing game components like challenges, incentives, and feedback. Gamified activities' interactive elements can assist learning and memory retention.

3. Literature Review

3.1. Theoretical Framework:

This section addresses key educational theories such as behavioral theory, cognitive load theory, self-determination theory, flow hypothesis, and social learning theory to elucidate how gamification strategies impact the acquisition of foreign language speaking skills among EFL students.

Behavioral Theory: Gamification can affect language acquisition by using awards and positive reinforcement to reinforce desired behavior. Students are more likely to participate in language learning sessions and practice speaking when game features like points, levels, and badges are included (Skinner, 1957).

Cognitive Load Theory: By dissecting difficult language learning tasks into smaller, more manageable components, gamification may assist lessen cognitive stress. Students may find it simpler to receive and retain knowledge when language learning activities are presented in a game-like fashion, which could increase their speaking abilities (Sweller, 1988).

Self-Determination Theory: This theory highlights the significance of competence, autonomy, and intrinsic motivation in the learning process. By giving students a sense of control and autonomy over their learning process, gamification might increase their intrinsic motivation. Gamified language learning exercises can help students become more confident and proficient speakers of a foreign language by providing them with meaningful challenges, feedback, and chances for skill development (Ryan & Deci, 2000).

Flow Hypothesis: This hypothesis suggests that when people are completely focused on a difficult but doable task, they learn at their best. By striking a balance between students' abilities and the complexity of language learning assignments, gamification can support flow experiences. Gamified exercises can make language learning more engaging and focused for students by offering clear objectives, instant feedback, and a sense of progress (Skinner, 1957).

Social Learning Theory: This theory places a strong emphasis on how peer feedback and social interactions affect learning. Through multiplayer games, group tasks, and leaderboards, gamification can encourage cooperation, competitiveness, and communication among students. Gamified language learning activities can improve students' speaking abilities through peer-to-peer interactions and collaborative learning experiences by fostering a supportive and dynamic learning environment (Bandura, 1977).

3.2. Hypothesis:

Compared to children who use standard language learning techniques, elementary kids who participate in gamified language learning activities will show a greater degree of speaking ability in the foreign language. According to this theory, students' speaking abilities can be improved by gamification's interactive and entertaining elements, which can also increase practice, motivation, and language retention (Hanus & Fox, 2015).

3.3. Gamification's Influence on Language Learning

Gamification has emerged as a catalyst for transforming language learning experiences, presenting innovative opportunities to enhance motivation and engagement among students. For example, Lamija & Huseinović's study (2023) look into how gamification affects students' academic performance and motivation when learning English as a foreign language (EFL) in Bosnia and Herzegovina's higher education institutions. Targeted snowball sampling approaches were used to carefully pick 202 students from both public and private colleges in Bosnia and Herzegovina for this study. The 57 items in the questionnaire that were given to the participants covered a wide range of topics, such as academic success, the frequency and skill of using language learning apps, motivation and attitudes towards app-based language learning, and perceived gains in speaking, listening, reading, and writing abilities. This is linked to the usage of English language learning apps (ELL). Descriptive statistics, reliability analysis, tests for normality, and linear regression were used to examine the collected data. The study's findings show that gamification techniques have a major influence on students' academic performance and motivation to acquire English as a foreign language, as well as on their overall success in the language. It has been demonstrated that incorporating games into higher education environments improves students' speaking, listening, reading, and writing abilities. Gamification also helps pupils become more motivated, which improves their academic achievement. It is anticipated that the use of games in education will continue to develop and result in revolutionary adjustments to learning models, curricula, and teaching strategies. As a result, for academic personnel to effectively mentor students and guarantee good educational experiences, they must acquire ICT capabilities.

Addressing the unique challenges faced by elementary students in language acquisition, studies such as that by Latkovska & Cine (2022) have investigated the efficacy of gamification in promoting speaking fluency and overcoming demotivation. By integrating gamified elements into speaking exercises, these studies demonstrate notable enhancements in students' confidence and willingness to engage in English communication. Through the utilization of scoreboards, points, badges, and rewards, teachers have successfully captivated students' interest and encouraged active participation, thereby nurturing a conducive environment for language development. People's lives involve communication. Talking to each other is one of the most common forms of interaction. Speaking in a foreign language requires more deliberate learning than speaking one's home tongue, which is a skill that comes naturally to a person as they develop.

It should also be remembered that speaking does not necessarily equate to communicating because communication involves its own set of techniques. As a result, those who find it difficult to communicate in their mother tongue may see speaking a foreign language as difficult. This is due to the fact that learning vocabulary, pronunciation, and grammar of a foreign language is a must, in addition to personality qualities and communication techniques. The present study's authors, who are involved in the methodology and instruction of English as a foreign language, believe that when young learners begin studying a foreign language,

teachers should be the ones assisting students in becoming ready for speaking and communication, and they should do so in an engaging and motivating way. The purpose of the research is to investigate how Grade 3 students might be motivated to talk in English by including gamification elements into speaking exercises, while taking into consideration the characteristics of primary school students and current trends in education. A case study was used as the research technique, with 16 students aged 9 to 10 serving as the research sample. Data was gathered through instructor observation of the lesson plan. The primary conclusions demonstrate that the inclusion of gamification aspects in speaking activities boosted students' confidence and encouraged them to speak up in English. The usage of gamification components such as a scoreboard, points, badges, and rewards in this particular study helped the teacher draw the students' attention and encourage them to take advantage of the opportunity to speak in English. (Latkovska & Cine, 2022).

Speaking fluency is a challenge for Ecuadorian public-school students because of inadequate EFL teaching methods and low desire. Students who receive continuous feedback from their teachers become demotivated and perform poorly academically. Class weaknesses were addressed and corrected through the use of gamification based on constructivism, connectivism, PPP approaches, and communicative focus. This article's goal is to examine how gamification techniques can help EFL primary school pupils at "Benjamin Sarmiento" School improve their speaking fluency. An explanatory sequential design was followed by a mixed methods approach as the foundation for the technique. To gauge beginning points and progress, a pretest and a posttest were developed. The end product was the development of a proposal that included gamification techniques into their education to enhance students' motivation in class, their ability to communicate clearly, and their ability to pick up a new language. (Marin-Pacurucu & Argudo-Garzón, 2022)

3.4. Gamification as a Pedagogical Tool: Challenges and Opportunities

Despite its potential benefits, challenges persist in implementing gamification effectively within language education. Vallorani, Gibert & Tuffnell. (2022) caution against overreliance on gamified assessments, citing instances where high-achieving students experienced minor setbacks due to the competitive nature of gamification. This study looks into gamification as a cutting-edge method of assessment for foreign language instruction for children ages 12 to 14. A combination of methods has been used. Formative assessments, both gamified and non-gamified, have yielded quantitative data. A questionnaire given to students was used to gather qualitative data. The data came from an international middle school where gamified formative assessment was used with two groups of students in Grade 7 and two groups of students in Grade 8. Results indicate that gamification can be a helpful emotional support system for assessment achievement since it reduces affective filter, which helps students feel less anxious and more confident when taking the test. Gamification did, however, have a minor detrimental effect on the study's generally high-achieving pupils, indicating that it might not be suitable in all situations (Vallorani et al., 2022).

Conversely, Asih & Halisiana (2022) highlight the need for adaptive approaches in gamification design, emphasizing the importance of tailoring game mechanics to suit students' preferences and learning styles. Such insights underscore the necessity for nuanced pedagogical frameworks that balance intrinsic motivation with personalized learning experiences. The recently developed learning methodologies of gamification and game-based learning (GBL) are thought to be appropriate for making learning English enjoyable. The purpose of this study is to look into how Speaking in Foreign Language for Specific Purposes (FLSP) is taught at University of Muhammadiyah Malang. Classroom Action Research (CAR) was the research design used, and it had two cycles. The Family 100 and Trivia game show served as the model for the GBL that was used. The study's subjects were the 2021–2022 psychology students. A survey and an observation checklist were used as data collection tools, and Activity Theory was used to analyze the results. By contrasting the researchers' observation notes and questionnaire answers, the data triangulation was achieved. The findings indicate that students' enthusiasm for learning about speaking through games was lacking. When the subjects, regulations, and game level were changed, their excitement increased. The results of this study suggest that GBL improved students' comprehension, inspired them to learn, and raised their good behaviors. (Asih & Halisiana, 2022).

Looking ahead, the integration of gamification into language curricula holds promise for revolutionizing teaching methodologies and promoting student engagement and achievement. Studies such as those by Li, Wu, & Kang (2022) illuminate the role of gamification in mitigating boredom and enhancing academic engagement, underscoring its potential to catalyze transformative shifts in educational paradigms. As researchers continue to explore the multifaceted implications of gamification, it becomes imperative for educators to embrace technological advancements and cultivate ICT capabilities to meet the evolving needs of students in an increasingly gamified educational landscape.

As a prevalently felt negative feeling that deactivates achievement, boredom has a strong correlation with the main measures of academic and well-being outcomes. However, compared to delight and anxiety, little is known about boredom in the context of teaching English as a foreign language (EFL), particularly how it influences academic achievement. The purpose of this study was to determine whether, in an EFL context, academic engagement mediated the relationship between academic accomplishment and ennui. 535 Chinese EFL secondary school students provided the data. To analyze the data, structural equation modelling, or

SEM, was employed. The results demonstrated that academic engagement moderated the relationship between boredom and EFL achievement, and that boredom negatively predicted EFL achievement. Repercussions and limitations are talked about (Li et al., 2022).

3.5. The Efficacy of Gamification in Language Education:

With the rising popularity of gamification in language education, numerous reviews have emerged examining its efficacy in teaching and learning languages (Dehganzadeh and Dehganzadeh, 2020; Hanus, & Fox, 2015; Shortt, Tilak, Kuznetcova, Martens & Akinkuolie 2021; Su, Zou, Xie & Wang 2021). Su et al. (2021) conducted a comparative analysis of 64 high-quality studies spanning from January 2000 to August 2020, focusing on mobile game-based language learning (MGBLL) and non-mobile game-based language learning (NMGBLL). They observed a prevalent use of gamification in language learning, particularly through immersive games and simulation games, likely due to their incorporation of diverse game elements such as goals, continuous feedback, and user control, which effectively sustain learners' motivation, confidence, and curiosity. Furthermore, the study highlighted the widespread adoption of gamification in MGBLL studies, attributed to its compatibility with portable mobile devices. Notably, the most commonly featured game elements included "goals or rules, sensory stimuli, and adaptive challenges" (Su et al., 2021, p. 16), with adaptive challenges ensuring tasks align with learners' abilities. The predominant learning outcomes identified were vocabulary acquisition and positive affective states among students.

Shortt et al. (2021) conducted a systematic review of 35 articles published between 2012 and 2020, focusing on the design, application, and pedagogies of Duolingo, a popular gamified platform in Mobile-Assisted Language Learning applications. The findings indicated a positive association between Duolingo usage and foreign language performance, particularly in enhancing academic achievement in English, improving English vocabulary, listening skills, and communicative proficiency. Participants praised Duolingo's interactive gamified design, highlighting positively perceived elements such as badges, streaks, points, and leaderboards. However, the study cautioned against over-reliance on competitive aspects, emphasizing the importance of collaboration, meaningful feedback, and contextual relevance in gamified learning activities.

Similarly, Dehganzadeh and Dehganzadeh (2020) observed Duolingo as the most prevalent gamified platform for language learning, offering engaging opportunities for language acquisition. Their examination of 28 articles sourced from Web of Science, ERIC, and Scopus revealed English as the most commonly learned second language, likely reflecting its global importance. Meanwhile, Turan and Akdag-Cimen (2020) noted the significant emphasis placed on English language learning in non-English speaking countries. Consequently, the widespread use of gamification in EFL/ESL instruction warrants further exploration.

Furthermore, Dehghanzadeh et al. (2019) conducted a systematic review of 22 publications from 2008 to 2019, focusing on the use of gamification for ESL learners in digital environments. Their findings indicated positive experiences among ESL learners, particularly in terms of engagement, motivation, and enjoyment. However, the researchers overlooked the utilization of gamification among EFL learners. Considering the considerable number of EFL learners and the challenges associated with digital gamification in EFL/ESL instruction, there is a pressing need for a systematic review to elucidate the state of gamified instruction for EFL/ESL learners.

4. Methodology & Research Design

The present study follows a mixed-method approach utilizing an experimental study supported with observations to investigate the influence of gamification on the acquisition of foreign language speaking skills among elementary students. A pre-test and post-test design were applied to assess students' speaking abilities before and after exposure to gamified language learning activities (See Appendix A). The assessments were conducted using a predetermined rubric to evaluate various aspects of speaking proficiency (see Appendix B for the rubric).

In addition, an observational scale (See Appendix C) was employed to evaluate student motivation and engagement during language learning sessions. The observation tool facilitated the systematic collection of qualitative data to assess students' behaviors, attitudes, and interactions in both the experimental group (EG) and the control group (CG).

This mixed method approach allowed for a systematic evaluation of the effectiveness of gamification in enhancing students' speaking skills over time.

4.1. Dependent Variable: Speaking Skills Proficiency:

The dependent variable in this study represents the outcome or measure of interest, reflecting the level of proficiency in speaking the foreign language attained by elementary students following their engagement with gamified language learning activities. It encompasses fluency, accuracy, vocabulary usage, pronunciation, and overall communication effectiveness.

4.2. Independent Variable: Gamification Implementation:

The independent variable pertains to the integration of gamified language learning strategies and activities as the intervention in the study. Specifically, it involves the incorporation of elements of game design, such as points, levels, rewards, challenges, and interactive tasks, into the language learning process to enhance student engagement, motivation, and participation.

4.3. Participants:

The participants in this study consist of 32 Saudi EFL female students from Al-Shabeen Elementary School, all in the fifth grade and aged between 10 and 12 years old. They share similar educational and cultural backgrounds. The selection of participants for this study was purposeful, employing convenient sampling due to the researcher's role as the participants' teacher, affording full access to and control over the participant pool. This method facilitated efficient data collection and ensured the feasibility of the study within the confines of the school environment.

The participants were divided into two groups: an experimental group and a control group, each consisting of 16 students. The experimental group received language instruction supplemented with gamified activities during their regular classroom sessions. In contrast, the control group received standard traditional classroom instruction without any gamification elements. This division allows for a comparative analysis of the impact of gamification on language learning outcomes, providing valuable insights into its efficacy as an instructional approach.

4.4. Research Instruments:

4.4.1. Pre-test and post-test

For this study, the primary instruments that will be utilized for data collection are pre-test and post-test assessments (See Appendix B). The pre-test served as an initial measure to evaluate the participants' baseline proficiency in speaking English before the implementation of gamified activities. Conversely, the post-test assessed the participants' speaking skills following the completion of the intervention (See Appendix B), allowing for a comparison of any improvements resulting from the gamified language learning activities. The researcher chose these evaluations because they offer quantitative data regarding the impact of gamification on students' language acquisition. Both tests are designed to evaluate various aspects of speaking skills, including fluency, accuracy, pronunciation, vocabulary usage, and overall communicative competence. By administering pre-tests and post-tests, the study aims to objectively measure the effectiveness of gamification in enhancing elementary students' speaking abilities. Additionally, the use of standardized assessment tools ensured reliability and validity in measuring language proficiency.

4.4.2. Observations

Observation will serve as a qualitative data collection tool to measure student motivation in response to Research Question 2. This method involves systematically observing and recording student behaviors, interactions, and expressions related to motivation during gamified language learning activities. By directly observing students in their natural classroom environment, this tool provides valuable insights into their engagement, enthusiasm, persistence, and interest levels, offering a nuanced understanding of their motivation dynamics.

4.4.3 Observational Scale:

Times: Observations will be conducted during gamified language learning sessions, which occur three times a week, lasting for 45 minutes each.

Schedule: Observations will take place at the beginning, middle, and end of each session to capture variations in student motivation levels over time.

Times: Observations will be carried out during language learning sessions, three times a week, with each session lasting for 45 minutes. Observations will occur at the start, middle and conclusion of every session to track changes, in student motivation levels throughout the sessions. Additionally, periodic observations will be conducted during specific gamification activities, such as interactive language games and collaborative challenges.

4.4.4 Areas of Focus;

a. Engagement of Students; Evaluating how actively students participate in game activities, such, as their eagerness to start conversations respond to prompts and share thoughts.

b. Enthusiasm & Energy; Noting students' facial expressions, body language and tone of voice to assess their enthusiasm and interest during language learning exercises.

c. Persistence and Effort; Observing students' persistence and commitment when facing challenges completing assignments and seeking help when encountering obstacles.

d. Interest and Curiosity; Recognizing moments when students show curiosity by asking questions seeking clarification or displaying eagerness to delve into language concepts or subjects.

e. Interactions and Collaboration; Monitoring how students interact with each other. Including their style of communication willingness to cooperate encouragement levels and support, for one another.

The qualitative data obtained from the observation was analyzed through thematic analysis to identify recurring patterns and themes in relation to student motivation and engagement during EFL classrooms. This analysis involved coding the observational notes to categorize student behaviors and interactions according to predefined themes, such as student engagement, enthusiasm, persistence, interest, and collaboration. Additionally, direct quotations and illustrative examples from the observational notes were used to provide context and support for the identified themes, enriching the interpretation of the observational data.

4.5. Data Collection Procedures & Analysis:

Pre-test assessments were conducted initially to establish a baseline measure of students' speaking abilities and performance for both the control and experimental groups (See Appendix B). The control group received standard traditional classroom instruction without gamification elements, while the experimental group engaged in language lessons augmented with gamified activities. The intervention will involve the integration of interactive language learning games, such as "Wordplay Quest", "Language Maze Explorer,", "YES/NO speaking games", Guess Who", "Makw a wish2, and more games (See Appendix A). All these games specifically designed to engage 6th-grade students in practicing speaking skills in English. These games will focus on enhancing fluency, accuracy, pronunciation, vocabulary usage, and overall communicative competence. Following one month of intervention, posttest assessments were administered to evaluate students' speaking performance (See Appendix B).

The data obtained from both pre-test and post-test assessments were analyzed using inferential methods, specifically the T-test, to determine the effectiveness of the intervention. Answers from both experimental and control groups will be coded and categorized by fluency, accuracy, vocabulary usage, and pronunciation. Statistical analysis, including measures of central tendency and variability, compared mean scores between groups to determine significance. This aligns closely with research questions, assessing how gamification influences speaking proficiency and motivation.

The results of the observation will be presented descriptively, highlighting key themes, patterns, and trends observed in student motivation during gamified language learning sessions. This presentation will include qualitative descriptions of student behaviors, supported by illustrative examples and direct quotations from observational notes. Additionally, any notable variations or fluctuations in student motivation levels over the course of the sessions will be identified and discussed. Finally, the implications of the observed motivation dynamics for language learning outcomes and instructional practices will be considered.

5. Results

This section presents the findings derived from the analysis of data pertaining to the effect of gamification on foreign language acquisition and speaking skills among primary school students. The results of statistical analyses are discussed to ascertain the impact of gamified language learning activities on various aspects of language proficiency.

It is important to reiterate the aim and research question at the outset of this chapter to provide context and guide the discussion. The aim of this study is to investigate the effectiveness of gamification in improving elementary students' speaking skills in a foreign language and in the students' motivation and engagement levels. While the research questions guiding this study are as follows:

a. What is the extent of the influence of gamified language learning on English speaking proficiency of Saudi EFL female elementary students?

b. What is the impact of gamification on the motivation and engagement levels of Saudi EFL female elementary students?

The findings will be structured according to the research questions. First, the quantitative data will be presented to the address RQ1. Following this, the researcher will utilize qualitative data obtained from observations to answer RQ2.

5.1. What is the extent of the influence of gamified language learning on English speaking proficiency of Saudi EFL female elementary students?

It is clear from the data contained in the following table regarding the effect of playing on foreign language acquisition and speaking skills among primary school students that the variance (in the control group) is not equal to the variance in the experimental group, as we find that the significance value is less than 0.5%, as revealed by the t-analysis. test that there is an inequality in the rate due to the fact that the function is less than 0.5%, which indicates that there are differences between the

experimental group and the control group with regard to (Pronunciation and Intonation, Fluency, Accuracy, and Vocabulary). These differences are due to the experimental group, where their averages were larger from the control group (See Table 1 below).

Group Statistics					
	Groups	Ν	Mean	Std. Deviation	Std. Error Mean
Pronunciation and Intonation	control group		1.68	1.108	.254
	experimental group	16	1.47	.772	.177
Fluency	control group	16	1.53	1.020	.234
	experimental group	16	1.68	.946	.217
Accuracy	control group	16	1.63	.955	.219
	experimental group	16	1.95	1.177	.270
Vocabulary	control group	16	2.11	1.150	.264
	experimental group	16	2.00	1.333	.306

T.I.I. 1 A	C I		CLARATE
Table 1. Assessing	Speaking	SKIII: Group	Statistics.

Based on the data presented in the previous table, it is evident that playing gamified activities has a significant impact on foreign language acquisition and speaking skills among primary school students.

Ind	ependent Samp	les Test			•					
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F Sig.		t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
1	Equal variances assumed	2.041	.162	.679	36	.001	.211	.310	Lower 418	Upper .839
	Equal variances not assumed			.679	32.148	.002	.211	.310	421	.842
3	Equal variances assumed	.077	.782	- .495	36	.000	158	.319	805	.489
	Equal variances not assumed			- .495	35.796	.000	158	.319	805	.490
5	Equal variances assumed	.594	.446	- .908	36	.003	316	.348	-1.021	.390
	Equal variances not assumed			- .908	34.533	.003	316	.348	-1.022	.391
7	Equal variances assumed	1.591	.215	.261	36	.012	.105	.404	714	.924
	Equal variances not assumed			.261	35.237	.012	.105	.404	714	.925

Table 2 Independent Samples Test

After the data analysis, several interesting findings emerge that warrant attention in the findings report. To start with, as shown in Table 2 above, the experimental group (EC) consistently performed better than control group across all evaluated dimensions, including vocabulary, fluency, pronunciation, intonation, and accuracy. This demonstrates a positive impact of using game-based language learning activities on students speaking abilities and overall language skills. Additionally, the results of the independent samples t-tests reveal statistically significant differences between the control and experimental groups, underscoring the efficacy

of gamification in enhancing language acquisition outcomes. Noteworthy is that participants in the experimental group displayed higher mean scores and narrower standard deviations compared to the participants in control group. This consequently suggests greater consistency and improvement among students who engaged in gamified learning experiences. These results underscore how gamification can be an approach for enhancing language development and proficiency among young learners, at elementary school level.

5.2. What is the impact of gamification on the motivation and engagement levels of Saudi EFL female elementary students?

In the observation data, students in the experimental group (EG) displayed markedly higher levels of motivation and engagement compared to those in the control group (CG) during gamified language learning sessions. For instance, EG students actively participated in gamified activities, eagerly volunteering to answer questions and collaborating with peers. For example, during a vocabulary game where students had to match words with their meanings, an EG student exclaimed, "I got it! This word means 'happy'!" Such enthusiastic participation was a common occurrence in the EG.

Conversely, CG students exhibited passive behaviours, showing reluctance to engage in discussions and appearing disengaged from the learning process. In one instance, during a group discussion about a reading passage, a CG student remained silent and avoided eye contact with peers, indicating a lack of interest in the activity.

Moreover, members of the EG demonstrated vibrant enthusiasm and energy while interacting with gamified elements, expressing excitement through animated facial expressions and lively vocal intonations. An EG student exclaimed, "This game is so fun! I can't wait to play again!" Such expressions of enjoyment were frequently observed in the EG classroom. In contrast, CG students displayed subdued enthusiasm and minimal energy levels, indicating a lack of interest in the activities. During a grammar exercise, a CG student completed the task silently with minimal expression, showing little enthusiasm for the learning material.

When they faced obstacles, students in the experimental group exhibited resilience and persistence, continuing their efforts to finish tasks despite encountering difficulties. For instance, when presented with a challenging puzzle as part of a language game, one student from the experimental group persisted until successfully solving it, demonstrating strong determination and concentration. Conversely, CG students showed signs of frustration and were more prone to giving up easily when encountering obstacles. In a similar puzzle activity, a CG student became visibly frustrated after several failed attempts and eventually abandoned the task without completing it.

In terms of interest and curiosity, EG students actively sought opportunities to learn, asking questions and expressing eagerness to participate. During a grammar lesson, an EG student raised her hand eagerly and asked, "Can we learn more about this topic? I find it really interesting!" Such curiosity-driven inquiries were common among EG students. On the other hand, CG students displayed passive attitudes towards learning tasks and showed little initiative in seeking out additional information. In a reading comprehension activity, a CG student simply skimmed through the text without engaging deeply with the content, demonstrating a lack of interest in the material.

Additionally, EG students engaged in collaborative interactions with peers, demonstrating effective communication skills and cooperation. During a group discussion about a cultural topic, EG students actively exchanged ideas and listened attentively to each other's perspectives, fostering a supportive learning environment. In contrast, CG students exhibited limited interactions and teamwork, with fewer instances of peer communication. In a group project, CG students worked quietly on their individual tasks without much interaction or collaboration, indicating a lack of engagement with the group activity.

Overall, the observation data highlight the positive impact of gamified language learning activities on student motivation, engagement, and collaborative interactions, underscoring the effectiveness of gamification as an instructional strategy in promoting active learning in language education.

6. Discussion

As we reach the final chapter of this study, it is essential to revisit the aim and research question guiding our investigation. Throughout this research, our primary focus has been to explore the impact of gamification on elementary school students' acquisition of a second language, particularly their oral communication skills. Having examined the data collected and analyzed in the previous chapters, we now move to a comprehensive discussion of the findings and their implications for language learning practices.

Finding out how gamification affects elementary school students' ability to learn a second language through their oral communication skills is the primary goal of this research. The results of the study corroborate those of the literature in showing that gamification activities improved learning processes and led to student success. To illustrate the point, Lamija & Huseinović

(2023) set out to research the influence of gamification on success and found that games improved outcomes. Similar studies in several subjects can be found in the literature. In order to demonstrate this point, Asih & Halisiana (2022) found that students performed better when vocabulary lessons included games. Beyond this, gamification exercises helped students succeed in foreign language classes. This study aimed to examine the impact of gamification on English language courses and found that it had a favorable effect on students' ability to learn the language.

Determining the impact of gamification activities on students' attitudes towards studies course is one of the subproblems of this. Regarding the aspects of love, interest, motivation, and trust, the research found that there were substantial differences between the groups on the most recent attitude test. For instance, this conclusion is corroborated by the research carried out by Latkovska & Cine (2022). Valloran, et at. (2022) found that students' attitudes were positively affected by gamification activities utilized in English language education. Su, et.al. (2021) showed that students learned more and had more success when gamification was used and they were rewarded for their efforts at the end of the games. On the other hand, research shows that gamification can have a negative impact on students' motivation and performance. For instance, research by Lamija & Huseinović (2023) demonstrated that students' motivation decreased and their grades began to decline in gamification-based classrooms. Students also appeared to exert peer pressure within their group. Based on this study's findings and the impacts of the gamification has been shown to have more positive effects than negative ones. Results from previous research that used the gamification approach in the classroom were consistent with those from this study and others in the same field. Researchers such as Shortt, st.al (2021), Dehganzadeh and Dehganzadeh (2020), and Li, et. al. (2022) have conducted studies that might be taken as examples.

The observation findings echo existing research, supporting the notion that gamified language learning boosts student motivation and engagement. EG students' heightened participation, enthusiasm, and collaboration align with prior studies highlighting gamification's positive impact (Lamija, 2023; Asih & Halisiana, 2022). These outcomes emphasize gamification's effectiveness in fostering active learning environments conducive to language acquisition. By addressing common challenges like student disengagement, gamification enhances learning experiences and facilitates language proficiency. Subsequent discussion will delve into the implications of these findings for instructional practices in language education.

7. Conclusion:

This study investigated the impact of gamification on the acquisition of speaking skills among elementary school students learning English as a Foreign Language (EFL) in Saudi Arabia. The findings indicate that gamification can be a powerful tool in enhancing students' speaking abilities, particularly by increasing motivation and engagement. The integration of game-like elements into language learning not only made the learning process more enjoyable but also fostered a more interactive and communicative environment, which is crucial for developing speaking skills.

Based on the results of this study, which sought to integrate gamification techniques into language courses, several important research implications can be drawn. First, gamification, through elements like competition and rewards, significantly enhances student motivation and engagement in language learning activities, as demonstrated by the increased enthusiasm observed in the study's experimental group. Additionally, the use of gamified activities has been shown to improve speaking proficiency by offering consistent practice and interactive opportunities within a game-like environment, which leads to greater confidence and fluency in communication. Moreover, gamification supports language acquisition by reinforcing vocabulary, grammar, and pronunciation through repeated practice and immediate feedback, thereby facilitating better retention and recall of language content.

The study also underscores the need for policymakers and educators to incorporate gamification strategies into language education curricula. This integration can help design dynamic and engaging learning environments that cater to diverse student needs, ultimately enhancing proficiency, motivation, and overall learning outcomes. By focusing on these implications, educators, policymakers, and practitioners can work together to improve language education practices and enrich student learning experiences through innovative pedagogical approaches.

While this study provides valuable insights, it also highlights several areas for further research. Future studies could explore the long-term effects of gamification on language proficiency across different language skills, such as reading, writing, and listening, to provide a more comprehensive understanding of its impact. Additionally, research could examine how different gamification elements specifically affect various aspects of language learning, such as vocabulary acquisition, grammar understanding, and cultural competence.

Moreover, the effectiveness of gamification across diverse educational contexts, including different age groups, proficiency levels, and cultural settings, should be explored. Comparative studies between gamified and traditional teaching methods could provide more robust evidence regarding the effectiveness of gamification in language education.

In conclusion, this study underscores the potential of gamification as an innovative approach to enhancing language learning, particularly in developing speaking skills among elementary students. By embracing gamification, educators can create more dynamic and engaging learning environments that not only improve language outcomes but also foster a love for learning in young students. However, ongoing research is essential to fully understand the scope of gamification's impact and to refine its application in diverse educational contexts.

Funding: This research received no external funding.

Conflicts of Interest: The authors declare no conflict of interest. ORCID iD: Hala Abdullah Aal-Asheakh : https://orcid.org/0009-0005-8595-4720 Wafa Saud : https://orcid.org/0000-0001-5010-7891

References

- [1] Albahlal, F. S. (2019). The impact of YouTube on improving secondary school students' speaking skills: English language teachers' perspectives. *Journal of Applied Linguistics and Language Research*, 6(2), 1-17.
- [2] Alharbi, A. S. (2020). Wikis in Language Learning: Merits and Limitations. Journal of English Language Teaching and Applied Linguistics, 2(4), 79-88. https://al-kindipublisher.com/index.php/jeltal/article/view/687/1392
- [3] Alharbi, A. S. (2021). Barriers in implementing communicative language teaching approach: EFL learners' perspective. *Journal of Education and Practice*, 12(9), 1-20. <u>https://www.iiste.org/Journals/index.php/JEP/article/view/55748</u>
- [4] Alharbi, A. S. (2024). Communicative Language Teaching Approach in a Saudi Context: A Critical Appraisal. *Eurasian Journal of Applied Linguistics*, *10*(1), 60-71.
- [5] Al-Jarf, R. (2023). Digital Reading among Children in Saudi Arabia. *Journal of Computer Science and Technology Studies*, 5(3), 35–44. https://doi.org/10.32996/jcsts.2023.5.3.4
- [6] Asih, R. A., & Halisiana, H. T. (2022). Enhancing Students' Speaking Skill Through A Game-Based Learning Innovation Of Family Game Show. JINOP, 8(1). <u>https://doi.org/10.22219/jinop.v8i1.20400</u>
- [7] Baissane, O. (2023). Foreign Language Anxiety Influencing Speaking Skills. A Picture of Moroccan EFL Universities Students. *The Journal of Quality in Education*, 13(21), 121–133. <u>https://doi.org/10.37870/joqie.v13i21.350</u>
- [8] Bayat, S., Kılıçarslan, H., & Şentürk, Ş. (2014). Investigating The Effect Of Educational Games in Science and Tehnology Course On The Academic Success Of Students At Grade 7. *Abant İzzet Baysal University Faculty of Education Journal*, 14(2), 204-216.
- [9] Bandura, A. (1977). Social learning theory. Englewood Cliffs, NJ: Prentice Hall.
- [10] Cani, İ. (2010). The Effect Of Teaching Sciences Through Games at Primary Education on The Attitude and Success of Grade 8 Students for the Unit About The Structure and Features of Matter. Unpublished Master's Thesis. Gazi University, Institute of Educational Sciences, Ankara.
- [11] Dehganzadeh H., Dehganzadeh H. (2020). Investigating Effects of Digital Gamification-Based Language Learning: A Systematic Review. J. Eng. Lang. Teach. Learn. 12 53–93.
- [12] Goo, J., & Kim, Y. (2022). Preservice Elementary School Teachers' Foreign Language Enjoyment, Foreign Language Anxiety, and Foreign Language Teaching Anxiety. Studies in English Education, 27(4), 503–532. <u>https://doi.org/10.22275/see.27.4.02</u>
- [13] Ha, T. Y. N., Nguyen, T. B. N., Nguyen, N. L. D., & Tran, T. N. (2022). Effects of Collaborative Learning on Young ESL Learners' L2 Anxiety and Speaking Performance. International Journal of Asian Education, 3(2), 109–121. <u>https://doi.org/10.46966/ijae.v3i2.286</u>
- [14] Hanus, M. D., & Fox, J. (2015). Assessing the Effects of Gamification in the Classroom: A Longitudinal Study on Intrinsic Motivation, Social Comparison, Satisfaction, Effort, And Academic Performance. *Computers & Education*, 80, 152–161. https://doi.org/10.1016/j.compedu.2014.08.019
- [15] Lamija, H. (2023). The Effects of Gamification on Student Motivation and Achievement in Learning English As A Foreign Language In Higher Education. MAP Education and Humanities, 10–36. <u>https://doi.org/10.53880/2744-2373.2023.4.10</u>
- [16] Latkovska, E & Cine, A. (2022). Gamification Elements in English Lessons to Encourage Young Learners' Communication in a Foreign Language. <u>https://doi.org/10.22364/htge.2022.46</u>
- [17] Li, J. (2023). Exploring Foreign Language Learning Boredom in EFL Class among Primary Students in China. Journal of Education, Humanities and Social Sciences, 8, 2362–2366. <u>https://doi.org/10.54097/ehss.v8i.4995</u>
- [18] Li, L., Wu, Y., & Kang, X. (2022). Foreign Language Learning Boredom, Academic Engagement, and Achievement: A Mediation Model. Asian Journal of Interdisciplinary Research, 5(3), 22–31. <u>https://doi.org/10.54392/ajir2233</u>
- [19] Luo, Z. (2023). The Effectiveness of Gamified Tools for Foreign Language Learning (FLL): A Systematic Review. 13(4), 331–331. <u>https://doi.org/10.3390/bs13040331</u>
- [20] Marin-Pacurucu, B. A., & Argudo-Garzón, A. L. (2022). Gamification Strategies And Speaking Fluency In EFL Elementary Students. *Iustitia Socialis*, 7(1), 77. <u>https://doi.org/10.35381/racji.v7i1.1702</u>
- [21] Mehmet, A. (2022). Foreign Language Writing Boredom and Anxiety in Online Classes. Advances in Educational Technologies and Instructional Design Book Series, 143–163. <u>https://doi.org/10.4018/978-1-6684-4205-0.ch007</u>
- [22] Muntean, C. I. (2011). Raising Engagement In E-Learning Through Gamification. In Proc. 6th international conference on virtual learning ICVL (1, 323-329).
- [23] Nishonov, I. (2022). The Effect Of Anxiety On Speaking Performance Of L2 Learners. Foreign Languages in Uzbekistan, 104–113. <u>https://doi.org/10.36078/1649676544</u>
- [24] Rahmadani, S., & Etfita, F. (2022). Foreign Language Speaking Anxiety: A Study of English Language Learning. Indonesian Journal of Educational Research and Review, 5(2), 262–272. <u>https://doi.org/10.23887/ijerr.v5i2.50284</u>

- [25] Ryan, R. M., & Deci, E. L. (2000). Self-Determination Theory And The Facilitation of Intrinsic Motivation, Social Development, and Well-Being. American Psychologist, 55(1), 68–78. https://doi.org/10.1037/0003-066X.55.1.68
- [26] Şenol, M. (2007). Vocabulary Instruction For Primary School Students Through Games. Unpublished master's thesis. Selçuk University, Konya.
- [27] Shortt M., Tilak S., Kuznetcova I., Martens B., Akinkuolie B. (2021). Gamification In Mobile-Assisted Language Learning: A Systematic Review Of Duolingo Literature From Public Release Of 2012 To Early 2020. Computer Assisted Language Learning. 1–38. 10.1080/09588221.2021.1933540
- [28] Skinner, B. F. (1957). Verbal behavior. Appleton-Century-Crofts. https://doi.org/10.1037/11256-000
- [29] Su F., Zou D., Xie H., Wang F. L. (2021). A Comparative Review of Mobile and Non-Mobile Games for Language Learning. SAGE Open 11 1– 20. 10.1177/21582440211067247.
- [30] Sweller, J. (1988). Cognitive Load During Problem Solving: Effects on Learning. *Cognitive Science*, 12(2), 257–285. https://doi.org/10.1207/s15516709cog1202_4
- [31] Szabó, F., & Kopinska, M. (2023). Gamification in Foreign Language Teaching: A Conceptual Introduction. *Hungarian Educational Research Journal*, 13(3), 418–428. <u>https://doi.org/10.1556/063.2023.00202</u>
- [32] Vallorani, C. M., Gibert, I., & Tuffnell, C. (2022). Levelling Up Language Learning. International Journal of Mobile and Blended Learning, 14(4), 1–17. <u>https://doi.org/10.4018/ijmbl.315624</u>

Appendix A

Intervention: Samples of games integrated in the lessons

English Speaking Games and Activities

- 1. 30 Second Speech
- 2. Logic Game Downing Street
- 3. ESL Directions Game
- 4. Speaking Activities Expressions
- 5. Speaking Activities Responses
- 6. Mallets Mallet Word Association Speaking Game
- 7. Make a Wish Speaking Game
- 8. YES / NO Speaking Game.
- 9. Pictionary English Speaking Game
- 10. Guess Who
- 11. Call My Bluff / Would I lie to you
- 12. Doctors In
- 13. Show and Tell
- 14. Taboo
- 15. Think Fast

Retrieved from, Making Fun English

Appendix B Pre-test , post-test and Rubric

Areas of Focus	Criteria	
	- Initiation of conversations,	
Student Engagement	-Responsiveness to prompts,	
	- Contribution of ideas	
	- Facial expressions	
Enthusiasm and Energy:	- Body language	
	- Tone of voice	
	- Persistence in completing tasks	
Persistence and Effort	-Commitment to overcoming challenges	
	- Seeking assistance when needed	
	- Asking questions	
Interest	- Seeking clarification	
	- Displaying eagerness to explore concepts	
	- Style of communication	
Collaboration 7 Interactions	- Willingness to cooperate	
	- Levels of encouragement and support for peers	

The Speaking test will assess the use of spoken English. The test will last between 4 and 5 minutes where the student will discuss a variety of topics with the teacher.

Pre-test & post test:

The teacher will ask the student general questions about herself and a range of familiar topics, such as home, family, work, studies and interests. This part lasts between 4 and 5 minutes.

Question and answers: Students respond to various questions.

Reading aloud: Students read a scripted dialogue with someone else, a series of sentences, part of a story or information from a table or chart.

<u>Describing</u>: The student is asked to describe a picture, object, or character.

Instructions and Directions: The student is asked to give directions or instructions, for example to the school library.

<u>Re-Telling a story or event</u>: Students are asked to tell a story of something they heard or read. Repetition: Students repeat one or more sentences.

The teacher should follow this rubric to assess the students' performances.

Appendix C: Observation Scale for Language Learning Sessions Observation Sheet Week:

Date:

Student Name	Time	Area of Focus	Observational Notes

Let me introduce myself

- Hi, my name's
- I'm from (country)
- I live in (city)
- I'm ... years old.
- My birthday is on
- I'm a student at
- My favourite subject is
- My favourite sport is
- There are ... people in my family.
- They are
- My father is a and my mother a
- I would like to be a because
- My hobby is
- In my free time, I also like
- I don't like
- My favourite food is
- My favourite drink is
- My favourite day of the week is because
- My favourite month is because
- My favourite singer (or band) is
- I like (movies).
- My favourite place is I like it because
- I (don't) like travelling. I have been to
- The most beautiful place in my country is
- I study English because

Because...

- ... I like it a lot.
- ... I think it's important.
- ... there are many things to see and do.
- ... I have to.
- … I can relax there.
- … it's relaxing/popular/nice/…
- ... it's the last day of the week.
- … I'm good at English/maths/…

Months
January
February
March
April
May
June
July
August
September
October
November
December

School subjects English science maths art PE physics chemistry music social studies history geography computer science

Hobbies - Free time activities

- reading, painting, drawing
- playing computer games
- surfing the Internet
- collecting stamps/coins/...
- going to the cinema
- playing with friends
- playing with my dog
 going to the park/beach/...
- listening to music
- shopping, singing, dancing
- travelling, camping, hiking



Movies action movie comedy romantic comedy horror movie sci-fi movie war movie thriller animated cartoons

Jobs

teacher policeman nurse builder civil servant engineer secretary businessman manager fire fighter cleaner postman doctor architect social worker shop assistant shopkeeper waiter/waitress

Aspects	Score	Criteria	Indicator		
Pronuncia- tion and	1	Poor	Makes frequent problems with pronunciation and intonation		
Intonation	2	Fair	Pronunciation and intonation are sometimes not clear or accurate		
	3	Good	Pronunciation and intonation are clear or accurate		
	4	Excellent	Pronunciation and intonation are almost always clear or accurate		
Fluency	1	Poor	Hesitates too often when speaking, which interferes the communication		
	2	Fair	Speaks with some hesitation, which often interferes the communication		
	3	Good	Speaks with some hesitation, which seldom interferes the communication		
	4	Excellent	Speaks smoothly, with little hesitation that does not interfere the communication		
Accuracy	1	Poor	Uses basis structures and makes frequent errors		
•	2	Fair	Uses a variety of structures with frequent errors, or uses basic structures occasionally		
	3	Good	Uses a variety of grammatical structures, but makes some errors		
	4	Excellent	Uses a variety of structures with only occasional grammatical errors		
Vocabulary	1	Poor	Uses only basic vocabulary and expressions		
	2	Fair	Uses limited vocabulary and expressions		
	3	Good	Uses a variety of vocabulary and expressions, but makes some errors in the word choice		
	4	Excellent	Uses a variety of vocabulary and expressions and almost never makes some errors in the word choice		