

The Impact of Gamification on Kurdish EFL Learners in Terms of Motivation, Engagement, and Listening Comprehension Skills

Chiman Y. Ali

University of Kurdistan Hewlêr, Iraq

Email: chiman.yousif@ukh.edu.krd

ORCID: <https://orcid.org/0009-0007-4246-1904>

Hogar Mohammed Tawfeeq (Supervisor)

Sulaimani Polytechnic University, Iraq

Email: Hogar.tawfeeq@spu.edu.iq

ORCID: <https://orcid.org/0009-0006-8497-2633>

Abstract:

Listening is one of the most difficult and frequently overlooked skills in EFL classes, especially in the Kurdistan region of Iraq (KRI). The innovative assessment practice in such regions remained underutilised. This study examined the impact of gamified formative assessment on Kurdish EFL students' listening comprehension, motivation, and classroom engagement. Furthermore, it aimed to evaluate students' and teachers' perceptions of the educational value of gamified assessment and its application in language learning. This study adopted a mixed-methods approach, using a quasi-experimental test with interviews. Moreover, Kahoot was used as a gamification assessment tool in the experimental group, while the control group utilised traditional method protocols.

The quantitative findings demonstrated that although the post-test comparison between the two groups was not statistically significant, the experimental group achieved higher listening comprehension scores than the control group. These qualitative results indicated that students perceived gamified assessments with confidence, a great sense of autonomy, peer collaboration, and enjoyment. Teachers' responses also corresponded to these advantages, emphasising observable improvements in students' engagement, reductions in anxiety, and the pedagogical benefits of real-time feedback. This research provides insights for teachers and policymakers about the potential and limitations of gamified assessment and its application in language learning settings.

Keywords: gamification, GFA, Kurdish EFL students, motivation, engagement, listening comprehension

1. Introduction

The integration of gamification as a pedagogical approach in the educational setting to boost learners' engagement, motivation, and persistence has garnered considerable interest in recent years (Hamari et al., 2014). The effectiveness of digital gamification tools (e.g. Quizizz, Kahoot) in providing a dynamic, student-centred learning experience is often less considered in EFL settings (Zainuddin et al., 2020). While existing research has largely examined the role of gamification in overall language competence, grammar mastery, and vocabulary development, fewer studies have explored its potential to improve listening comprehension (Li et al., 2024; Zhang & Huang, 2024). However, many EFL contexts still prioritise reading and writing over listening skills (Field, 2008). This is particularly evident in the Kurdistan Region of Iraq (KRI) educational contexts (Sofi-Karim, 2015).

Gamified formative assessment (GFA) is a recent, promising strategy that combines game elements such as points and continuous feedback to improve learners' listening performance and enhance motivation during assessments (Deterding et al., 2011). A notable gap in the literature exists about how such approaches have an impact on listening skills, particularly in EFL settings across KRI. This study addresses the following research questions:

- 1) What is the effect of GFA on Kurdish EFL students' listening comprehension skills compared to traditional assessment approaches?
- 2) How do Kurdish EFL school students perceive GFA in terms of motivation and engagement?
- 3) What are the perspectives of Kurdish EFL teachers on the integration of GFA into EFL classrooms in terms of motivation, engagement, and listening comprehension skills?

From a theoretical standpoint, this study contributed to the Self-Determination Theory (Ryan & Deci, 2000), Krashen's (1982) Affective Filter Hypothesis and Vygotsky's (1978) role of social interaction in the educational process. From an empirical perspective, this study provides further evidence of the impact of gamification on listening comprehension in EFL settings.

2. Theoretical Framework and Literature Review

2.1 Gamification and GFA

"Gamification" is described as the latest academic strategy (Okolo et al., 2024) and "the use of game design elements in non-game contexts", which includes different features (e.g. levels, marks) in the game itself to enhance user interaction within the existing system (Deterding et al., 2011, p. 10). It works on a solid foundation of gaming features such as points, levels, and achievements incorporated into ongoing learning activities (Deterding et al., 2011). Several theories underlie the significance of GFA, such as Behaviourism (Skinner, 1968, as cited in Ebo, 2018), Vygotsky's (1978) sociocultural hypothesis, Self-Determination Theory (SDT) (Ryan & Deci, 2000), and Krashen's (1982, p. 131) "affective filter".

The effectiveness of gamification varies according to the user interface and experience when played in a different non-player environment (Hamari et al., 2014). GFA has emerged as a promising transformational pedagogical approach from game applications that increase student participation, motivation, and instant feedback during the process of learning (Zainuddin et al., 2020; Che Abdul Rani et al., 2023). By incorporating various features such as badges, leaderboards, instant feedback, and interactive challenges, this strategy reconsiders traditional evaluation models, encouraging active contribution and in-depth learning (Zainuddin et al., 2020). When incorporated into formative assessments, gamification can change regular testing into more interactive and encouraging experiences (Hussain et al., 2025).

2.2 Previous studies

Several studies (Zainuddin et al., 2020; Arce and Valdivia, 2020; Zhang and Huang, 2024) indicated the positive role of GFA, showing that the experimental group that utilised the gamified platform



performed better than the control group in improving overall language competency. Other studies (Bularafa et al., 2023; Syihabuddin, Abidin, and Khafifah, 2025) argued for the effectiveness of gamified assessment for listening comprehension. Some empirical studies (Hussein et al., 2022, Zebari and Alzeebaree, 2022) investigated gamification in the KRI educational context. In general, these studies show that gamified activities help increase student motivation and interest in language learning as well as reduce anxiety levels in education. However, there is a significant variation between the studies in research design. More importantly, few studies focused specifically on listening skills. Thus, this study seeks to fill the existing gaps by specifically focusing on the listening comprehension skill in secondary EFL classrooms in KRI.

3. Methodology

3.1 Research design

This study used a mixed-methods approach with a quasi-experimental design that compared the listening scores of the control and experimental (GFA) groups. In this study, a non-probability purposive sampling approach was employed to choose both participants and schools. Two intact classes were selected as natural settings to gather information in class. The qualitative sampling process proceeded until data saturation was achieved.

3.2 Research participants

Overall, this study involved 90 students at Balla Private English School in Erbil city in KRI. All of the participants were mostly Kurds, followed by Arabs. The quasi-experimental test included 30 students who were divided into two groups: an experimental group (GFA) and a control group (traditional assessment). The participants aged between 15 and 16 years were enrolled in Grades 10 and 11. Additionally, 17 EFL teachers from various private schools in Erbil city participated in semi-structured interviews to provide their professional perspectives about GFA tools, focusing on both instructional value and practical application.

3.3 Instrumentation

For the Quasi-experimental exam, listening-test samples from Cambridge IELTS 19 and 16 were used (Cambridge IELTS, n.d., a-b). Both tests were administered to all the participants under supervised conditions. Additionally, Kahoot, as a gamified assessment tool, was utilised as it allows audio-visual aids to create a better studying experience. Students and teachers were also interviewed to examine their views on the role of GFA in listening comprehension, engagement, and motivation. The interview questions were checked for validity and reliability.

4. Findings and Discussions

SPSS was used to analyse quantitative data. Both groups had equivalent English language proficiency levels, establishing a valid starting point for the post-intervention differences.



As shown in Table 1 and Table 1, the findings of the experimental group indicated a statistically notable increase from 14.00 to 16.07 ($p = .004$), highlighting a substantial impact of the GFA on improving listening scores, as supported by the paired-samples t-test result ($t(14) = -3.460$, $p = .004$).

Table 1. Descriptive Statistics of Pre- and Post-Listening Scores – Experimental Group

Test Time	N	Mean	SD
Pre-Listening	15	14.00	4.60
Post-Listening	15	16.07	5.87

Table 2. Paired Samples T-Test – Experimental Group

t	df	Sig.	Mean Diff.	95% CI Lower	95% CI Upper
-3.460	14	.004	-2.07	-3.35	-0.79

Table 3 shows a slight increase from 13.20 to 14.53; according to Table 4, at a $p = .146$, this difference was not statistically significant. This collective finding suggests that the traditional assessment did not lead to a notable improvement in listening scores.

Table 3. Descriptive Statistics of Pre- and Post-Listening Scores – Control Group

Test Time	N	Mean	SD
Pre-Listening	15	13.20	6.07
Post-Listening	15	14.53	7.75

Table 4. Paired Samples T-Test – Control Group

t	df	Sig.	Mean Diff.	95% CI Lower	95% CI Upper
-1.540	14	.146	-1.33	-3.19	0.52

Table 5 shows the results of the post-test listening comparison between the two groups, indicating that the experimental group achieved higher listening scores than the control group (16.07 vs. 14.53). Conversely, the comparison shown in Table 6 revealed no statistically significant differences ($p = .546$).

Table 5. Descriptive Statistics of Post-Listening Scores by Group

Group	N	Mean	SD
Experimental	15	16.07	5.87
Control	15	14.53	7.75

Table 6. Independent Samples T-Test for Post-Listening Scores

Levene's p	t	d f	Sig.	Mean Diff.	95% CI Lower	95% CI Upper
.281	0.611	28	.546	1.53	-3.61	6.68

The findings of the pre- and post-tests corroborate the results of recent studies (e.g. Zhang and Huang, 2024; Bularafa et al., 2023). However, these results are not congruent with Zainuddin et al.'s (2020) study, demonstrating no statistically significant differences between the two groups in their performance. This study provides empirical evidence on listening improvement by GFA. These findings support Self-Determination Theory, Krashen's affective filter hypothesis and Vygotsky's sociocultural theory, which stresses the role of social interaction in cognitive development.

Crucial dimensions were emerged from the students' views, including competence, autonomy, motivation, engagement, relatedness, as three basic psychological needs, and motivation, engagement, emotional response, curiosity, and game elements as instructional factors. Furthermore, their responses illustrate the transformative impact of GFA on their educational environment, concentration, and motivation, and independent learning. More than half of them thought that such activities noticeably improved their listening comprehension. The students' emphasis on feelings of autonomy, social connections, and competence aligns with Self-Determination Theory, and their perceived collaborative and interactive components of Kahoot platform resonate with Vygotsky's (1978) emphasis on learning as a social practice.

All EFL teachers emphasised the beneficial impact of GFA on students' motivation and their listening comprehension. However, around 7 out of 17 of them pinpointed some notable obstacles like technical issues and student speech rate differences. Teachers' insights included teacher attitude, core dimensions of student engagement, improvements in listening skills, assessment methods, equity concerns, and implementation challenges. Together, these viewpoints underscore the multifaceted classroom realities of integrating GFA into EFL teaching in classroom. These findings are supported by Zhang and Huang (2024), who acknowledged that implementing GFA promotes students' autonomy and improves their competence.



5. Conclusions

This study concludes that implementing GFA, like Kahoot, can enhance listening comprehension, motivation, and engagement among Kurdish EFL students. The findings from this study could provide valuable insights into how gamified-based activities can possibly turn language learning into a more dynamic and effective classroom experience. Future studies are needed in public schools and different regions to provide a deeper and longer-term impact of GFA on Kurdish EFL learners.

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