



Using Classcraft to Foster Iranian EFL Learners' Writing Development through Gamified Collaborative Writing

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Abstract

This study examined the effects of gamified-collaborative, gamified, and collaborative writing instruction on Iranian EFL learners' writing development using Classcraft. Ninety-six intermediate learners from four classes at a private language institute in Urmia were selected through convenience sampling and assigned to four groups: a Gamified-Collaborative Instruction Group (GCIG), a Gamified Instruction Group (GIG), a Collaborative Instruction Group (CIG), and a Control Group (CG). All participants completed a pretest to establish homogeneity in writing proficiency, assessed using an analytic writing rubric. The experimental groups received their treatments over 16 sessions, while the control group received traditional instruction. A writing posttest was administered at the end of the intervention. Quantitative data were analyzed through one-way ANOVA and paired-samples t-tests. The results indicated that all three instructional approaches significantly improved learners' writing performance. However, the gamified-collaborative approach demonstrated the greatest effectiveness, followed by gamified instruction and collaborative instruction. These findings highlight the pedagogical value of integrating game-based elements and collaborative learning to enhance EFL writing outcomes. The study has certain implications for syllabus designers since it underscores Classcraft's potential as a digital platform for fostering meaningful writing development among Iranian EFL learners.

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Introduction

A close examination of previous research (e.g., Zohrabi & Khalili, 2024a) shows that foreign language learners continue to struggle with various dimensions of writing development and its practical use in classroom settings. As noted, many EFL learners experience persistent difficulties in constructing key organizational components of academic writing, including thesis statements, topic sentences, and supporting details. In traditional, in-person writing classes, such problems often stem from writing anxiety, lack of motivation, limited peer support, and an overall unsupportive classroom climate (Marandi & Seyyedrezaie, 2017).

To address these challenges, scholars (e.g., Anunpattana, 2021; Khalili et al., 2022) have increasingly recommended integrating technological innovations into writing instruction in EFL contexts. Among these innovations, gamified writing instruction has gained notable attention. Gamification involves incorporating elements commonly found in digital games such as points, levels, rewards, and challenges into educational environments with the aim of enhancing learners' motivation and promoting sustained engagement in language-learning tasks (Rincon-Flores et al., 2022). Research in this area includes investigations into contextualized gaming and its contribution to writing proficiency (Fu et al., 2019), the combined impact of gamification and blended learning models (Lam et al., 2018), and the role of gamified tools in ESP writing courses (Lin et al., 2018). Recent studies have also examined learners' perceptions of gamified writing instruction (Guo et al., 2024; Khalili et al., 2025), reflecting the growing interest in this instructional approach.

Parallel to gamification, a substantial body of literature has emphasized the advantages of collaborative writing pedagogy. Scholars such as Storch (2011) have argued that collaborative writing can mitigate many of the problems EFL learners encounter in developing their writing skills. Through planning, drafting, revising, and editing texts together, learners engage in meaningful interaction, exchange ideas, negotiate language forms, and provide peer feedback on content and accuracy (Zhang, & Hyland, 2022; Zohrabi & Khalili, 2025). Collaborative writing has been shown to foster learners' sense of shared responsibility, deepen their engagement with writing tasks, and ultimately enhance the quality of their written output (Khonamri & Salimi, 2020). Studies in various contexts have explored collaborative writing from perspectives such as peer negotiation patterns (Chen & Yu, 2023), the impact of pair/group composition (Bailey & Almusharraf, 2021), and the quality of jointly produced texts (Khalili & Zohrabi, 2024; Li & Kim, 2020).

Despite the expanding literature on gamification and collaborative writing independently, their intersection remains empirically opaque. While gamification is often critiqued for encouraging individual competition, and collaborative writing relies on social interdependence, it remains unclear whether these two paradigms can be synthesized to support, rather than distract, EFL learners. Furthermore, empirical evidence is conspicuously absent within the Iranian EFL context, where persistent issues such as writing apprehension and a lack of authentic peer interaction (Tahmasebi & Soleimani, 2022; Zohrabi & Khalili, 2024b) are prevalent. While digital tools like Classcraft provide a structural framework for team-based learning (Anunpattana, 2021), the field currently lacks a mechanism to determine whether such platforms can successfully bridge the gap between individual motivation and collaborative

academic output. Consequently, researchers do not yet know if the gaming element acts as a catalyst for deeper collaborative discourse or if it adds an additional layer of cognitive load in an already challenging EFL writing environment.

Given these gaps, the present study aimed to investigate the impact of gamified collaborative writing, operationalized through Classcraft, on the writing development of Iranian EFL learners. Classcraft was specifically selected for this investigation because, unlike generic gamification tools, it offers a sophisticated, role-based framework that necessitates interdependence and collective accountability (i.e., core tenets of effective collaborative writing). By immersing learners in a narrative-driven environment where team success depends on individual linguistic contributions, this study intended to determine if such a high-stakes, team-based pedagogy can mitigate writing apprehension and scaffold organizational and linguistic growth. Ultimately, this study aspired to provide a nuanced understanding of how Classcraft's unique synergy of play and pedagogy can address the motivational and cognitive hurdles prevalent in the Iranian EFL context.

The findings of this research may offer meaningful pedagogical insights for Iranian EFL instructors, curriculum designers, and educational policymakers by highlighting the potential benefits of integrating gamified collaborative platforms into writing instruction. Ultimately, this study aimed to contribute to the growing literature on technology-enhanced language learning and to propose a feasible, engaging model for tackling long-standing challenges in EFL writing classrooms. To this end, it attempted to answer the following questions:

1. Does Classcraft-informed gamified-collaborative writing instruction have a significant impact on Iranian EFL learners' writing performance?
2. Does Classcraft-informed gamified writing instruction have a significant impact on Iranian EFL learners' writing performance?
3. Does collaborative writing instruction have a significant impact on Iranian EFL learners' writing performance?
4. Are there significant differences between the effects of gamified-collaborative, gamified, and collaborative writing instructions on EFL learners' writing ability?

Literature Review

Theoretical Frameworks Underpinning Gamified Collaborative Writing

Self-Determination Theory (SDT)

Self-Determination Theory (Deci & Ryan, 2000) offers an essential lens for understanding how gamification can influence learning motivation. SDT proposes that satisfying learners' needs for autonomy, competence, and relatedness fosters intrinsic motivation and sustainable engagement. Gamified platforms typically include mechanics such as points, levels, badges, and instant feedback, which can strengthen learners' perceptions of competence and progress (Sailer & Homner, 2020). Team-based gamified systems, such as Classcraft, further reinforce relatedness by positioning learners as interdependent collaborators who collectively strive toward shared goals. Within writing instruction, enhanced motivation is critical because low

persistence, fear of evaluation, and writing anxiety are common barriers in EFL contexts, including Iran (Marandi & Seyyedrezaie, 2017).

Sociocultural Theory (SCT)

Sociocultural Theory (Vygotsky, 1978) emphasizes that learning is socially mediated and occurs through interaction within the Zone of Proximal Development (ZPD). Collaborative writing aligns strongly with SCT because learners negotiate meaning, co-construct texts, and provide scaffolding through peer feedback and shared decision-making (Storch, 2011). Digital collaborative environments extend these interactions by enabling synchronous and asynchronous communication, shared text editing, and dynamic peer support (Mohammadnia & Khalili, 2014 a, b, c; Kessler, 2009). Gamified collaborative platforms enhance SCT-aligned learning by creating structured group roles, responsibilities, and incentives that encourage sustained participation and mutual scaffolding in writing tasks.

Interaction Hypothesis

Long's (1996) Interaction Hypothesis posits that language development is promoted through interaction and negotiation of meaning. Collaborative writing tasks provide rich opportunities for such negotiation, as learners discuss word choice, grammar, organization, and content while co-creating texts (Chen & Yu, 2023). Gamified settings can amplify interaction by motivating learners to contribute actively to group tasks, thus increasing the quality and quantity of negotiation moves that support writing development (Guo & Chu, 2024; Khalili et al., 2024).

Together, these theories justify the theoretical foundation for studying gamified collaborative writing, as they explain how motivation, social interaction, and scaffolding may interact to enhance EFL learners' writing development.

Empirical Background

Gamified Instruction in Second Language (L2) Writing

Gamification has gained considerable attention in language education due to its potential to boost motivation, engagement, and learning outcomes (Rivera-Trigueros & Sánchez-Pérez 2020; Zohrabi & Khalili, 2023). However, research specifically examining gamification in L2 writing remains relatively limited.

Studies of general gamified L2 instruction reveal positive outcomes. Jeon (2022) reported that gamification significantly improves learners' task engagement and reduces affective barriers, including anxiety and low motivation. In writing-focused interventions, Fu et al. (2019) found that contextualized digital games improved learners' lexical richness and syntactic complexity in writing tasks. Similarly, Lam et al. (2018) showed that integrating gamified elements into a blended writing course increased learners' task persistence and improved writing fluency.

In specialized contexts, Lin et al. (2018) demonstrated that gamified English for Specific Purposes (ESP) writing instruction led to significant gains in writing accuracy and discipline-specific vocabulary. Learner-perception research has also confirmed positive attitudes. For instance, Guo et al. (2024) found that EFL learners valued the motivational and interactive qualities of gamified writing activities.

However, the majority of gamification studies focus on individual writing performance or learner engagement rather than collaboration. Few studies examine platforms specifically designed for team-based gamified learning, such as Classcraft. Moreover, evidence from the Middle East or Iranian EFL contexts remains sparse, despite well-documented challenges related to writing motivation and anxiety in Iranian learners (Zohrabi & Khalili, 2024a).

Collaborative Writing Research in L2 Contexts

Collaborative writing has been recognized as an effective approach for improving L2 writing quality due to its emphasis on co-construction, negotiation, and shared responsibility (Zhang & Hyland, 2022). Storch (2011) emphasized that collaboratively written texts tend to be more accurate and better organized than individually written texts. Research also shows that collaboration promotes deeper engagement with linguistic choices and planning strategies (Lee, 2004).

Recent empirical studies continue to affirm the value of collaborative writing. Chen and Yu (2023) found that L2 learners engaged in rich negotiation patterns that contributed to improved lexical and grammatical choices. Bailey and Almusharraf (2021) demonstrated that synchronous online collaborative writing environments promote interactional competence and support iterative drafting and revision.

Studies in the Iranian EFL context also highlight promising outcomes. Khonamri and Salimi (2020) reported that collaborative writing significantly improved Iranian learners' writing accuracy and fluency. Tahmasebi and Soleimani (2022) found that collaborative writing through Google Docs enhanced learners' engagement and writing performance.

Nonetheless, while collaborative writing is well-researched, most studies do not incorporate gamified elements. The motivational dimension (which is critical for Iranian learners who often exhibit low writing engagement) remains underexplored.

Gamified Collaborative Writing: A Limited and Emerging Field

The intersection of gamification and collaborative writing represents a relatively new research area. Some studies have begun to explore this combination. For example, Anunpattana (2021) reported that gamified collaborative writing activities enhanced peer interaction and improved learners' overall engagement in writing tasks. Rincon-Flores et al. (2022) found that team-based gamification significantly increased writing task persistence and collaborative behaviors.

Despite these promising findings, the literature remains limited in several ways. That is, few studies have examined writing outcomes beyond motivation or engagement. Moreover, most of gamified collaborative writing studies have used general tools, not platforms specifically designed for gamified teamwork (e.g., Classcraft). In addition, writing components such as organization, coherence, accuracy, and complexity have rarely been assessed simultaneously. Lastly, the published studies have not investigated gamified collaborative writing in the Iranian EFL context, despite its pedagogical need.

The Existing Research Gap

A synthesis of the literature reveals a number of major gaps. First, gamification and collaborative writing have been studied separately rather than in an integrated model. Second, there is a lack of empirical research exploring Classcraft as a platform for facilitating collaborative writing tasks. Third, existing studies have rarely examined how gamified collaboration influences writing development across multiple dimensions. Finally, there is insufficient research from the Iranian EFL context, where writing challenges, low motivation, and anxiety remain persistent issues. These gaps substantiate the need for empirical investigations into how gamified collaborative writing through Classcraft can support Iranian EFL learners' writing development.

Method

Design of the Study

In line with the objectives, the researchers adopted a quasi-experimental design, which is particularly suitable for naturally occurring educational settings where random assignment is not feasible (Creswell & Creswell, 2017). This design enabled the researchers to investigate the comparative effects of three distinct instructional approaches on EFL learners' writing development while maintaining the integrity of intact classroom groups. To generate quantitative data, the researchers employed a sequence of structured procedures consisting of an initial writing pretest, a series of instructional treatment sessions, and a concluding writing posttest. These procedures allowed for systematic measurement of changes in learners' writing performance over the course of the intervention.

The study included three treatment conditions: gamified-collaborative writing, gamified writing, and collaborative writing. In the gamified-collaborative condition, Classcraft was used to structure team-based writing tasks that incorporated gamification elements such as points, levels, rewards, and collective challenges. The gamified-only condition provided the same motivational elements but required learners to complete writing tasks individually, without peer interaction. In contrast, the collaborative-only condition involved traditional group-based writing activities without any gamified features. Following the treatment sessions, all participants completed a writing posttest that paralleled the pretest in requirements and scoring procedures. A comparison of pretest and posttest results across the three groups enabled the researchers to evaluate the relative effectiveness of gamified- collaborative writing, gamified writing, and non-gamified collaborative instruction on developing Iranian EFL learners' writing performance.

Participants

The participants of the study were drawn from the population of EFL learners attending private language institutes. Due to institutional constraints and the impracticality of randomly selecting learners within these settings, the researchers employed a convenience sampling procedure. Four intact intermediate-level classes from a well-established language institute in Urmia (Iran) were selected to take part in the study. The total sample consisted of 96 female high school learners (i.e., 24 learners in each class), all of whom were enrolled in regular EFL programs at the institute. Table 1 provides information about these participants:

Table 1. *Participants' Demographic Information*

Demographics	Number
Age Group	
12-13	39
14-15	57
First Language	
Azeri	66
Kurdish	22
Persian	8

To ensure a comparable level of language proficiency across the participants, the researchers administered Allan's (2004) Quick Oxford Placement Test prior to the intervention. Only learners whose scores fell within the designated intermediate band were included in the study. In addition, written informed consent was obtained from the participants' parents to comply with ethical guidelines and to secure permission for the learners' involvement in the study.

Materials and Instruments

The researchers used the following instruments to gather the data:

Classcraft

To meet the objectives of the study, the researchers employed the Classcraft gamified learning platform to deliver both the gamified-collaborative and gamified writing instructional treatments. Classcraft is widely recognized for its resemblance to the structure and mechanics of the multiplayer online role-playing game *World of Warcraft* (Rivera-Trigueros & Sánchez-Pérez, 2020). Similar to such games, the platform uses experience points (XPs) to reward learners for completing quests and accomplishing learning tasks (Sipone et al., 2021). As learners accumulate XPs, they level up, which in turn promotes sustained engagement and encourages continued participation in academic activities (Sipone et al., 2021). Functioning as an educational role-playing environment, Classcraft incentivizes positive academic behaviors (including timely submission of assignments and supporting teammates) by granting players special powers or privileges (Sanchez et al., 2017). The pursuit of unlocking these powers fosters both individual and group progress and is likely to enhance learners' motivation and active involvement in the learning process (Sipone et al., 2021). Additionally, the platform allows students to design personalized avatars belonging to three-character classes: warriors, mages, or healers, adding a layer of identity-building and immersion to the learning experience.

Classcraft was selected over comparable gamified platforms such as 3DGameLab and Gradecraft due to several advantageous features, particularly its flexibility in quest creation. This feature enabled the researchers to design five customized quests (i.e., targeting content, organization, vocabulary, language use, and writing mechanics) which aligned directly with the writing subskills emphasized in the three instructional approaches of the study. The platform also offers seamless integration with various educational tools, allowing the researchers to incorporate Google Docs into the treatment procedures to facilitate drafting,

revision, and collaborative text construction. Moreover, Classcraft is well-suited for collaborative writing pedagogy (Rivera-Trigueros & Sánchez-Pérez, 2020), as it supports the formation of small teams and encourages peer cooperation. In the present study, this feature was utilized to organize learners into three-member groups in two of the experimental conditions, thereby promoting structured interaction and collaborative engagement in the gamified environment.

Quick Oxford Placement Test

To establish the participants' homogeneity prior to the intervention, the researchers administered the Quick Oxford Placement Test (QOPT) developed by Allan (2004) to the participants. The test comprises three sections including grammar (20 items), vocabulary (20 items), and a cloze test (20 items) designed to assess learners' overall language proficiency. Table 2 shows the rubric of this test:

Table 2. *Interpretation of Scores in QOPT*

Score	0-17	18-29	30-39	40-47	48-54	55-60
CEFR	A1	A2	B1	B2	C1	C2
Level	Beginning	High Beginning	Low Intermediate	Intermediate	High Intermediate	Advanced

To ensure that the instrument demonstrated acceptable reliability within the Iranian EFL context, the researchers conducted a pilot study with a group of 20 intermediate-level female learners. Using Cronbach's alpha (α) as the reliability estimate, the test yielded a coefficient of $\alpha = .86$, indicating satisfactory internal consistency. Based on this index, QOPT was deemed suitable for use in the main study.

Writing Pretest and Posttest

The researchers designed two writing assessments (i.e., a pretest and a posttest) based on the writing topics presented in the participants' textbook *American English File 3* (Latham-Koenig et al., 2019). Both assessments required students to produce 500-word argumentative essays. They aligned with the learning objectives of the English course and reflected the types of writing tasks students regularly completed. The pretest asked learners to argue for or against banning homework in schools, whereas the posttest required them to discuss whether technology is causing people to become less social.

Writing Assessment Scale

Participants' performances on the pretest and posttest were evaluated using the analytic scoring rubric developed by Jacobs et al. (1981). This framework, widely recognized in writing assessment (Weigle, 2002), assesses five components of writing: content (13–30 points), organization (7–20 points), vocabulary (7–20 points), language use (5–25 points), and mechanics (2–5 points). Each component allows raters to classify writing quality into four categories: excellent to very good, good to average, fair to poor, and very poor. The choice of this analytic scale was aligned with the course's assessment procedures. That is, the course instructor had previously introduced these criteria to students and had encouraged them to consider these elements when composing their essays.

To establish inter-rater reliability, the researchers calculated Pearson's correlation coefficient. The resulting coefficients demonstrated acceptable reliability for both the pretest ($r = .85$) and posttest ($r = .89$), consistent with benchmarks outlined by McHugh (2012).

While more contemporary automated or holistic scoring tools exist, the continued use of the Jacobs et al. (1981) analytic scale is justified by its robust construct validity and its specific suitability for pedagogical research. Unlike automated tools that may prioritize surface-level linguistic features, this scale provides a granular, multi-dimensional assessment of writing that accounts for higher-order cognitive skills such as content development and organizational logic. Furthermore, its enduring presence in the literature allows for a high degree of comparability with decades of prior research in L2 writing proficiency. Most importantly, the scale's transparency provided a direct washback effect in this study. That is, because the scoring criteria mirrored the instructional framework used in the classroom, the instrument served as an ecologically valid measure of the specific competencies the participants were encouraged to develop, ensuring that the assessment was an authentic reflection of the learning process rather than a detached metric.

Procedure

The study involved 96 intermediate-level female EFL learners enrolled in four intact classes at a private language institute. Participants were selected through convenience sampling. In line with the study objectives, the four classes were assigned to four groups: the Gamified–Collaborative Instruction Group (GCIG), the Gamified Instruction Group (GIG), the Collaborative Instruction Group (CIG), and the Control Group (CG). Prior to the intervention, all participants completed a writing pretest to ensure group homogeneity in terms of writing proficiency. Their performance was evaluated using Jacobs et al.'s (1981) analytic writing rubric.

Following the pretest, the experimental treatments were implemented over 16 sessions across eight weeks (two sessions per week). In the GCIG, instruction was delivered through the Classcraft platform. The researchers created virtual classrooms and designed five customized quests aligned with the five components of Jacobs et al.'s (1981) framework: content, organization, vocabulary, language use, and writing mechanics. Each quest comprised stages corresponding to the subcomponents of these criteria. For example, the writing mechanics quest required learners to focus on capitalization, spelling, punctuation, and paragraphing. Students were expected to compose coherent paragraphs that satisfied these requirements and upload their completed tasks to Classcraft.

At the outset of the treatment, learners in the GCIG were introduced to Classcraft and its features. They created individual accounts, joined the virtual classroom using invitation codes, and customized their avatars by selecting roles such as warrior, mage, or healer. Participants were then randomly assigned to three-member groups and instructed to complete their quests collaboratively using shared Google Docs links provided within the platform. The collaborative writing process followed the stages outlined by Storch (2011). Group members used the comment function to brainstorm ideas and negotiate content, collaboratively developed paragraph outlines, and contributed to drafting topic sentences, supporting details, and concluding sentences. To ensure transparency of contributions, each member used a distinct

color while composing. Learners alternated in writing sentences, reviewed the completed paragraphs collectively, suggested revisions to improve clarity and coherence, and conducted a final group review to confirm that task requirements were met. Completed assignments were submitted via the discussion section of Classcraft. The researchers provided feedback based on the established assessment criteria, assigned grades, and converted these grades into experience points (XPs) using Classcraft's Treasures of Tavuros feature, enabling students to progress to higher levels within the platform.

In the GIG, learners were similarly introduced to Classcraft, created accounts, joined virtual classes, and customized avatars. However, they completed the quests individually rather than collaboratively. They submitted their assignments through Classcraft and received feedback and grades converted into XPs, mirroring the reward structure used in the GCIG.

In the CIG, learners did not use the Classcraft platform. Instead, they were randomly assigned to three-member groups and participated in virtual classes via Adobe Connect that was the institute's learning management system. Each group received a Google Docs link and completed writing tasks collaboratively, following the same stages of collaborative writing (brainstorming, outlining, drafting, revising, and final review). Assignments were submitted through Adobe Connect, and feedback was provided accordingly.

In the CG, instruction followed a traditional product-oriented approach (Kellogg, 2008). Learners received writing prompts and instructional guidance through Adobe Connect and composed their paragraphs individually within specified time limits using Google Docs. Completed assignments were submitted through the learning management system, and teacher feedback was provided without gamified or structured collaborative elements.

At the conclusion of the eight-week intervention, all of the groups completed the writing posttest to evaluate the effectiveness of the gamified-collaborative, gamified, and collaborative instructional approaches in Iranian EFL context. As with the pretest, posttest essays were assessed using Jacobs et al.'s (1981) analytic rubric.

Data Analysis

To analyze the quantitative data, the researchers employed one-way analysis of variance (ANOVA) and paired-samples t-tests. These statistical procedures were selected based on the research objectives. Specifically, one-way ANOVA is appropriate for examining the effects of three or more categorical independent variables on a continuous dependent variable (George & Mallery, 2024; Pallant, 2020). In the present study, the independent variables were the three instructional approaches (i.e., gamified-collaborative, gamified, and collaborative instruction) while the dependent variable was learners' writing performance, measured on an interval scale.

Additionally, paired-samples t-tests were conducted to compare each group's performance across two time points (pretest and posttest) and to determine whether significant within-group improvements occurred over the course of the intervention (Pallant, 2020).

Results

The researchers first evaluated the characteristics of the pretest and posttest data to select the appropriate statistical procedures. Preliminary analyses indicated that the scores were interval-

scale measurements collected independently and that the distributions met the assumption of normality ($p > .05$). Consequently, parametric statistical tests (specifically one-way ANOVA and paired-samples t-tests) were employed for the data analysis. The results of these analyses are presented in the following section.

Examining the Effects of Gamified-Collaborative, Gamified, and Collaborative Approaches on Learners' Writing Performance

To verify that the groups were comparable in their writing proficiency before the intervention, the researchers first conducted a one-way ANOVA. The descriptive statistics for this analysis are presented in Table 3:

Table 3. *Descriptive Statistics on Writing Pretest Results*

	N	M	SD	SE
GCIG	24	49.29	5.377	1.098
GIG	24	48.63	5.867	1.198
CIG	24	51.21	3.989	.814
CG	24	50.58	4.138	.845
Total	96	49.93	4.938	.504

As indicated in Table 3, the groups differed in their mean pretest scores. Levene's test also confirmed that the assumption of homogeneity of variances was met ($p = .103$). Accordingly, the ANOVA results were examined, which are presented in Table 4:

Table 4. *ANOVA Test of Writing Pretest Results*

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	100.115	3	33.372	1.385	.252
Within Groups	2216.375	92	24.091		
Total	2316.490	95			

As shown in Table 4, the one-way ANOVA revealed no statistically significant differences among the groups' pretest scores [$F(3, 92) = 1.385$, $p = .252$]. These results are illustrated in Figure 1:

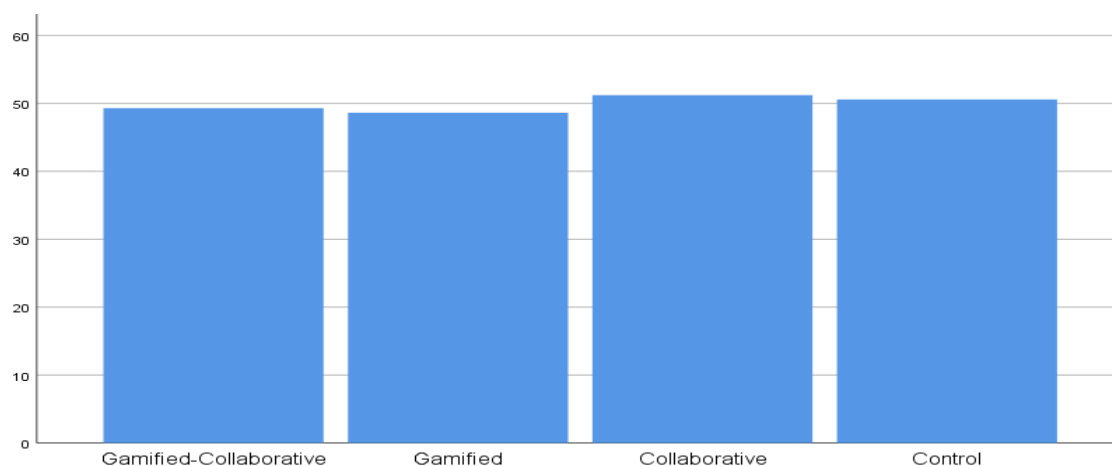


Figure 1. *Writing Pretest Results of Groups*

Consequently, the researchers proceeded with the main phase of data analysis to address the research questions. The first, second, and third research questions examined the effects of the gamified-collaborative, gamified, and collaborative instructional approaches, respectively, on EFL learners' writing performance. To determine the extent of improvement in each experimental group's writing ability following the intervention, three paired-samples t-tests were conducted. The relevant descriptive statistics are presented in Table 5:

Table 5. *Descriptive Statistics on the Writing Pretest and Posttest Results*

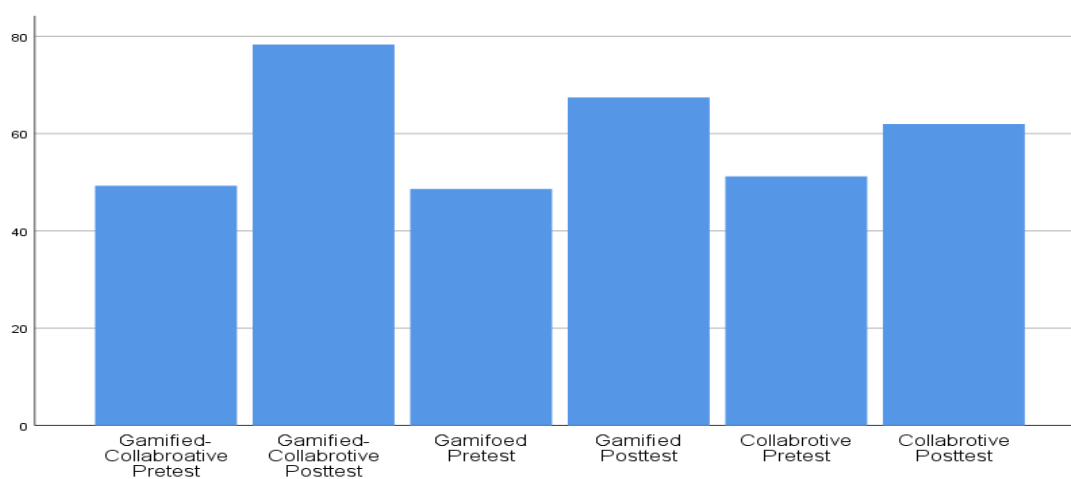
		M	N	SD	SEM
Pair 1	CCIG Pretest	49.29	24	5.377	1.098
	GCIG Posttest	78.29	24	3.605	.736
Pair 2	GIG Pretest	48.63	24	5.867	1.198
	CIG Posttest	67.42	24	3.020	.617
Pair 3	CIG Pretest	51.21	24	3.989	.814
	CGI Posttest	61.96	24	4.144	.846

As indicated in Table 5, all groups demonstrated gains in writing performance. Accordingly, the researchers proceeded to analyze the results of the corresponding paired-samples t-tests. The findings of these analyses are presented in Table 6:

Table 6. Paired *t*-tests of Writing Pretest and Posttest Results

		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2- tailed)
					Lower	Upper			
Pair 1	GCIG Pretest- Posttest	- 29.000	6.692	1.366	-31.826	-26.174	-21.230	23	.000
Pair 2	GIG Pretest- Posttest	- 18.792	5.501	1.123	-21.114	-16.469	-16.736	23	.000
Pair 3	CIG Pretest- Posttest	- 10.750	4.901	1.000	-12.820	-8.680	-10.745	23	.000

As presented in Table 6, statistically significant differences were found between the pretest and posttest scores of the GCIG [$t(23) = -21.230$, $p = .000$], GIG [$t(23) = -16.736$], and CIG [$t(23) = -10.745$]. These findings indicated that all three instructional approaches led to significant improvements in learners' writing performance. The results are illustrated in Figure 2:

**Figure 2.** Writing Pretest and Posttest Results of Groups

Scrutinizing the Differences between the Impacts of Gamified-Collaborative, Gamified, and Collaborative Approaches on Learners' Writing Performance

The fourth research question sought to determine whether the instructional approaches differed significantly in their effects on learners' writing performance. To address this question, a one-way ANOVA was conducted using the groups' posttest scores. The relevant descriptive statistics are presented in Table 7:

Table 7. *Descriptive Statistics on Writing Posttest Results*

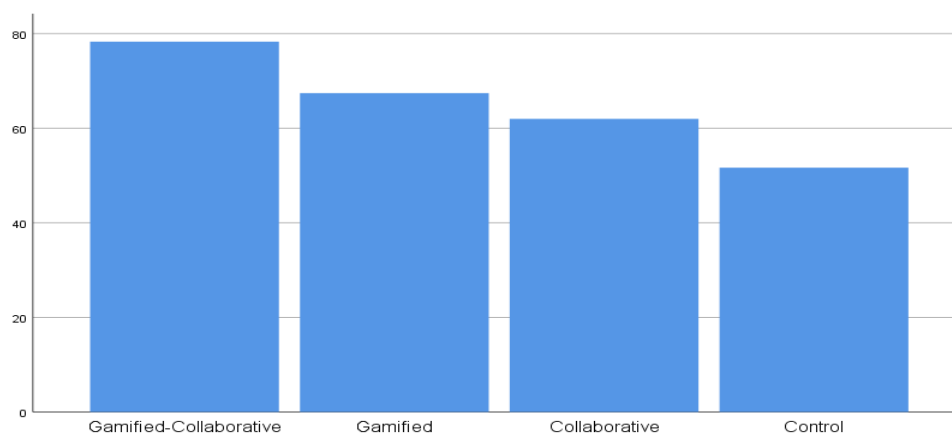
Groups	N	M	SD	SE
GCIIG	24	78.29	3.605	.736
GIG	24	67.42	3.020	.617
CIG	24	61.96	4.144	.846
CG	24	51.67	2.239	.457
Total	96	64.83	10.201	1.041

As shown in Table 7, the groups differed in their mean posttest scores. In addition, Levene's test confirmed that the assumption of homogeneity of variances was satisfied ($p = .366$). Therefore, the results of the ANOVA were examined. The relevant findings are presented in Table 8:

Table 8. *ANOVA Test of Writing Posttest Results*

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8866.250	3	2955.417	266.807	.000
Within Groups	1019.083	92	11.077		
Total	9885.333	95			

As indicated in Table 8, the one-way ANOVA revealed significant differences among the groups' posttest scores [$F(3, 92) = 266.807, p = .000$]. These results are illustrated in Figure 3:

**Figure 3.** *Writing Posttest Results of Groups*

Accordingly, the researchers examined the results of the Tukey post hoc test to identify the specific group pairs in which the significant mean differences occurred. The relevant findings are presented in Table 9:

Table 9. *Tukey Test of Writing Posttest Results*

(I) Groups	(J) Groups	Mean Difference (I-J)	Std. Error	Sig.
GCIG	GIG	10.875*	.961	.000
	CIG	16.333*	.961	.000
	CG	26.625*	.961	.000
GIG	GCIG	-10.875*	.961	.000
	CIG	5.458*	.961	.000
	CG	15.750*	.961	.000
CIG	GCIG	-16.333*	.961	.000
	GIG	-5.458*	.961	.000
	CG	10.292*	.961	.000
CG	GCIG	-26.625*	.961	.000
	GIG	-15.750*	.961	.000
	CIG	-10.292*	.961	.000

As presented in Table 9, significant differences were observed among the performances of all groups ($p < .05$). More specifically, GCIG achieved the highest posttest scores, followed by GIG, CIG, and finally CG.

Discussion

The present study investigated the effects of gamified-collaborative, gamified, and collaborative writing instruction (implemented through Classcraft) on Iranian EFL learners' writing development. The results demonstrated that all three instructional approaches significantly enhanced participants' writing performance, with the gamified-collaborative instruction showing the greatest efficacy, followed by the gamified instruction, and collaborative instruction. This section discusses these findings in relation to each research question in light of the existing literature and theoretical explanations.

Research question one examined the impacts of Classcraft-informed gamified-collaborative writing instruction on Iranian EFL learners' writing performance. The results indicated that GCIG experienced the most substantial gains in writing performance. This finding aligns with a number of studies (e.g. Anunpattana, 2021) suggesting that the combination of gamification and collaborative learning can create a highly stimulating and socially supportive environment conducive to language development (Lin et al., 2018). In particular, collaboration encourages idea sharing, negotiation of meaning, and collective problem-solving, which deepen learners' linguistic awareness and writing competence (Storch, 2011). When paired with gamification elements (such as points, levels, quests, and personalized avatars) collaboration becomes more engaging and goal-driven, increasing learners' motivation and sustained participation (Sipone et al., 2021).

The observed effectiveness of the gamified-collaborative approach can also be interpreted through self-determination theory (Deci & Ryan, 2000). Classcraft's collaborative quests supported learners' psychological needs for autonomy, competence, and relatedness.

Autonomy was fostered through avatar customization and decision-making within groups. That is, competence was reinforced through continuous feedback, leveling-up mechanisms, and clear task progression. Moreover, relatedness was strengthened through group interdependence within the platform. When these needs were met, learners were more likely to display intrinsic motivation and deeper cognitive engagement, which could translate into improved writing performance.

Unexpectedly, the magnitude of improvement in GCIG surpassed what might be predicted from gamification or collaboration alone. This synergistic effect is also documented in Rincon Flores et al. (2022), who found that gamified collaborative tasks amplified learners' investment in writing and reduced writing anxiety. The results of this study therefore lend further empirical support to the idea that integrating collaboration with game-based learning produces outcomes greater than the sum of their parts.

Research question two investigated the effect of Classcraft-informed gamified writing instruction on Iranian EFL learners' writing performance. The findings revealed that GIG also experienced significant gains, though to a lesser degree than GCIG. This result accords with numerous studies (e.g., Rivera-Trigueros & Sánchez-Pérez 2020) reporting that gamification can promote learners' engagement, motivation, and task persistence, all of which contribute to better writing outcomes (Sailer & Homner, 2020). In particular, Classcraft's progression-based design (quests, experience points, and rewards) likely encouraged learners to approach writing tasks as manageable steps rather than intimidating, large-scale assignments. This task segmentation corresponds with cognitive load principles (Sanchez et al., 2017), helping learners allocate attention to content generation, organization, and language use more effectively.

However, GIG did not outperform the GCIG, highlighting the limitations of using gamification in isolation. Gamification primarily enhances extrinsic motivation (through points, rewards, and levels), and while such motivation is beneficial, it may not sustain deep cognitive processing to the same extent as collaborative interaction (Lam et al., 2018). This may help explain why GIG learners improved less than GCIG learners, despite receiving similar gamified incentives.

Another plausible explanation concerns the social dimension of learning. Without collaborative support, GIG learners worked individually on cognitively demanding tasks that required idea generation, organization, and linguistic refinement that constitute the processes that benefit from the shared cognitive responsibility offered in collaborative settings (Dobakhti & Khalili, 2024; Rincon-Flores et al., 2022). Therefore, although gamification enhanced engagement, the absence of collaborative scaffolding may have constrained learners' ability to reach the same level of improvement as GCIG.

Research question three focused on the impact of collaborative writing instruction on Iranian EFL learners' writing ability. Based on the results, CIG demonstrated significant improvement in writing performance, consistent with previous research (e.g., Khonamri & Salimi, 2020) showing that collaborative writing enhances language awareness, lexical variety, and syntactic complexity (Storch, 2011). Collaborative writing provides opportunities for peer feedback, negotiation of meaning, and shared planning, all of which encourage learners to reflect on their

linguistic choices. In the present study, the structured use of Google Docs facilitated real-time collaboration, allowing learners to comment, revise, and jointly edit their texts that constituted a process shown to improve writing accuracy and content development (Bailey & Almusharraf, 2021).

Nevertheless, CIG learners showed less improvement than those in the gamified conditions. This result contrasts with certain studies (e.g. Lee, 2004) emphasizing that collaboration alone can be as effective as, or even superior to, gamification under some circumstances (e.g., Storch, 2013). A plausible explanation lies in the motivational dimension of the instructional environment. While collaboration fosters cognitive engagement, it does not automatically guarantee sustained motivation, especially in contexts where learners face writing anxiety or low self-confidence (Tahmasebi & Soleimani, 2022). In contrast, the gamified conditions may have introduced a layer of enjoyment and goal-oriented structure that reinforced learner engagement throughout the writing process. Consequently, the comparative weakness of CIG results suggests that collaborative learning is beneficial but may be further enhanced when combined with gamified motivational support.

Lastly, research question four scrutinized the significant differences between the effects of the gamified-collaborative, gamified, and collaborative writing instructions on Iranian EFL learners' writing performance. The posttest comparisons demonstrated clear, statistically significant differences among all groups, with the performance ranking as GCIG > GIG > CIG > CG. This gradient highlights the cumulative value of combining motivational and cognitive supports within instructional design. The superior performance of GCIG strongly supports the argument that gamified collaborative learning provides a dual pathway to improvement. That is, motivation is stimulated through gamification and cognitive scaffolding is ameliorated through collaboration (Fu et al., 2019).

The results resonate with recent studies (e.g., Rincon Flores et al., 2022) showing that integrating gamification and collaboration leads to heightened engagement and improved learning outcomes in writing contexts (Sipone et al., 2021). Moreover, GCIG's performance can be interpreted through Vygotsky's (1978) sociocultural theory, which proposes that learning is optimized when cognitive tools (such as rubrics and quests) interact with socially mediated learning processes. Classcraft appears to have provided both the cognitive structure (quests aligned with Jacobs et al.'s writing criteria) and the social interaction (collaborative groups) required for effective scaffolding.

The incremental decrease in performance from GIG to CIG further reinforces the idea that motivation and collaboration independently support writing, but their integrated use produces the strongest effect (Sanchez et al., 2017). CG's significantly lower performance underscores the limitations of traditional product-oriented instruction, which offers limited opportunities for process-oriented engagement, peer interaction, and motivational support.

Conclusion

The present study set out to examine the comparative impact of three instructional approaches (i.e., gamified-collaborative instruction, gamified instruction, and collaborative instruction) on Iranian EFL learners' writing development, using Classcraft as the primary gamification

platform. The overarching goal was to determine whether integrating game-based principles with collaborative learning could provide a more engaging and effective environment for improving learners' writing performance. Consistent with this objective, the findings revealed that all three instructional modes significantly enhanced learners' writing outcomes. However, the combined gamified–collaborative approach produced the highest level of improvement, followed by gamified instruction, and finally collaborative instruction. These results underscore the pedagogical promise of merging gamification and collaboration to foster writing development in EFL contexts.

From a theoretical standpoint, the study contributes to the growing body of research supporting socio-constructivist and motivational perspectives on learning. The superior performance of the gamified–collaborative group suggests that writing development benefits most when both social interaction and motivational game elements are embedded into the instructional process. Collaborative writing allows learners to co-construct meaning, exchange ideas, and engage in dialogic negotiation, while gamification adds layers of extrinsic and intrinsic motivation, such as immediate feedback, reward structures, and a sense of challenge and achievement. The synergy between these two dimensions appears to heighten engagement, sustain effort, and enhance the quality of textual production. This aligns with certain theories including Long's (1996) interaction hypothesis emphasizing the central role of meaningful interaction and sustained motivation in language learning, particularly in writing, which demands cognitive investment and iterative refinement.

Practically, the findings carry important implications for EFL teachers and curriculum designers. First, the demonstrated efficacy of gamified–collaborative writing instruction suggests that digital gamification platforms such as Classcraft can be strategically integrated into writing classrooms to create dynamic, student-centered learning environments. Teachers can employ game mechanics (e.g., points, levels, quests, and team challenges) to encourage participation, scaffold writing tasks, and maintain learners' motivation throughout the writing process. Second, combining these mechanics with structured collaborative writing tasks can promote teamwork, peer support, and shared responsibility for learning. In contexts like Iran, where traditional teacher-centered instruction may limit student engagement, gamified collaboration can facilitate a shift toward more interactive and participatory pedagogies. Finally, given the manageable technological requirements of platforms like Classcraft, such approaches are feasible in most of the EFL settings.

Despite its contributions, this study is subject to several limitations that warrant consideration. First, the participant pool was entirely female, which, while providing internal consistency for this specific group, may limit the transferability of the results to male or mixed-gender EFL groups. Second, the sociolinguistic profile of the participants was heavily skewed, with a predominant representation of Azeri speakers compared to Kurdish and Persian speakers. While the language of instruction and the writing tasks were conducted in English, the participants' diverse first-language (L1) backgrounds and their varying degrees of multilingualism may have influenced their collaborative dynamics and linguistic transfer during the writing process. Furthermore, the duration of the intervention was relatively short. Therefore, longitudinal studies are necessary to reveal more nuanced patterns of change and to

assess the long-term sustainability of the observed improvements. The exclusive use of Classcraft also narrowed the scope of interpretation, as different gamification platforms with varying mechanics might yield distinct motivational or pedagogical outcomes. Finally, this study relied primarily on quantitative measures to assess writing performance. Future research could benefit from a mixed-methods approach, incorporating qualitative analyses to provide richer insights into learners' lived experiences, perceptions, and the intricate social dynamics that occur within gamified, team-based environments.

Future studies should explore variations of gamified–collaborative writing instruction across different proficiency levels, age groups, and cultural contexts to determine the broader applicability of the approach. Researchers may also investigate which specific game mechanics exert the strongest influence on writing development, or how varying forms of collaboration (e.g., pair writing versus group writing) interact with gamification. Examining learners' motivational trajectories, identity development, and emotional engagement within gamified collaborative environments would further deepen understanding of why and how such approaches work.

It can be concluded that, the study provides compelling evidence that integrating gamification with collaborative writing instruction can significantly enhance EFL learners' writing performance. By leveraging both motivational and socio-interactive dimensions of learning, gamified–collaborative instruction offers a powerful pedagogical option for improving writing outcomes and enriching the overall language learning experience.

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References

- Allan D. (2004). *Oxford placement test*. Oxford University Press.
- Anunpattana, J. (2021). Gamified collaborative writing tasks in EFL classrooms: Effects on interaction and engagement. *International Journal of Instruction*, 14(3), 327–346.
- Bailey, D. R., & Almusharraf, N. (2021). Online collaborative writing and interactional competence in L2 English: Insights from synchronous digital platforms. *Computer Assisted Language Learning*, 34(7), 900–923. <https://doi.org/10.1080/09588221.2019.1704786>
- Chen, W., & Yu, S. (2023). Investigating peer interaction patterns in collaborative writing: A multidimensional analysis of L2 learners' co-construction of texts. *Journal of Second Language Writing*, 62, 101042. <https://doi.org/10.1016/j.jslw.2023.101042>
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approach* (4th Ed). Sage.
- Deci, E. L., & Ryan, R. M. (2000). The what and why of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268.
- Dobakhti, L., & Khalili, A. (2024). A contributory study of the factors in British and Iranian English instructors' teacher immunity. *Applied Research on English Language*, 13(2), 125–148. <https://doi.org/10.22108/are.2024.141099.2264>

- Fu, Q. K., Lin, C. J., Hwang, G. J., & Zhang, L. (2019). Impacts of a mind mapping-based contextual gaming approach on EFL students' writing performance, learning perceptions and generative uses in an English course. *Computers & Education*, 137, 59-77. <https://doi.org/10.1016/j.compedu.2019.04.005>.
- George, D., & Mallery, P. (2024). *IBM SPSS statistics 29 step by step: A simple guide and reference* (18th ed.). Routledge.
- Guo, K., Li, Y., & Chu, S. K. W. (2024). Game on: Enhancing argumentative writing with digital gamification. *Innovation in Language Learning and Teaching*, 6, 1-12. <https://doi.org/10.1080/17501229.2024.2374347>
- Guo, X., Li, M., & Chen, Y. (2024). EFL learners' perceptions of gamified writing instruction: A mixed-methods study. *Language Learning & Technology*, 28(1), 1-23.
- Jacobs, H. L., Zinkgraf, S. A., Wormuth, D. R., Hartfiel, V. F., & Hughey, J. B. (1981). *Testing ESL composition: A practical approach*. Newbury House.
- Jeon, E. H. (Ed.). (2022). *Understanding L2 proficiency: Theoretical and meta-analytic investigations*. John Benjamins Publishing Company.
- Kellogg, R. T. (2008). Training writing skill: A cognitive developmental perspective. *Journal of Writing Research*, 1(1), 1-26. <http://doi.org/10.17239/jor-2008.01.01.1>
- Kessler, G. (2009). Student-initiated attention to form in wiki-based collaborative writing. *Language Learning & Technology*, 13(1), 79-95.
- Khalili, A., Dobakhti, L., & Zohrabi, M. (2024). Scrutinizing the predicting factors in native and nonnative English instructors' teacher immunity. *Journal of Research in Applied Linguistics*, 15(1), 62-74. <https://doi.org/10.22055/ral.2023.43835.3061>
- Khalili, A., Kashef, S. H., & Khalili, F. (2022). Interlinking corrective feedback with EAP writing instruction: An advantageous endeavor. *ESP Today*, 10(2), 286-309. <https://doi.org/10.18485/esptoday.2022.10.2.5>
- Khalili, A., & Zohrabi, M. (2024). Predictors of New Zealander and Iranian English teachers' productive and maladaptive teacher immunity. *Journal of Language Horizons*, 8(3), 97-124. <https://doi.org/10.22051/lghor.2024.46117.1892>
- Khalili, A., Zohrabi, M., Dobakhti, L., & Gholami, J. (2025). Convenience editing in medical sciences: Professional expertise vis-à-vis linguistic virtuosity. *Language Related Research*, 16(1), 161-189. <https://doi.org/10.48311/LRR.16.1.7>
- Khonamri, F., & Salimi, H. (2020). The impact of collaborative writing on EFL learners' writing accuracy and fluency: Insights from the Iranian educational context. *Iranian Journal of Language Teaching Research*, 8(1), 1-18. <https://doi.org/10.30466/ijltr.2020.120823>
- Lam, Y. W., Hew, K. F., & Chiu, K. F. (2018). Improving argumentative writing: Effects of a blended learning approach and gamification. *Language Learning & Technology* 22 (1), 97-118. <http://hdl.handle.net/10125/44583>
- Latham-Koenig, C., Oxenden, C., & Lambert, J. (2019). *American English file 3*. Oxford University Press.
- Lee, L. (2004). Learners' interaction in an online collaborative writing task. *Language Learning & Technology*, 8(3), 97-110.

- Li, M., & Kim, D. (2020). The effects of collaborative writing on L2 learners' writing development: A meta-analysis. *TESOL Quarterly*, 54(2), 515–546. <https://doi.org/10.1002/tesq.553>
- Lin, C. J., Hwang, G. J., Fu, Q. K., & Chen, J. F. (2018). A flipped contextual game-based learning approach to enhancing EFL students' English business writing performance and reflective behaviors. *Journal of Educational Technology & Society*, 21(3), 117-131.
- Long, M. H. (1996). The role of the linguistic environment in second language acquisition. In W. Ritchie & T. Bhatia (Eds.), *Handbook of SLA* (pp. 413-468). Academic Press.
- Marandi, S. S., & Seyyedrezaie, M. S. (2017). The multi-course comparison of the effectiveness of two EFL writing environments: Google drive versus face-to-face on Iranian EFL learners' writing performance and writing apprehension. *CALL-EJ*, 18(1), 9–21.
- Mohammadnia, Z., & Khalili, A. (2014a). An investigation of the existence of a threshold level for the vocabulary. *Iranian EFL Journal*, 10(6), 590-608.
- Mohammadnia, Z., & Khalili, A. (2014b). Linguistic focus of language related episodes in intermediate and advanced EFL learners' group-based interactions: A case study. *Advances in Language and Literary Studies*, 5(2), 127-133. <https://doi.org/10.7575/aiac.all.v.5n.2p.127>
- Mohammadnia, Z., & Khalili, A. (2014c). An investigation of the differential effects of visual input enhancement on the vocabulary learning of Iranian EFL learners. *International Journal of Applied Linguistics and English Literature*, 3(4), 69-79. <https://doi.org/10.7575/aiac.ijalel.v.3n.4p.69>
- Pallant, J. (2020). *SPSS survival manual: A step-by-step guide to data analysis using IBM SPSS*. Open University Press. <https://doi.org/10.4324/9781003117452>
- Rincon-Flores, E. G., Gallardo, K., & García, J. (2022). Team-based gamification in writing instruction: Effects on engagement and persistence. *Journal of Educational Technology & Society*, 25(2), 15-28.
- Rivera-Trigueros I., & Sánchez-Pérez M. M. (2020). Conquering the iron throne: Using Classcraft to foster students' motivation in the EFL classroom, *Teaching English with Technology*, 20 (2), 3-22.
- Sailer, M., & Homner, L. (2020). Gamification of learning: A meta-analysis. *Educational Psychology Review*, 32(1), 77–112.
- Sanchez, E., Young, S., & Jouneau-Sion, C. (2017). Classcraft: From gamification to ludicization of classroom management. *Education and Information Technologies*, 22(2), 497-513. <https://doi.org/10.1007/s10639-016-9489-6>
- Sipone S., Abella-García V., Rojo M., & dell'Olio L. (2021). Using ClassCraft to improve primary school students' knowledge and interest in sustainable mobility. *Sustainability*, 15(17). <https://doi.org/10.3390/su13179939>.
- Storch, N. (2011). Collaborative writing in L2 contexts: Processes, outcomes, and future directions. *Annual Review of Applied Linguistics*, 31, 275-288. <https://doi.org/10.1017/S0267190511000079>
- Tahmasebi, E., & Soleimani, H. (2022). Collaborative writing through Google Docs: Effects on Iranian EFL learners' writing performance and engagement. *Journal of Modern Research in English Language Studies*, 9(2), 123–148. <https://doi.org/10.30479/JMRELS.2022.15806>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

- Weigle, S. C. (2002). *Assessing writing*. Cambridge University Press.
<https://doi.org/10.1017/CBO9780511732997>
- Zhang, M., & Hyland, K. (2022). Collaborative writing and learner engagement in L2 classrooms: A synthesis of recent research. *Language Teaching Research*, 26(6), 1288–1307.
<https://doi.org/10.1177/1362168820927702>
- Zohrabi, M., & Khalili, A. (2023). The philosophy of teacher immunity: EFL teachers' perspectives. *Journal of Philosophical Investigations*, 17(45), 330-346.
<https://doi.org/10.22034/jpiut.2024.59889.3664>
- Zohrabi, M., & Khalili, A. (2024a). A cross-cultural study into the utility of diverse written corrective feedback strategies in medicine students' ESP writing courses. *International Journal of Society, Culture & Language*, 12(2), 150-169. <https://doi.org/10.22034/ijscsl.2024.2025600.3436>
- Zohrabi, M., & Khalili, A. (2024b). A study of the predictors of English and Persian language learners' psychological well-being. *Literary Arts*, 16(2), 1-12.
<https://doi.org/10.22108/liar.2024.140835.2360>
- Zohrabi, M., & Khalili, A. (2025). The utility of tailor-made teacher education in Iranian EFL instructors' attitudes towards dynamic assessment. *Language Testing in Asia*, 15(1), 29.
<https://doi.org/10.1186/s40468-025-00366-9>