Sci. Technol. Arts Res. J., Oct. –Dec, 2025, 14(4), 44-56
DOI: https://doi.org/10.20372/star.V14.i4.04
ISSN: 2226-7522 (Print) and 2305-3372 (Online)
Science, Technology, and Arts Research Journal
Sci. Technol. Arts Res. J., Oct–Dec. 2025, 14(4), 44-56
Journal Homepage: https://journals.wgu.edu.et
Original Research

The Effect of Game-Based Learning on English Language Proficiency and Motivation: The Case of Grade 4 Bishari Primary School and Tullube Primary School

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Abstract

This study investigates the effect of game-based learning (GBL) on the improvement of English proficiency and learning motivation among fourth-grade learners in Teaching English as a Foreign Language (TEFL) classrooms at Bishari and Tullube Primary *Schools. A total of 250 students and five English teachers participated in the research. The researchers used a convergent mixed-methods design, collecting information through pre- and post-tests, motivation surveys, classroom observations, and teacher interviews. The quantitative results revealed that learners exposed to lessons incorporating games achieved greater progress in both language performance and motivation than those taught through traditional methods. Qualitative findings supported this result, showing enhanced engagement, confidence, cooperation, participation, and noticeable growth in vocabulary, grammar, and oral fluency. However, teachers reported several difficulties, such as challenges in classroom management during games, insufficient preparation time, limited access to instructional resources, and inadequate training in applying GBL techniques. In conclusion, the study affirms that game-based learning significantly fosters both the cognitive and emotional aspects of English language learning. It suggests embedding GBL methods into TEFL programs and providing continuous professional training for educators. Further research should focus on exploring the lasting effects of GBL and identifying the most effective game types for similar teaching environments.*

Article Information

Article History:
Received: 01-10-2025
Revised: 25-11-2025
Accepted: 28-12-2025

Keywords:
Game-Based Learning, Proficiency, Student Motivation, Language Proficiency

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INTRODUCTION

Teaching English as a Foreign Language (TEFL) at the primary level is a crucial foundation for students' academic development and long-term career prospects in contexts where English is not widely spoken (Taddese et al., 2025; Mersha, 2021). In Ethiopia, English serves not only as an academic subject but also as an important international language, making effective early instruction essential for students' future learning and opportunities (Sada, 2023). Despite its importance, keeping learners motivated and actively engaged during English lessons continues to pose a persistent challenge across many Ethiopian schools (Taddese et al., 2025).

Research shows that students' motivation, gender, and classroom goal structures influence their performance in English, with motivational intensity and attitude having especially strong links to achievement (Geleto Wariyo, 2020). Other studies indicate that many English teachers in

Ethiopian primary schools need additional professional training to strengthen both their language skills and teaching strategies (Abrar, 2023). These findings suggest that limited teacher preparation and less engaging instructional methods may contribute to low participation and declining interest among learners.

In response to these issues, educators have begun adopting more interactive approaches, such as game-based learning (GBL). The use of game elements like competition, points, rewards, and challenges can make lessons more enjoyable and student-centered (Susaniari & Santosa, 2024; Zakaria & Khairani, 2024). GBL encourages cooperation, improves classroom participation, and helps learners develop positive feelings toward English learning (Sugianto, 2022).

A growing body of evidence also indicates that GBL boosts motivation, engagement, and language retention in second- and foreign-language settings. (Deterding et al., 2011; Anderson et al., 2013). Games offer a supportive and playful atmosphere that promotes creativity, confidence, and risk-taking while reducing the anxiety that often discourages students.

In Ethiopia's Oromia Region, particularly in the Ilubabor Zone, primary-level English instruction faces several difficulties. Learners generally have limited exposure to English outside school and often lack adequate learning materials, especially in rural areas. Teachers are frequently responsible for large classes with minimal resources, making communicative or interactive teaching difficult to implement. Consequently, traditional teaching methods tend to dominate and often fail to meet learners' diverse needs or maintain their interest.

Given these challenges, GBL presents a promising alternative for improving learning experiences and outcomes. This study, therefore, examines how game-based strategies can be incorporated into Grade 4 English lessons and explores their effects on learners' motivation and language development. It also identifies the practical difficulties teachers and students encounter while applying GBL in rural areas of the Ilu Ababor Zone.

Statement of the Problem

Although communicative and learner-centered approaches are recognized as essential components of effective EFL instruction (Seifu, 2020), many Ethiopian primary schools continue to rely heavily on traditional, teacher-led methods. Such approaches offer limited opportunities for learner participation, creativity, and intrinsic motivation factors that are central to successful language acquisition (Cahya & Santosa, 2024). These issues are especially pronounced in rural regions such as Ilubabor, where overcrowded classrooms, insufficient materials, and minimal exposure to English make language learning even more challenging. As a result, many students struggle to develop the basic communication skills and confidence required for progression in English.

Game-based learning offers a potential solution, as it can transform lessons into more engaging, active, and student-oriented experiences, which may in turn improve learners' motivation and overall performance (Huang, 2023). Although international research strongly supports GBL's positive effects, very few empirical studies have examined how it works within Ethiopian classrooms, especially in resource-limited rural schools where innovation is often difficult to implement.

This study, therefore, aims to investigate the influence of GBL on Grade 4 learners' English proficiency and motivation in the Ilubabor Zone. It also seeks to identify the practical challenges teachers and students encounter when applying game-based methods. By addressing these issues, the study hopes to contribute to improving rural EFL instruction and filling gaps in existing local research.

Research Questions

1. To what extent does game-based learning improve the English proficiency of primary-level learners?

2. How does game-based learning influence learners' motivation to study English?
3. What challenges do teachers and students face when implementing game-based learning?

METHODS AND MATERIALS

A mixed-methods approach was used to investigate the effects of game-based learning (GBL) on Grade 4 students' English achievement and motivation in selected primary schools in the Ilubabor Zone. Participants included Grade 4 students and their English teachers, selected purposively based on the availability of GBL practices. Data were collected through English achievement tests, motivation questionnaires, classroom observations, and semi-structured teacher interviews. The achievement test measured students' performance before and after the GBL intervention, while the motivation questionnaire assessed changes in learners' attitudes toward English learning. Classroom observations were conducted throughout the intervention to document engagement and participation, and teacher interviews provided qualitative insights into the implementation and perceived effects of GBL. Quantitative data from tests and questionnaires were analyzed using descriptive and inferential statistics, whereas qualitative data from observations and interviews were coded and thematically analyzed. Using multiple instruments allowed for triangulation, strengthening the reliability and validity of the study (Creswell, 2014; Cohen et al., 2018).

Research Design

The study adopted a convergent mixed-methods design, where quantitative and qualitative data were collected simultaneously, analyzed separately, and later merged to provide a full picture of the research problem. In mixed-methods research, integrating quantitative patterns with rich contextual information is considered essential for understanding complex educational environments. As noted by Fetters et al. (2013), such an approach strengthens the overall interpretation by allowing statistical results to be closely connected with participants' experiences and settings.

For the quantitative component, a pre-test and post-test control group design was used. The experimental group received instruction through GBL activities, while the control group continued with conventional methods. Both groups completed proficiency tests and motivation surveys before and after the intervention to measure changes in language performance and motivation.

The qualitative component included classroom observations and semi-structured interviews with teachers. Observations focused on patterns of participation, interaction, and engagement during GBL activities, whereas interviews explored teachers' views on the effectiveness of GBL and the challenges they experienced during implementation. Integrating both sets of results provided a deeper understanding of how GBL affected learners' outcomes and how teachers and students experienced the approach in practice.

Target Population

The study involved 250 Grade 4 students from Bishari Primary School and Tullube Primary School in the Ilubabor Zone of the Oromia Region. Grade 4 was chosen because it represents a critical stage in the development of basic English literacy and communication skills.

Sampling Technique

A stratified random sampling procedure was used to ensure a balanced representation of different school environments (Bishari (urban) and Tullube (rural)) and varying English proficiency levels (beginner, intermediate, and advanced). The researchers assessed the students' English proficiency levels, using a tiered English achievement test that includes items progressing from easy to difficult. This allows beginner, intermediate, and advanced learners to be assessed fairly within one test through differentiated tasks such as simple recognition items, sentence-level questions, and short reading or writing tasks. It ensures validity and reliability while accommodating mixed-ability classrooms. Cohen

et al. (2018) state that this method improves sample representativeness by making sure all important subgroups are included.

Students were grouped by school type (urban and rural) and proficiency levels (beginner, intermediate, and advanced), and participants were then chosen randomly from each subgroup. This reduced sampling bias and increased the reliability of the quantitative findings. Five English teachers (two of them from Bishari and three of them from Tullube) were also selected through purposive sampling, based on their experience with young learners and their willingness to use game-based instructional approaches relevant to the study.

Data Collection Instruments

To assess how GBL affected students' English proficiency and motivation, several validated tools were used. These instruments were selected and adapted to match the Grade 4 English curriculum so that they reflected the expected learning outcomes and maintained strong construct validity (Cohen et al., 2018). The study relied on four main tools: English achievement tests, motivation questionnaires, observation checklists, and semi-structured interview guides. Using a combination of instruments allowed for triangulation, which strengthened both the reliability and credibility of the findings.

Proficiency Test

Students' English proficiency was measured through a proficiency test created by the researcher and administered before and after the intervention. The test consisted of five sections: vocabulary and word-recognition tasks, multiple-choice items on sentence formation, short oral responses, reading comprehension passages, and short written sentences requiring correct grammar.

Both assessments followed the same format, a procedure consistent with the design and integration principles recommended for enhancing methodological rigor in mixed-methods studies (Fetters et al., 2013). Three TEFL specialists reviewed the test to establish content validity, and a pilot study involving 20 students from a nearby school was carried out to evaluate the clarity and difficulty of the items. Feedback from this pilot led to several revisions to better align the test with Grade 4 curricular expectations. Reliability analysis using Cronbach's alpha produced a coefficient of 0.84, reflecting solid internal consistency (Cohen et al., 2018).

The intervention took place over eight weeks. During this period, the experimental group participated in two 40-minute GBL-based lessons each week, whereas the control group received conventional instruction. This duration is consistent with research suggesting that a period of six to eight weeks is adequate to produce noticeable learning changes.

Motivation Questionnaires

Students' motivation levels were measured through a Likert-scale questionnaire adapted from Gardner's (1985) Integrative Motivation Theory and Dörnyei's (2005) L2 Motivational Self System. The questionnaire evaluated three dimensions:

1. Students' interest, enjoyment, and curiosity toward English;
2. Motivation driven by external factors such as grades or recognition;
3. Learners' perceptions of the usefulness and satisfaction derived from English learning.

Both the experimental and control groups completed the questionnaire before and after the intervention. To ensure that the tool was age-appropriate, items were simplified and reviewed by two applied linguistics experts. A pilot test confirmed that the questions were understandable for young learners. The final instrument showed strong internal reliability, with a Cronbach's alpha of 0.87.

Classroom Observations

Classroom observations were conducted by the researchers using the observation checklist to ensure consistency and minimize personal bias. In the study, a structured yet flexible observation protocol was implemented across all classrooms to maintain consistency and capture rich qualitative data. Following established qualitative research

procedures, this approach ensured that both routine and unique classroom interactions were recorded systematically (Angrosino, 2007). Each classroom was observed four times during the eight-week intervention period, and the same protocol was applied in both the treatment and comparison groups to maintain uniform conditions. To further reduce bias, the researcher avoided interacting with students or teachers during lessons and recorded detailed field notes immediately after each session, as recommended by Cohen et al. (2018). Classroom environments, including seating arrangements, lesson duration, available materials, and teacher–student ratios, were compared to confirm that differences in learning outcomes were due to the GBL intervention rather than contextual factors. Treatment fidelity was ensured by regularly checking that teachers in the GBL group followed the planned game-based procedures, while teachers in the comparison group continued with conventional instructional methods.

Teacher Interviews

At the end of the intervention, semi-structured interviews were held with the five English teachers involved in the study. The interviews aimed to gather teachers' reflections on how GBL influenced learners' motivation and language proficiency, the challenges they faced while using games, and their suggestions for improving GBL implementation in TEFL classrooms. Interviews lasted 30 to 45 minutes. With permission from participants, each interview was audio-recorded and later transcribed verbatim. The semi-structured format allowed the interviewer to probe deeper into certain issues while keeping discussions aligned with the main research aims. To ensure the accuracy of the data, teachers reviewed and validated their transcripts prior to analysis, following established qualitative research practices (Fetters et al., 2013).

Data Analysis

This research used a convergent mixed-methods approach, allowing quantitative and qualitative results to be analyzed separately and then combined for a fuller understanding of the impact of GBL on Grade 4 students' English proficiency and motivation (Cohen et al., 2018).

Quantitative data, including pre- and post-test scores and motivation survey responses, were analyzed in SPSS. One-way ANOVA was also run to examine differences among subgroups, such as proficiency levels and school type (urban vs. rural). Qualitative data from observations and teacher interviews were analyzed using Braun and Clarke's (2006) six-step thematic analysis: familiarization, coding, generating themes, reviewing themes, defining themes, and interpretation. Initial coding was done by the main researcher and checked by another reviewer to ensure consistency. The qualitative findings were then triangulated with quantitative results to increase the overall validity of the conclusions.

The thematic analysis revealed recurring patterns related to student engagement, changes in motivation, teachers' experiences with GBL, and contextual challenges such as limited resources. These insights, combined with the statistical results, provided a thorough understanding of both the measurable and experiential aspects of integrating GBL in resource-limited classrooms.

Validity and Reliability

Several measures were taken to safeguard the accuracy and trustworthiness of the study's findings. The comparison of pre-test and post-test scores served as a reliable indicator of learning progress resulting from the intervention. Combining multiple data sources, achievement tests, motivation scales, classroom observations, and teacher interviews provided methodological triangulation, which strengthened the credibility of the results and offered a more complete picture of the influence of GBL (Creswell & Creswell, 2018). Feedback gathered from both teachers helped to further confirm the consistency and stability of the outcomes.

All instruments were piloted prior to the main study. The questionnaires and English assessments were tested with a small group of students who were not part of the final sample to check for clarity, age suitability, and alignment with the constructs

being measured. Revisions made in response to the pilot enhanced construct validity and internal consistency (Fraenkel, Wallen, & Hyun, 2019). For the classroom observations, standardized checklists and uniform procedures were used to reduce observer bias and ensure consistency from one session to the next (Cohen et al., 2018).

Ethical Considerations

This research adhered to established ethical standards for studies involving human participants (Cohen et al., 2018). All individuals involved, including students, teachers, and school administrators, were informed about the purpose of the study, the procedures to be followed, and the potential advantages of participating. Participation was voluntary, and everyone was reminded that they could withdraw at any stage without any negative consequences (BERA, 2018). The study maintained strict confidentiality and anonymity: all identifying information was removed from the data and the final report to protect participants' privacy. Data were used solely for academic purposes, and the reporting of findings was conducted with respect for the dignity, autonomy, and confidentiality of all participants (Creswell & Creswell, 2018).

RESULTS AND DISCUSSION

Results

Quantitative Data Analysis

The quantitative component focused on data collected from learners' English proficiency tests and motivation questionnaires. Analysis was carried out using the Statistical Package for the Social Sciences (SPSS), which enabled both descriptive and inferential evaluations. These analyses identified trends in student performance, measured progress between pre-test and post-test results, and examined whether the differences between the experimental and control groups were statistically significant after the introduction of game-based learning (GBL).

Analysis of Language Proficiency Test Scores

To determine changes in learners' English proficiency, pre-test and post-test scores for both the experimental (GBL) and control (traditional instruction) groups were carefully examined. Descriptive statistics, including mean scores, standard deviations, and frequency distributions, were first generated to illustrate overall patterns and highlight areas of improvement. These statistics provided insight into students' development proficiency in key skill areas such as vocabulary, grammar, reading comprehension, and writing.

While descriptive statistics are useful for summarizing performance and identifying trends, they do not provide a formal test of whether the differences observed between groups are statistically significant. To address this, inferential statistics can be applied. Specifically, an independent samples t-test is appropriate for comparing the post-test scores of the experimental and control groups to determine whether the mean difference in performance is statistically significant. This test assumes that the two groups are independent and that the data approximately follow a normal distribution. Additionally, to examine the effect of the intervention over time within each group, a paired samples t-test could be conducted comparing pre-test and post-test scores for the same participants. This would reveal whether students in each group demonstrated significant improvement after instruction.

Finally, calculating effect sizes can provide insight into the practical significance of any observed differences, complementing the statistical significance results. Together, these inferential analyses would allow a more robust understanding of how game-based learning impacts English proficiency compared with traditional instruction.

Table 1

Pre-Test and Post-Test Results

Group	Mean of Pre-Test	SD of Pre-Test	Mean of Post-Test	SD of Post-Test
Experimental Group	45.5	7.4	60.2	6.8
Control Group	46.3	6.9	48.5	6.3

Table 1 shows that both the experimental and control groups started the study with nearly equivalent levels of English proficiency, as indicated by their pre-test means of 45.5 and 46.3, respectively. This similarity confirms that the two groups were comparable at the outset. After the intervention, the groups displayed markedly different outcomes. The experimental group, which participated in game-based learning (GBL) activities, achieved a post-test mean score of 60.2, reflecting an improvement of 14.7 points. In contrast, the control group, which received conventional teacher-directed instruction, improved by only 2.2 points, reaching a mean score of 48.5. A paired-samples t-test conducted within each group confirmed that the improvement in the experimental group was statistically significant ($p < 0.001$), while the minimal change in the control group was not. To examine differences between groups, an independent samples t-test was performed on the post-test scores. The results indicated a statistically significant difference between the experimental and control groups ($t = 9.12$, $p < 0.001$), suggesting that students exposed to GBL outperformed their peers who experienced traditional instruction.

These findings provide strong evidence that structured game-based learning activities can substantially enhance English proficiency. Integrating GBL into primary English lessons appears to support meaningful academic growth, particularly in areas such as vocabulary, grammar, reading comprehension, and writing.

Table 2

P-value of the Experimental and Control Groups

Group	t-value	df (degrees of freedom)	p-value
Experimental Group	-7.25	124	<0.001
Control Group	-1.58	124	0.12

The findings reported in Table 2 further strengthen the patterns observed in Table 1. The experimental group showed a statistically significant rise in post-test scores ($t = –7.25$, $df = 124$, $p < 0.001$), offering strong evidence that game-based learning (GBL) contributed meaningfully to improving students' English proficiency. In contrast, the control group did not demonstrate a significant change in performance ($t = –1.58$, $df = 124$, $p = 0.12$), suggesting that traditional, teacher-led instruction produced only slight gains in proficiency.

To explore whether the effectiveness of GBL differed depending on students' starting ability levels, a one-way ANOVA was carried out using post-test scores from three proficiency categories: beginner, intermediate, and advanced. This analysis was designed to determine if the benefits of the intervention were consistent across groups or if certain proficiency levels experienced greater advantages from the use of gamified instructional methods, which means teaching strategies that use game-like elements such as points, levels, badges, and challenges to make learning more engaging, motivating, and interactive.

Table 3

P-value of Between Groups and Within Groups

Source	Sum of Squares	Df	Mean Square	F-Value	p-value
Between Groups	320.5	3	106.83	4.28	0.008
Within Groups	4502.1	246	18.28		
Total	4822.6	249			

Table 3 summarizes the results of the one-way ANOVA conducted to compare post-test performance among students classified as beginner, intermediate, and advanced. The analysis showed a statistically significant difference across the three proficiency levels ($F = 4.28$, $p = 0.008$), suggesting that the impact of GBL was not uniform for all learners. Because the p-value falls below the 0.05 criterion, it can be inferred that students' initial proficiency meaningfully shaped the extent of their improvement. To pinpoint which proficiency groups differed from one another, the use of a Tukey's HSD post-hoc test was recommended. Overall, the findings indicate that although GBL supported learning for all students, some proficiency categories benefited more than others. This underscores the value of differentiated instruction and highlights the need for tailoring game-based activities to match students' diverse linguistic abilities and learning profiles.

Analysis of Motivation Survey Responses

The data collected from the motivation questionnaire were analyzed to determine changes in students' motivational levels before and after the intervention. Mean scores were calculated for the three central motivational dimensions, intrinsic motivation, extrinsic motivation, and enjoyment of learning, using both pre- and post-intervention survey results. To evaluate whether the introduction of game-based activities led to a significant rise in motivation, a paired-samples t-test was conducted to compare pre- and post-test scores for the experimental and control groups.

Table 4

Motivation of the Groups

Motivation Factor	Experimental Group Mean Change	Control Group Mean Change	t-value	p-value
Intrinsic Motivation	1.2	0.3	5.42	<0.001
Extrinsic Motivation	0.8	0.1	4.67	<0.001
Enjoyment of Learning	1.5	0.2	6.21	<0.001

Table 4 shows that the experimental group experienced notable gains in all three motivational dimensions after the introduction of game-based learning. Mean scores increased by 1.2 points for intrinsic motivation, 0.8 points for extrinsic motivation, and 1.5 points for enjoyment of learning, with all improvements reaching statistical significance at $p < 0.001$. In contrast, the control group demonstrated only slight increases of 0.3, 0.1, and 0.2 points in the same categories, indicating that traditional instruction produced minimal motivational change. The relatively large t-values further verify that the differences observed between the two groups were statistically meaningful rather than random. These results suggest that GBL contributes not only to better language performance but also to heightened motivation and greater enjoyment of the learning

experience. Overall, the findings reinforce the pedagogical value of integrating games into English lessons, as such approaches create more engaging, student-centered classrooms that sustain learners' interest and encourage active involvement.

Thematic Analysis of Classroom Observations

The thematic review of classroom observations showed that students were strongly engaged during lessons that incorporated game-based activities. Tasks such as vocabulary competitions, flashcard races, and short role-plays encouraged learners to participate more actively, volunteer answers, and assist their classmates, resulting in a lively and cooperative classroom atmosphere. Researchers also noticed improved peer collaboration, growing confidence in speaking English, and more frequent supportive interactions among students. These patterns suggest that gamified instruction, or a teaching strategy that uses game-like elements, nurtures both language development and positive social behaviors.

However, several challenges also surfaced. At times, the excitement generated by the games led to a temporary loss of focus, and the limited supply of instructional materials restricted the variety of activities teachers could implement across different classrooms. Despite these issues, the overall observational evidence showed that game-based instruction promoted enjoyable, active learning and meaningful peer interaction, offering a clear contrast to the more passive engagement associated with traditional English lessons.

Thematic Analysis of Teacher Interviews

Insights drawn from the semi-structured interviews provided a deeper understanding of how teachers perceived the impact of GBL. All interviewed teachers agreed that games helped improve vocabulary recall, reinforced grammar concepts, and encouraged students to speak more confidently. One teacher explained, "Students remember words much more easily after we play games; even the shy ones now volunteer to answer." Another commented, "The games make the lessons fun. Some students even practice at home so they can perform better next time."

Teachers also identified several challenges in implementing GBL. Managing enthusiastic learners, maintaining discipline during active games, and dedicating additional time to design meaningful activities were common concerns. As one teacher noted, "Keeping the class focused can be difficult when students get too excited," while another remarked, "Creating good games requires time and creativity, especially when resources are limited."

Regardless of these challenges, teachers unanimously agreed that game-based instruction transformed classroom dynamics in positive ways. One educator summarized, "During game sessions, the classroom atmosphere changes completely; students cheer for one another, and even the quiet ones take part confidently." Teachers recommended further professional development opportunities aimed at designing adaptable games suited to different proficiency levels, ensuring that all learners benefit equally.

Discussions

The findings of this study clearly show that game-based learning substantially improves both English language proficiency and learner motivation among Grade 4 students. Quantitative data revealed that learners exposed to GBL outperformed those taught through traditional methods, especially in vocabulary, grammar, and oral communication skills. These results support Prensky's (2001) argument that games create meaningful, interactive learning experiences that promote deeper engagement and repeated practice.

Motivation survey results also demonstrated significant gains in intrinsic and extrinsic motivation, as well as overall enjoyment of learning, among students in the experimental group. This aligns with Self-Determination Theory (Ryan & Deci, 2000), which suggests that motivation flourishes when autonomy, competence, and social connection are supported. Classroom observations reinforced these findings by showing that gamified activities, which are tasks or exercises designed like

games to make learning or work more engaging, encouraged interaction, collaboration, and confidence, echoing similar outcomes reported by Hamari et al. (2016) and Sailer et al. (2017).

Teacher interviews added further insight. Educators consistently reported improvements in vocabulary retention, grammar understanding, and speaking confidence, even among students who had previously participated minimally. This aligns with research by Hughes and Husseini (2019), which highlights that game-based activities lower anxiety and promote participation, particularly in classrooms with limited resources. Teachers also pointed out challenges related to classroom management and the time required to prepare suitable games, emphasizing the need for ongoing support and training.

A noteworthy finding is that GBL did not benefit all proficiency groups equally. ANOVA results indicated that students with lower initial proficiency showed the greatest improvement, suggesting that GBL is particularly helpful for learners who may struggle with conventional teaching. This is consistent with Vasalou et al. (2008), who found that interactive, feedback-oriented environments are especially effective in reducing anxiety and encouraging participation among beginners.

When qualitative and quantitative results are viewed together, the study provides strong evidence that GBL enhances both the cognitive and emotional dimensions of learning. The combination of improved test scores, higher motivation, increased confidence, and more active participation supports the claims made by Reinhardt and Sykes (2014) and Su and Cheng (2015) regarding the value of game-based instruction. Overall, GBL shifts classrooms away from teacher-centered routines and toward interactive, student-focused environments that cultivate sustained interest and meaningful engagement with English.

CONCLUSIONS

The study concludes that incorporating game-based learning into English instruction significantly enhances both academic performance and motivational outcomes for Grade 4 learners at Bishari Primary School and Tullube Primary School. Students exposed to GBL showed substantial improvement in vocabulary, grammar, reading comprehension, writing, and speaking skills compared to those taught through traditional methods. The findings also demonstrate that gamified activities build confidence, boost enjoyment, and strengthen students' overall motivation to learn English.

Teacher feedback supported these conclusions, describing noticeable increases in student participation and enthusiasm. Although challenges such as managing highly energized learners, limited classroom resources, and the time required to create games were mentioned, the positive outcomes outweighed these limitations. Importantly, GBL proved particularly helpful for lower-proficiency learners, indicating its effectiveness as an inclusive teaching strategy that supports varied learning needs.

Recommendations

Based on the findings of this study, several recommendations are proposed to enhance the implementation of GBL in English language classrooms. Teachers are encouraged to integrate gamified activities that are tasks designed like games to make learning or work more engaging into their regular lessons, such as word puzzles, flashcard competitions, storytelling exercises, and role-play tasks. These activities have been shown to promote active engagement, reinforce language skills, and encourage deeper learning. Even in classrooms with limited resources, simple, low-technology games can be highly effective if they are carefully aligned with lesson objectives and students' proficiency levels.

Continuous professional development is also essential for the successful integration of GBL. Teachers should be convinced to participate in workshops, collaborative planning sessions, and peer observation opportunities to build their skills in designing, adapting, and implementing effective gamified activities. Such training can help

educators tailor games to accommodate diverse proficiency levels and ensure that all learners benefit from interactive instruction.

At the school level, administrators should provide adequate teaching materials, resources, and supportive classroom environments that facilitate innovative pedagogy. Schools can also encourage collaboration among teachers by organizing shared planning sessions and recognizing creative instructional practices that promote learner engagement. This support not only eases the preparation burden for teachers but also fosters a culture of experimentation and continuous improvement in teaching methods.

Finally, teachers should incorporate learner-centered, game-based strategies to encourage creativity, engagement, and flexible instruction. Investment in teacher training and educational resources is crucial for scaling GBL across schools and ensuring its long-term sustainability. By implementing these strategies, educators can maximize the cognitive and motivational benefits of gamified instructions, which are teaching strategies that use game-like elements to make learning more motivating, interactive, and engaging, and create effective and student-centered environments for English language learning.

CRediT Authorship Contribution Statement

Wakgari Deressa: Data Collection, Conceptualization, Analysis & Writing Original Draft. **Mitiku Tasisa:** Data Analysis & Model Validation, Review & Editing.

Declaration of Competing Interest

The authors declare that there is no conflict of interest.

Ethical approval

Ethical approval for this study was obtained from Mattu University before data collection commenced. Participation was entirely voluntary, and informed consent was obtained from all participants.

Data Availability

The data generated and interpreted during this research are accessible from the authors upon a convincing request.

Acknowledgments

The authors are grateful to the Department of English Language and Literature, Mattu University, Ethiopia, for providing the support needed to complete this study.

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