

Article

Enhancing English Listening Comprehension through Interactive Games: An ELT-Based Assessment Approach

Yongling Wan ^{1,*,+}, Nan Gao ^{1,+} and Minxia Wu ¹

¹ National University Philippines, Manila, 1008, Philippines

* Correspondence: Yongling Wan, National University Philippines, Manila, 1008, Philippines

+ These authors contributed equally to this work

Abstract: The research examines the impact of interactive game-based learning on the improvement of English listening comprehension for ELT learners under the concept of Kolb's Experiential Learning Theory (ELT). With 200 elementary students and 15 English teachers as its sample in Hefei, China, the study investigates the role of interactive games within the four ELT stages, i.e., Concrete Experience, Reflective Observation, Abstract Conceptualization, and Active Experimentation. Results show that active involvement and immediate feedback bring about the greatest gains in students' accuracy and comprehension of listening materials as well as their listening motivation and strategy use. Teachers reported more engagement and skill building but also identified challenges including technical constraints, minimal training, and limited time for implementation. The research demonstrates the pedagogic value of the introduction of game-based learning to ELT, by focusing on the role of structured reflection and teacher scaffolding in order to enhance both cognitive and metacognitive outputs. To conclude, it can be said that interactive games provide a novel means to transform the traditional, passive listening class into an interesting, experiential and transferable skill based learning course.

Keywords: interactive games; English listening comprehension; experiential learning theory; game-based learning; student engagement; pedagogical innovation

1. Introduction

English listening skill is a prerequisite that has a great impact on other English skills and it is a cornerstone for English skills learning in that listening is necessary to enhance students' communicative ability, thinking ability and cross-culture communication [1]. The Importance of Listening as a Language Skill As a language skill, listening is one of the four fundamental skills (listening, speaking, reading and writing), and it is the basis of oral communication and input processing. Nevertheless, listening to English is still considered one of the most difficult skills to teach due to the English Instruction remain What is more, (Rabab'ah, 2005; Kim, 2005; Ghobadi & Kaffash, 2013), ELL are often less motivated and feel less competent as listeners. Students often have low motivation, low comprehension and are exam-driven learners, with teachers relying heavily on traditional approaches which are not very engaging. Therefore, the teaching of listening is still behind the times in the pedagogical aspects, and new approaches which are interactive, learner-centered need to contribute to the development in teaching listening [2].

The teaching of listening in primary and secondary language classrooms is dominated by mechanical jobs, such as listening to a recording and then filling in the missing words or answering multiple-choice questions. Such activities do afford recognition training but are neither authentic nor contextual. Learners passively receive linguistic input with little interaction or reflection, resulting in cognitive exhaustion and frustration. Moreover, the content of traditional coursebooks is usually rich with scripted

Published: 31 December 2025



Copyright: © 2025 by the authors. Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

dialogues or topics supporting alien background, which prevents the learners from transferring the listening skills into real life communication. These restrictions have fostered a divide between classroom performance and language use in real-life settings, underscoring the need for methods that connect linguistic practice to experience-based learning [3].

Latest findings in educational technology have given rise to novel means for dealing with these challenges in the form of interactive games, defined as digital applications that integrate entertainment, participation, and language instruction [4]. Game-based learning platforms, including Duolingo, Quizlet, Minecraft Education Edition, have shown promise in converting passive listening to an active and immersive experience [5]. With instant feedback, adaptive difficulty and scenario-based tasks, these applications allow users to experience real language use while enhancing their ability to self-regulate and solving problems. Cascaded through a host of essential factors in interactive games are joy, emotional engagement, anxiety alleviation, group learning (conducive to long-term motivation) and so forth, all of which are produced through whole-person mechanisms. However, although the educational potential of interactive games is widely acknowledged, the empirical research revealed a number of questions left unanswered. However, educators frequently experience technological limitations, a lack of support from their institution, and the challenge of how to accurately assess learning [6]. In addition, the majority of assessments consider only the task accuracy (completion) and do not take into account the cognitive as well as the reflective aspects of learning [7].

In response to these instructional and evaluative lacunae, the present research draws on Kolb's Experiential Learning Theory (ELT) as its theoretical lens [8]. ELT views learning as a process of four stages interacting like a cycle (Concrete Experience, Reflective Observation, Abstract Conceptualization and Active Experimentation) through which learners are transforming their experiences into knowledge. This representation works well with game-based learning systems, considering that learners engage, reflect, conceptualize, and apply iteratively in those platforms. In doing so, the interactive listening games were developed on ELT principles with the aim to explore not only the progress of the students in terms of listening performance but also in terms of metacognitive and strategic learning capabilities at the experiential stages.

Therefore, this study concentrates on improving English listening comprehension via interactive games and develops a corresponding measuring instrument based on ELT, simultaneously. In particular, it seeks to contribute towards closing the gap between theory and practice by illustrating how empirical evidence can be applied from an elementary school context in Hefei, China. The following are the research questions of the study:

- 1) How do (1) Concrete Experience (2) Reflective Observation (3) Abstract Conceptualization (4) Active Experimentation Interactive Games enhance students' English listening comprehension skills?
- 2) To what extent do teachers experience or anticipate challenges in the use of interactive games for listening teaching at each of these ELT learning stages?
- 3) Based on the experiential learning cycle, what type of assessment tool can be created that will assist in evaluating and improving students' listening comprehension?

In answering these questions, the paper adds to a growing literature on technology-enhanced language learning and suggests a practical framework for the integration of game-based instruction with systematic assessment. Ultimately, it aims to serve as a positive illustration that interactive games—when informed by the principles of experiential learning—have the potential to reframe English listening instruction from a passive, test-centered occasion to a dynamic, contemplative, and transferable skill endeavor.

2. Literature Review

2.1. Experiential Learning Theory (ELT)

The ELT of Kolb (1984) has become a well-established theoretical framework in explaining the process of knowledge construction in learning by doing [9]. The theory is based on a four stage cyclical process in which the stages 1. concrete experience (CE), 2. reflective observation (RO), 3. abstract conceptualisation (AC), and 4. active experimentation (AE) are related to each other. Every phase is a different way of relating to the world which has to be integrated for successful learning in an ongoing feedback process [10].

In the Concrete Experience phase learners are directly involved in real or simulated experiences, which enable the use of language within authentic contexts. In the context of English listening learning, these activities could be games where learners listen to dialogues, carry out audio-based tasks, or react to spoken prompts. Experiences of this kind immerse the learner in real language and real life and provide the raw material for thinking [11].

The Reflective Observation phase inspires the learner to reflect on his or her own experiences, think about what strategies were successful or unsuccessful, and what modifications could be made. In relation to interactive games, this reflection can be activated through local feedback (as feedback within the game's interface), for example error messages or completion bars that cause users to reflect on listening techniques [12].

In the third phase of Abstract Conceptualization, observations are converted into concepts or generalized guidelines. Learners start to develop mental representations about how to listen more efficiently such as spotting discourse markers, guessing meaning from context, or anticipating what they are hearing. In terms of game based learning, this is where players move from particular in-game events to more general language learning insights and strategies [13].

Lastly, Active Experimentation is when these concepts are put to the test in new experiences. Learners actively transfer their newly adapted strategies into later tasks, and they fine-tune their performances accordingly. In the context of teaching listening, this is understood as applying the skills acquired through game play to other real-life communication scenarios or classroom activities [14].

Combined, these phases yield a kinetic cycle in which the passive reception is transformed into the active exploration. Incorporating interactive games in this context enables teachers to go beyond traditional drills and foster an environment where listening comprehension is nurtured through experiential learning, reflection, and repetitive practice [15]. Therefore ELT not only functions at the theoretical level in terms of understanding how a game-based learning became effective, but also offers guidance for the construction of assessment tools that capture development across t/g experiential stages.

2.2. Game-Based Learning Theory

Game-based Learning (GBL) theory proposes that learners learn best when they are actively participating in goal-oriented, interactive, and feedback providing learning activities [16]. The game-like features of challenge and rewards, combined with the social element, make users more intrinsically motivated and focused—two things that are typically missing in traditional English listening learning. And these days, digital products like Duolingo, Quizlet and Minecraft Education Edition have demonstrated how gamification can facilitate listening comprehension by giving repetitive practice a new lease on life as dynamic learning experiences [17].

Pedagogically speaking, interactive games engage the experiential learning cycle of Kolb. While playing, students are faced with authentic aural situations— they must listen to oral instructions and react to conversational cues. The integrated feedback systems promote reflective thinking since learners can observe the effects of the decisions they

make without delay. This practice promotes conceptualization, enabling the learner to see regularities and to formulate individualized comprehension strategies [18]. Through iterative play and increasingly complex challenges, they experiment with new ways of listening, and learning is solidified through trial and error [19].

Period of instruction unlike traditional instruction the game based learning is holistic and integrated in nature. Cognitive, emotional and social aspects are affected at the same time and students are required to pay attention to work, to treat their emotions, and to work with colleagues. In this sense, games not only train listening precision but also higher order thinking, including strategic thinking and metacognition (Mayer, 2001).

Another positive feature of learning with games is that it can be easily adapted to the needs of an individual. Digital platforms can adjust difficulty levels and linguistic input according to each student, making sure the tasks are not too difficult for them. This customized feedback process is especially helpful for listening skills as learners' needs differ substantially with regard to disrespect, speech tempo and logical deduction. This is how interactive games turn memorized listening exercises into no more than meaningful learning challenges.

These benefits notwithstanding, educational application of interactive games may also confront obstacles. The realization of their potential is often limited by technical constraints, limited teacher training and the absence of curriculum integration. And while it's true learners love the motivational aspects of games, teachers often find it harder to marry them to learning outcomes or to assess results with more traditional assessment tools. These issues highlight the need for a systematic framework that links game-based learning with principles from experiential learning - namely the objective in this study.

2.3. Existing Research Gaps

Although there are many studies on the potential of interactive games for language learning, some important research gaps still exist, especially in the area of improving English listening comprehension.

Firstly, there is an absence of ELT-friendly standardized testing.

Existing evaluations for the most part measure immediate impact on learning through indicators like quiz scores or task completion rates. These measures capture learning at a surface level, but do not capture deeper cognitive processes (e.g., reflective thinking, conceptualization, and application of skills) that are an output of experiential learning. In the absence of an ELT-compatible model, we cannot say to what extent and in what ways interactive games support learners at each point of the learning cycle. Creating such an instrument is hence important for both research and practical purposes.

Second, it is not thoroughly analyzed what difficulties in implementation are encountered by teachers.

Although a substantial body of research addresses student achievement, there are relatively few studies that deal with obstacles to the adoption of interactive games by educators. Teachers have reported technology-related frustrations, lack of time to work with the technology or train in its use, and incompatible curriculum. Furthermore, these challenges can have different manifestations in different ELT stages (technical barriers; Concrete Experience vs. reflection barriers (Reflective Observation): A comprehensive investigation of these stage-specific challenges would prove invaluable in offering generalized findings concerning teachers' support and pre-service training.

Third, there is a focus on short-term interventions in the literature with insufficient attention to long-term outcomes. A lot of research demonstrates immediate effects on motivation or on test scores after a few weeks of game-based learning, but very little on whether these effects last over time. There are questions about whether motivation, learning strategies for listening, and the application of such skills to actual communicative situations are sustainable. Besides, there is a lack of research on the effectiveness of

interactive games in different educational contexts, especially in non-Western ones e.g. Chinese primary schools.

It is important to address these gaps if we are to move theory and practice forward. Integrating ELT and game-based learning and creating a related assessment instrument as an extension, subsequent research will be able to better explain the relationship between interactive games and listening comprehension. Grounded in experience The study makes a contribution to bridging these gaps by associating the experiential learning cycle with evidence-based classroom practice, thereby presenting a model which is at once theoretically robust and practically feasible.

3. Methodology

3.1. Research Design

The research employed a descriptive type of quantitative research design and it sought to investigate the effect of interactive games on developing English listening comprehension in the light of Kolb's Experiential Learning Theory (ELT) to propose an assessment model. The purpose of this study was to explore the students' as well as the teachers' perceptions and experiences of using interactive games in the teaching of English listening. The study adopted a structured survey methodology to produce data that could be quantified to explore trends and patterns as well as possible relationships between variables related to the four ELT Stages: Concrete Experience (CE), Reflective Observation (RO), Abstract Conceptualization (AC), and Active Experimentation (AE).

Using a quantitative approach was appropriate as it is capable of providing objective and numeric measurements of participants' answers to questions, analyzing the attitudes and behaviors statistically, and comparing views among various groups of respondents demographically. It was this descriptive nature of the study that allowed the researcher to make an informed determination of the viability of the use of interactive games into that school's classroom.

3.2. Participants

The participants were 200 primary students and 15 English teachers from Olympic Primary School in Hefei, Anhui Province, China. The students were in Grades 4 to 6 and they had mixed levels of English listening proficiency. The group of teacher participants ranged from three to twelve years of experience. The purposive sampling technique was used to select participants, All the participants had experience in English listening and they possess the classroom technologies which could be used for interactive learning.

Summary Demographic Information of Responses. The table presents a nearly equal number of male and female students, various years of teaching experience for the teachers, and more than one grade level, which allows the results to generalize more broadly to the target school in terms of English listening teaching.

Table 1. Demographic Characteristics of Participants.

Group	N	Male	Female	Grade Level	Experience Range
Teachers	15	5	10	Grades 3–6	3–12 years
Students	200	100	100	Grades 4–6	Mixed proficiency

Table 1. consisted of 100 males and 100 females, and the teacher sample was female-dominated (15 teachers, 10 were female). The variety of grade levels and years of teaching experience among participants contributed to a richer understanding of the utilization of interactive games in different classroom settings.

3.3. Instruments

This research was conducted utilizing two base questionnaires, namely, one for students and another for teachers, aligned with the four stages of ELT model respectively. A 5-point Likert scale from 1 ("Strongly Disagree") to 5 ("Strongly Agree") was used in each questionnaire to indicate the participants' level of agreement toward the statements about game-based listening activities.

1) the student's questionnaire included items on motivation, engagement, understanding development and reflection while performing game-based listening tasks.

2) The teacher survey gauged attitudes toward teaching efficacy, engagement of students in class, and difficulties in teaching interactive games.

The items were confirmed with an expert validity by three senior-level English educators, which was content related, clear and consistent with the dimensions of ELT. Before conducting the main survey, a pilot test with 30 students was carried out in order to establish the reliability and the understandability of the instrument. The pilot Cronbach's alpha coefficients were all above 0.85, showing a high internal consistency.

3.4. Data Collection and Analysis

Data were collected over the course of four weeks during the spring term. All surveys were paper-based and completed under the supervision of the classroom teacher. The students answered the questionnaires in their normal English classes, and the teachers took part on their own. Voluntary participation ensured honest reporting, and responses were anonymized to protect participants from any potential risks.

The data were processed in SPSS (Statistical Package for the Social Science). Descriptive statistics (means, standard deviations, and weighted mean scores) were conducted to analyze the general trend of the participants' answers. For interpreting the consolidated data at the level of the four ELT dimensions, the weighted mean was really helpful. Frequency distributions were calculated to determine the most frequently perceived difficulties of teachers in carrying out orally interactive, game-based listening teaching.

The following commonly used scale was employed to interpret mean scores:

4.20–5.00 = Strongly Agree

3.40–4.19 = Agree

2.60–3.39 = Neutral

1.80–2.59 = Disagree

1.00–1.79 = Strongly Disagree

Such classification enabled the researcher to convert statistical results into qualitative ones in order to qualitatively meaningful conclusions about the attitudes of the participants.

3.5. Ethical Considerations

The study was conducted under the rigorous ethical standards for nonhuman primate research set forth by the United States Public Health Service. Permission from the school principal and informed consent from the parents/guardians of the students were obtained prior to collection of data. The participation was voluntary and respondent could drop at any time during the course of survey without any consequence. All information was treated as confidential, and no personal identifiers were obtained.

Teachers were assured that their answers would be analyzed for academic research purposes only and would not be used to judge them professionally. Likewise, students were told that the results would not be used in their course grades. The research protocol was thus in accordance with both institution and educational ethics, being fully transparent, anonymous and respectful of the participants.

4. Results

The quantitative results obtained from the students and teachers questionnaires are structured based on Kolb's four stages of ELT (Kolb, 1984) which includes Concrete Experience (CE), Reflective Observation (RO), Abstract Conceptualization (AC), and Active Experimentation (AE). The investigation is centered around four principal dimensions: students' responses to interactive game-based listening, teachers' views on ELT-oriented classroom activities, difficulties in application, and students' perceived advances in listening. Mean scores and weighted averages were used to estimate the magnitude of the agreement among the participants, supported by qualitative interpretations of their answers.

4.1. Students' Perceptions of Interactive Games in Listening Comprehension

Table 2 presents the students' overall perceptions of interactive game-based learning across the four ELT dimensions. The findings indicate that students generally agreed or strongly agreed that interactive games positively influenced their listening comprehension experiences.

Table 2. Students' Perceptions of Interactive Games under ELT Dimensions.

Dimension	Weighted Mean	Interpretation
Concrete Experience	4.23	Strongly Agree
Reflective Observation	3.66	Agree
Abstract Conceptualization	3.17	Agree
Active Experimentation	4.02	Agree
Grand Mean	3.77	Agree

As tabulated in Table 2, the highest total mean score was obtained in Concrete Experience ($M = 4.23$), followed by Active Experimentation ($M = 4.02$). This implies that students were most enthusiastic about the hands-on and engaging elements of game-based listening activity. Several students reported that they received authentic exposure to spoken English through play, such as by following narratives, responding to verbal prompts, and engaging in real-life communicative tasks. These opportunities enabled them to connect emotionally and intellectually, changing listening from a passive activity to a captivating learning adventure.

Meanwhile, Reflective Observation ($M = 3.66$), and Abstract Conceptualization ($M = 3.17$) achieved relatively lower mean grades. That suggests there were fewer students who reflected or conceptualised about the game at a deeper level, although they were clearly participating in the game as players. This sequence is typical for elementary-level learners, who tend to favor doing rather than thinking. The overall grand mean of 3.77 which indicated a positive attitude as a whole (> 3.50) recommended that games based on interaction can increase the engagement and understanding of students in teaching English listening.

4.2. Teachers' Perspectives on ELT-Based Classroom Practice

The teachers' responses reflected the positive perceptions of the students, but also contained a more balanced and pedagogically reflective perspective. As shown in Table 3, it was observed that the mean values of all dimensions of ELT were higher than 3.60 which means the teachers agreed on the fact that the interactive games helped to improve listening comprehension skills.

Table 3. Teachers' Perceptions of Interactive Games under ELT Dimensions.

Dimension	Weighted Mean	Interpretation
Concrete Experience	4.04	Agree

Reflective Observation	3.61	Agree
Abstract Conceptualization	3.79	Agree
Active Experimentation	3.85	Agree
Grand Mean	3.82	Agree

As it is shown in Table 3, teachers rated Concrete Experience [M (mean) = 4.04] and Active Experimentation (M = 3.85) as the most influential stages. That is to say, that teachers believed/they believed that they saw real gains in students' motivation to listen and listening performance when students were participating in game-based lessons!The teachers felt that students were more focussed and active listeners while playing games. The teachers noted that such (touch screen) games allowed them to more effectively reach previously passive students and gave them greater leeway in differentiated instruction, as the students proceeded at varying speeds.

The mean for Reflective Observation (M = 3.61) is, however, somewhat lower and this may suggest that reflective was less extremely carried out in the classroom routine. Some teachers complained that time constraints prevented them from conducting guided discussions or debrief sessions following gameplay. Similarly, while Abstract Conceptualization (M = 3.79) demonstrated that students could derive listening strategies from their gameplay experiences, it was clear that this was not a simple matter for them. Overall, the teacher grand mean of 3.82 is sufficient to say that it teaches for teachers listening teaching in a integrated approach in this case interactive games in the ELT setting is feasible and beneficial for in listening.

4.3. Challenges Encountered by Teachers

While the results above highlight the positive effects of interactive games, the teacher questionnaire also revealed several challenges encountered during classroom implementation. These challenges are summarized in Table 4.

Table 4. Summary of Main Challenges Reported by Teachers.

Challenge Category	Frequency	%	Example
Technical barriers	10	66.7	Device or software issues
Limited training	9	60.0	Lack of digital literacy
Time constraints	8	53.3	Game setup and evaluation
Resource limitations	7	46.7	Insufficient support materials

As outlined in Table 4, the most common problem was technical barriers (66.7%), such as unstable internet connections, a broken equipment, or software incompatibility. These problems frequently interrupted the pace of teaching and consumed class time. The second most prevalent concern was insufficient teachers training (60.0%), revealing that numerous teachers were not confident in their ability to effectively utilize digital platforms or they were unsure how to map game-based learning activities to curriculum standards.

Another major concern was the time consumption (53.3%) with which preparing the games, organizing the students' participation, and evaluating their performance took away from teaching time. Lastly, the consistent use of interactive games was limited by resources (46.7%) — too few teaching materials and/or a lack of support from school management.

Nonetheless, the teachers showed high interest in further 探索 ing interactive approaches, and commented that with better technical support and professional development, game-based learning may well be a viable pedagogical approach.

4.4. Students' Self-Reported Improvement in Listening Skills

The final section of the results focuses on students' perceptions of their own progress in specific listening skill areas after participating in interactive game-based activities. The summarized data are presented in Table 5.

Table 5. Students' Perceived Improvement in Listening Skills.

Skill Aspect	Improvement Level (Mean)	Description
Listening accuracy	4.34	Improved recognition of key information
Instruction comprehension	4.01	Better understanding of spoken commands
Engagement & motivation	4.11	More active participation
Strategy use	3.88	Trying different listening methods

Students reported the largest gain in listening accuracy ($M = 4.34$), which is their raised awareness in listening for key words, phrases, and other information in the spoken input. This result is consistent with the immersive and repetitive style of interactive games, where learners are exposed to auditory information numerous times in authentic situations.

There were also significant improvements in understanding instructions ($M = 4.01$) and the desire to participate and potential motivation for doing so ($M = 4.11$). The students felt the game-tasks make them more easily grasp the instructions in the classroom and keep them concentrated for a longer time. Playing the games with interactive and competitive characteristics created excitement and a sense of achievement, and this also contributed to positive feelings when engaging in English listening activities.

Lastly, although strategy use ($M = 3.88$) was rated somewhat lower, it still reflected that a large number of participants were trying out different methods when listening, including predicting, inferring and confirming meanings while "doing business". This result supports the argument that interactive learning contexts promote the increase of metacognitive listening strategies even in young learners.

5. Discussion

The results of this research conclusively support that interactive games in ELT context promote a better English listening comprehension. The findings indicated that CE and AE were the best stages to enhance motivation and understanding, and RO and AC were the weakest stages. such trends indicate that students have the most positive gains with content-based, experiential, and feedback-oriented activities in terms of motivation and competence developments, rather than receptive or reflective activities.

Effects on Strength in Concrete Experience underscore the value of genuine exposure and sensory participation in the listening activity. Interactive games place users in realistic sound situations, where they must answer to the spoken cues, give multiple answers, or follow spoken instructions. These interactive teaching strategies facilitate students' ability to think more actively and to remember vocabulary and expressions more easily. The interactive, game-oriented environment turns listening into more of an experiential activity rather than a testing skill, enabling students to associate sounds with actions and emotions. This change is congruent with the basic principle of ELT—that knowledge is acquired through real, as opposed to virtual, experience.

Also, our persistent high scores in Active Experimentation reveal that our students wanted to actively engage in applying their knowledge by means of varied practice and situational challenges. The nature of interactive games is to stimulate experimentation, as gamers are forced to take rapid decisions, change tactics and manage feedback. This iterative progression parallels the theoretical stage in ELT, during which learners evaluate

their ideas in novel contexts. The synergy of engagement, autonomy and immediate reward creates cognitive and affective involvement in learning and results in more profound and long-lasting benefits in listening comprehension.

The relatively lower means of Reflective Observation and Abstract Conceptualization imply that although interactive games promote engagement, they do not necessarily foster deeper reflection or theoretical abstraction. Many students could remember and apply listening strategies, but few could think critically about their performance or apply broad principles of comprehension. This gap suggests the need for sequenced reflection activities in game-based learning. For example, teachers might require brief discussions after the game, listening journals, or guided self-assessments that ask students to explain what they learned, why certain strategies were effective, and how that learning could be transferred to other listening situations. Such measures would enhance the reflective and conceptual aspects of the experiential learning cycle and thereby make games not only captivating experiences but also supporting tools for metacognitive development (See Appendix).

From the perspective of the teachers the results indicated that the use of interactive games on the whole provided strong motivation for the students and offered varied classroom activities, although difficulties in implementing them still remained. The most prominent concerns were technical restrictions, lack of training, time limitations, and insufficient resources. These are the challenges of introducing digital pedagogy in established classroom traditions. Technical challenges caused lessons to stall and become less effective, and lack of teacher training curtailed the pedagogical potential of game-based tools. Time management was reported as a significant challenge, as teachers had difficulties in dividing time between the curriculum, gameplay, and teachers' workload in terms of evaluating students' work.

These findings support the need for institutional support—in terms of infrastructure and in terms of professional development—to allow for effective, sustainable implementation of game-based learning.

The educator responses also emphasize a key pedagogical takeaway: While interactive games do facilitate immediate engagement, how engaging these games are for the purposes of learning relies heavily on the teacher's ability to direct, scaffold, and relate game play to specific learning goals. In the absence of adequate feedback and opportunities for reflection, games risk becoming viewed simply as entertainment rather than as structured learning experiences. As a result, teachers are essential to bridging the experiential engagement with conceptual understanding. They need to serve both as facilitators of play, and as mediators of meaning: facilitating connections between students' in-game actions and linguistic and cognitive outputs.

Underpinned by Experiential Learning Theory, the findings support the presupposition of theory that learning is enhanced with an appropriate balance between the two poles of experience and reflection, doing and thinking. The fun factor of interactive game clearly stimulated Concrete Experience and Active Experimentation as learners interacted, responded, and executed knowledge on the fly while they had fun playing games. However, the results of Reflective Observation or Abstract Conceptualization were somewhat less favorable, suggesting the cycle of experience was not fully realized. To the best of our knowledge, to take full advantage of the potential learning benefits of ELT in a game-based environment, teachers must craft a lesson including explicit tasks/strategies for reflection, analysis, and theorizing following each energetic session of gaming hostilities. This synthesis would conclude the cycle of experience and result in more outcome-rich learning.

Broader Implications Of The Study Findings Furthermore in implication to English language education. They imply that listening comprehension should not be limited to listening as a passive act but be viewed as a process of perception, reflection and experimentation. Interactive games can be used to realize this method, particularly in situations where the traditional method is not enough to spark the interest of students.

When tied to meaningful practice, such games produce positive emotions that may also contribute to enhancing long-term language retention and learner autonomy.

Overall, the discussion shows that interactive game-based learning is a good match for the strategic elements of Experiential Learning Theory. It facilitates active learning, relevance, and motivation, and reveals areas in need of improvement, especially in reflection and conceptualization. Filling these voids calls for purpose-driven instruction design, better teacher preparation, and supportive institutional mechanisms. Under such circumstances, interactive games have the potential to transform the English listening instruction, which traditionally is considered as a mundane classroom activity, into an experiential and thought-provoking learning experience.

6. Conclusion and Recommendations

This research investigated the effect of interactive games on English listening comprehension based on ELT. The results of the quantitative analysis on the opinions of learners and instructors suggested that the game-based interaction could positively support the improvement of learners' listening skills along with their motivation and strategic awareness. Interactive games were equally appreciated by teachers and students as an effective means of shaping a more motivating, authentic and cooperative class context. Concrete Experience and Active Experimentation were the two most dominant of the four ELT modes, indicating that students learn best by doing and by direct experience.

This study also led to the design of the ELT-based LC assessment (ELT-LCA) model to quantitatively ascertain learning outcomes across the whole process of EL. This model is a theoretical and practical instrument for assessing not only the performance of students, but also their experience, reflection, conceptualization and experimentation. When following this cyclical pattern in classroom activities, teachers will have a better understanding of the processes their students use to make meaning and apply listening strategies in various contexts.

Although the results validate the teaching usefulness of interactive games, they also identify weaknesses. Technical barriers, inadequate training, lack of time and resources were all cited by teachers as impediments to incorporating GBL fully. Overcoming these barriers involves institutional support in upgrading the technology, ongoing professional development, and the adaptation of teaching schedules in a way that supports the implementation of experiential learning.

On the basis of the conclusions, the following are recommended:

- 1) Institution and economy support need to be enhanced. The school should provide stable digital infrastructure, sufficient access to the interactive platform, and technical support services to ensure the smooth operation in the classroom.
- 2) Improve teacher training and pedagogic quality. Workshops should be held regularly in order to train the teachers to apply the principles of ELT Teaching to Distance Teaching, to prepare reflective post-study work and to handle timing.
- 3) Make reflective game design part of curricula. There should be elements of structured reflection, such as post-game discussions or self-assessment assignments, integrated into courses as a means of reinforcing the reflective and conceptual aspects of the learning experience.
- 4) Broaden future researches. Additional research will need to incorporate longitudinal studies at varying geographic and educational levels to determine the long-term effects of game-enhanced learning on listening and language development as a whole.

In summary, this research confirms that within experiential learning theory constructs, interactive games provide a means to revolutionize English listening teaching effectively. They engage, reflect, and apply the learning and in doing so enhance their

listening skills and promote a more independent, motivated and thoughtful new generation of learners.

References

1. D. A. T. Rodríguez, M. R. A. Ramírez, M. I. C. Vargas, and E. M. S. Chamba, "Gamification strategies on the development of English listening comprehension skills," *Revista Multidisciplinaria Investigación Contemporánea*, vol. 1, no. 2, pp. 30–57, 2023, doi: 10.58995/redlic.ic.v1.n2.a51.
2. T. Y. Tai and H. H. J. Chen, "The impact of immersive virtual reality on EFL learners' listening comprehension," *Journal of Educational Computing Research*, vol. 59, no. 7, pp. 1272–1293, 2021, doi: 10.1177/0735633121994291.
3. M. Mukhtorova and X. Ilxomov, "How to improve listening skills of both ESL and EFL students," *Qo 'Qon Universiteti Xabarnomasi*, vol. 11, pp. 84–86, 2024, doi: 10.54613/ku.v11i11.964.
4. T. Y. Tai and H. H. J. Chen, "The impact of intelligent personal assistants on adolescent EFL learners' listening comprehension," *Computer Assisted Language Learning*, vol. 37, no. 3, pp. 433–460, 2024, doi: 10.1080/09588221.2022.2040536.
5. Y. Jiang, Y. Chen, J. Lu, and Y. Wang, "The effect of the online and offline blended teaching mode on English as a foreign language learners' listening performance in a Chinese context," *Frontiers in Psychology*, vol. 12, p. 742742, 2021, doi: 10.3389/fpsyg.2021.742742.
6. M. Ahmadi Safa and F. Motaghi, "Cognitive vs. metacognitive scaffolding strategies and EFL learners' listening comprehension development," *Language Teaching Research*, vol. 28, no. 3, pp. 987–1010, 2024, doi: 10.1177/13621688211021821.
7. A. Toleuzhan, G. Sarzhanova, S. Romanenko, E. Uteubayeva, and G. Karbozova, "The Educational Use of YouTube Videos in Communication Fluency Development in English: Digital Learning and Oral Skills in Secondary Education," *International Journal of Education in Mathematics, Science and Technology*, vol. 11, no. 1, pp. 198–221, 2023.
8. S. A. Tilwani, B. Vadivel, Y. C. Uribe-Hernández, I. S. Wekke, and M. M. F. Haidari, "The impact of using TED talks as a learning instrument on enhancing Indonesian EFL learners' listening skill," *Education Research International*, vol. 2022, no. 1, p. 8036363, 2022, doi: 10.1155/2022/8036363.
9. D. I. Pratiwi and B. Waluyo, "Autonomous Learning and the Use of Digital Technologies in Online English Classrooms in Higher Education," *Contemporary Educational Technology*, vol. 15, no. 2, 2023.
10. K. F. Hew, W. Huang, J. Du, and C. Jia, "Using chatbots to support student goal setting and social presence in fully online activities: Learner engagement and perceptions," *Journal of Computing in Higher Education*, vol. 35, no. 1, pp. 40–68, 2023, doi: 10.1007/s12528-022-09338-x.
11. R. Al-Jarf, "Mobile Audiobooks, Listening Comprehension and EFL College Students," *Online Submission*, vol. 9, no. 4, pp. 410–423, 2021.
12. A. D. Tiara, M. A. Rahman, and C. Handrianto, "The students perception about use of duolingo application for improving english vocabulary," *International Journal of Education, Information Technology, and Others*, vol. 4, no. 4, pp. 690–701, 2021.
13. Y. Ghonivita, J. Pahamzah, M. A. Wijayanti, and U. Sultan, "Improving students' listening skill and vocabulary mastery through contextual teaching and learning," *Journal of English Language and Cultural Studies*, vol. 4, no. 1, pp. 1–12, 2021.
14. R. Rintaningrum, "Technology integration in English language teaching and learning: Benefits and challenges," *Cogent Education*, vol. 10, no. 1, p. 2164690, 2023, doi: 10.1080/2331186X.2022.2164690.
15. N. Mukharramkhon and M. Parizoda, "TOURISM AS A TOOL FOR ENGLISH LANGUAGE ACQUISITION," *Qo 'Qon Universiteti Xabarnomasi*, vol. 13, pp. 120–122, 2024, doi: 10.54613/ku.v13i.1038.
16. B. Zou, X. Guan, Y. Shao, and P. Chen, "Supporting speaking practice by social network-based interaction in artificial intelligence (AI)-assisted language learning," *Sustainability*, vol. 15, no. 4, p. 2872, 2023, doi: 10.3390/su15042872.
17. R. A. Prayudi, A. K. Hakiki, N. R. D. Putra, T. O. Anzka, and M. T. Ihsan, "The use of technology in english teaching & learning process," *Jurnal Riset Dan Inovasi Pembelajaran*, vol. 1, no. 2, pp. 102–111, 2021, doi: 10.51574/jrip.v1i2.38.
18. M. Muthmainnah, A. Khang, A. Al Yakin, I. Oteir, and A. N. Alotaibi, "An innovative teaching model: the potential of metaverse for English learning," in *Handbook of Research on AI-Based Technologies and Applications in the Era of the Metaverse*, pp. 105–126, IGI Global, 2023, doi: 10.4018/978-1-6684-8851-5.ch005.
19. A. Saeedakhtar, R. Haqju, and A. Rouhi, "The impact of collaborative listening to podcasts on high school learners' listening comprehension and vocabulary learning," *System*, vol. 101, p. 102588, 2021, doi: 10.1016/j.system.2021.102588.

Disclaimer/Publisher's Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of SOAP and/or the editor(s). SOAP and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.