GAMES IN ENGLISH LANGUAGE TEACHING

The rapid transformation of education in the digital era has encouraged English Language Teaching (ELT) practitioners to rethink how learning experiences are designed, delivered, and evaluated. Among the many pedagogical innovations that continue to shape contemporary ELT, game-based learning has emerged as one of the most engaging, adaptive, and learner-centered approaches. Games are no longer perceived merely as entertaining classroom activities; rather, they are increasingly recognized as powerful pedagogical tools capable of fostering communication, collaboration, creativity, critical thinking, and meaningful language use. This book, Games in English Language Teaching, presents a collection of scholarly and practical perspectives on how games can transform English language learning across various educational contexts.

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Chapter 3

Games for English Teaching-Learning and Assessment with Artificial Intelligence

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1. INTRODUCTION

The rapid advancement of digital technologies has significantly transformed contemporary education, particularly in English language teaching (Maknun, 2026). Traditional teacher-centered approaches are increasingly challenged by the need to create more engaging, interactive, and learner-centered environments. One major issue in English classrooms is students' low motivation and passive participation, especially when learning activities rely heavily on textbooks and conventional assessment methods. In response to this challenge, gamification has emerged as a promising pedagogical approach that integrates game elements, such as points, levels, and challenges, into learning activities to enhance student engagement and motivation. Recent studies highlight that gamification can foster active participation and sustained interest; however, it also faces criticism for promoting superficial learning and overreliance on extrinsic rewards when not carefully designed (Adi et al., 2026). This indicates a need for more sophisticated approaches that go beyond traditional gamified practices.

The integration of Artificial Intelligence (AI) into gamified learning environments represents a significant development in

addressing these limitations. AI has transformed gamification from a static motivational tool into a dynamic, adaptive learning system that can personalize instruction and provide real-time feedback (Wu & Wang, 2026). In language learning contexts, AI-driven gamification enables learners to receive immediate corrections, tailored challenges, and individualized learning paths, thereby improving both engagement and cognitive development (Kassenkhan, 2026; Maknun, 2020). Moreover, AI technologies, such as natural language processing and learning analytics, allow for more meaningful interaction with language content, supporting learners in developing critical thinking and communicative competence (Torres-Toukoumidis, 2025). This evolution reflects a broader shift toward intelligent, data-driven educational ecosystems that respond to learners' needs in real time.

Despite these promising developments, several challenges remain unresolved, particularly the effective integration of AI-based games into teaching, learning, and assessment practices. Concerns such as cognitive overload, reduced authenticity of language use, and overdependence on AI tools highlight the importance of pedagogical balance and thoughtful instructional design (Fajaria et al., 2026; Salmanova, 2025). Therefore, exploring "games for teaching-learning and assessment with AI" becomes crucial, not only to harness the motivational benefits of gamification but also to ensure meaningful, authentic, and equitable learning experiences. This chapter aims to address these issues by proposing innovative ways to design and implement AI-supported games in English classrooms, ultimately enhancing both learning outcomes and assessment practices in a holistic and engaging manner.

2. DISCUSSION

The integration of games and Artificial Intelligence (AI) in English language teaching, learning, and assessment represents a transformative shift from traditional instructional practices toward more adaptive, engaging, and data-driven approaches.

This section explores how AI-enhanced games can be strategically designed and implemented to support language acquisition while simultaneously serving as effective assessment tools. By combining pedagogical principles with technological affordances, AI-powered games offer opportunities to personalize learning, promote active participation, and generate meaningful feedback. The following subtopics provide a comprehensive discussion, ranging from theoretical foundations to practical implementation and assessment integration in English classrooms.

2.1 Theoretical Foundations of Game-Based Learning and AI in English Education

Game-based learning (GBL) is grounded in constructivist and socio-cultural theories, where learners actively construct knowledge through interaction, collaboration, and meaningful experiences. In English language teaching, games create authentic contexts for communication, allowing students to practice vocabulary, grammar, and discourse skills in a low-anxiety environment. The addition of AI further strengthens this framework by enabling adaptive learning systems that respond to individual learner needs. AI technologies, such as natural language processing (NLP) and machine learning, support real-time interaction and personalized scaffolding, aligning with Vygotsky's concept of the Zone of Proximal Development (ZPD). As noted by Deterding et al. (2011), gamification enhances motivation through meaningful engagement, while AI ensures that such engagement is cognitively appropriate and tailored to learners' proficiency levels.

2.2 Designing AI-Enhanced Games for English Teaching and Learning

Effective design of AI-powered games requires integrating pedagogical objectives, game mechanics, and intelligent systems. Key elements include clear learning outcomes, interactive challenges, instant feedback, and adaptive difficulty levels

(Maknun, 2024). AI can analyze learner performance and dynamically adjust content, ensuring tasks remain challenging yet achievable. For example, AI chatbots can simulate real-life conversations, enabling students to practice speaking and writing skills in authentic contexts (Hastomo et al., 2025). Moreover, incorporating storytelling, role-playing, and problem-solving elements can foster higher-order thinking skills and communicative competence (Hasbi, 2026). However, educators must carefully balance entertainment and educational value to avoid superficial engagement. Thoughtful instructional design ensures that games are not only fun but also aligned with curriculum goals and language learning standards.

2.3 AI-Driven Games for Language Assessment: From Assessment *of* Learning to Assessment *for* Learning

One of the most significant contributions of AI-enhanced games is their potential to transform language assessment. Traditionally, assessment has been summative and product-oriented, often failing to capture learners' ongoing development (Maknun et al., 2024). AI-driven games enable continuous, formative assessment by collecting real-time data on learners' performance, such as response accuracy, fluency, and interaction patterns. This allows teachers to monitor progress and provide immediate, personalized feedback. Furthermore, AI can support assessment for learning and serve as a learning tool, enabling students to become active participants in evaluating their own progress through game-based feedback systems. According to Holmes et al. (2019), AI in education facilitates more nuanced and comprehensive assessment practices, offering insights that go beyond traditional testing methods.

To help EFL teachers better understand how AI can be meaningfully integrated into game-based assessment, it is important to move beyond abstract concepts and look at concrete examples of AI-driven tools. These tools illustrate how assessment can shift from *assessment of learning* (summative, result-oriented) to *assessment for learning* (formative, process-oriented) and even

assessment as learning (self-regulated, reflective) (Maknun et al., 2024). The following examples highlight different types of AI-powered games that can be used to assess English language skills in engaging and pedagogically sound ways.

AI Chatbot-Based Role-Playing Games (e.g., Duolingo, ChatGPT)

AI chatbots can simulate real-life communication scenarios through role-playing games, such as ordering food, attending job interviews, or making travel arrangements. In these environments, learners interact with AI as if they were communicating with real people. The AI analyzes learners' input for grammar, vocabulary, fluency, and appropriateness, then provides immediate feedback. Assessment value:

- Assessment for learning: Instant corrective feedback helps learners improve during the activity.
- Assessment as learning: Students reflect on their responses and self-correct.
- Teachers can track interaction logs to evaluate communicative competence over time.

Adaptive Vocabulary and Grammar Games (e.g., Quizizz, Kahoot!)

These platforms use AI algorithms to adjust the difficulty level based on students' responses. For example, if a student consistently answers correctly, the system presents more challenging questions; if not, it provides simpler items or review tasks.

- Assessment value: Moves beyond one-time testing toward continuous formative assessment.
- Provides detailed analytics (accuracy, response time, misconceptions).
- Enables differentiated assessment for mixed-ability classrooms.

AI-Powered Storytelling and Simulation Games (e.g., Classcraft)

In AI-supported storytelling games, students engage in narrative-based missions that require them to use English to solve problems, make decisions, or collaborate with peers. AI can guide the storyline based on student input, creating a personalized learning journey (Maknun & Widyaningsih, 2022).

Assessment value:

- Assesses higher-order skills, including critical thinking, creativity, and discourse competence.
- Supports authentic assessment by embedding evaluation in meaningful contexts.
- Encourages collaborative and communicative language use.

Speech Recognition and Pronunciation Games (e.g., ELSA Speak)

AI-powered speech recognition tools analyze learners' pronunciation, intonation, and fluency. These tools provide detailed phonetic feedback and scoring, helping students identify specific areas for improvement.

Assessment value:

- Offers a precise, individualized pronunciation assessment.
- Enables repeated practice with immediate feedback (formative assessment).
- Reduces teacher workload while maintaining assessment quality.

These examples demonstrate that AI-driven games are not merely tools for engagement but powerful systems for continuous and meaningful assessment. They allow teachers to collect rich, real-time data about students' learning processes rather than relying solely on final test scores. Importantly, such tools support a shift toward assessment for learning, where feedback is ongoing and actionable, and assessment as learning, where students actively monitor their own progress.

However, teachers should remain critical users of technology. AI tools must be aligned with learning objectives, and

their use should be balanced with human interaction and pedagogical judgment (Sari, 2024). As Holmes et al. (2019) emphasize, AI should enhance teachers' decision-making rather than replace it. Similarly, Luckin et al. (2016) argue that effective AI integration depends on thoughtful instructional design that prioritizes learning over technology.

2.4 Challenges, Ethical Considerations, and Future Directions

Despite the benefits, implementing AI-based games in English classrooms presents several challenges. Issues such as data privacy, digital inequality, and overdependence on technology must be carefully addressed. Additionally, there is a risk that excessive gamification may prioritize extrinsic motivation over intrinsic learning goals. Teachers also need adequate training to effectively integrate AI tools into their pedagogical practices. Looking forward, future developments should focus on creating more ethical, inclusive, and pedagogically sound AI systems that support diverse learners. Collaboration among educators, researchers, and technology developers is essential to ensure that AI-enhanced games meaningfully contribute to language education rather than merely serve as technological novelties.

3. RECOMMENDATION

The integration of AI-powered games into English teaching, learning, and assessment continues to spark debate among educators and researchers. On the one hand, proponents argue that AI-enhanced games provide highly engaging, personalized, and data-informed learning experiences that can significantly improve students' language proficiency. These tools enable immediate feedback, adaptive difficulty, and authentic interaction, all of which are essential for effective language acquisition (Hasbi, 2026). On the other hand, critics caution against potential drawbacks, such as overreliance on technology, reduced human interaction, and the risk of prioritizing

entertainment over deep learning (Margana et al., 2026). Some scholars emphasize that without strong pedagogical grounding, AI-based games may lead to surface-level engagement rather than meaningful language development (Luckin et al., 2016). Therefore, the effectiveness of AI in game-based learning largely depends on how thoughtfully it is integrated into instructional design.

Another important consideration is the ethical and practical dimension of using AI in educational contexts. Issues such as data privacy, algorithmic bias, and unequal access to technology remain significant concerns, particularly in developing regions (Mualim et al., 2025). Teachers may also face challenges related to digital literacy and the additional time required to design or adapt AI-based games for classroom use. Nevertheless, when implemented responsibly, AI-driven games can support more inclusive and differentiated learning environments by catering to diverse learner needs and proficiencies. As Holmes et al. (2019) suggest, AI has the potential to augment, not replace, teachers by providing insights that inform more targeted and effective instruction. This highlights the importance of maintaining a balanced approach in which technology complements rather than dominates the teaching and learning process.

In conclusion, AI-enhanced games hold substantial promise for transforming English language education, particularly in fostering engagement and enabling continuous, formative assessment. However, their successful implementation requires careful consideration of pedagogical, ethical, and contextual factors. It is recommended that educators adopt a critical and reflective approach, combining AI tools with sound teaching practices and clear learning objectives (Astawa et al., 2026). Future research should focus on long-term impacts, best practices for integration, and strategies to ensure equitable access to AI technologies. By doing so, AI-powered games can move beyond novelty and become a meaningful component of effective and sustainable English language teaching and assessment.

Author

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