

## **INTEGRATION OF EDUCATIONAL GAMES IN INDONESIAN LANGUAGE LEARNING AT THE SENIOR HIGH SCHOOL LEVEL: OPPORTUNITIES AND CHALLENGES**

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### **Abstract**

The integration of technology in Indonesian language learning at the Senior High School level (SMA/MA/SMK) is becoming increasingly important in the digital era. One potential innovation is the use of educational games as a learning medium that can enhance students' motivation, creativity, and understanding in an interactive manner. However, the implementation of educational games also presents various challenges, such as device readiness, teacher skills, and the alignment of content with the curriculum. This study aims to explore the opportunities and challenges of integrating educational games in Indonesian language learning at the senior secondary level, to provide a strategic overview for educators and policymakers. The method used in this research is a literature review, conducted by examining various literatures and previous research related to the utilization of educational games and innovative learning in the digital era. After the data is collected through the literature review, a descriptive qualitative analysis is carried out as the next step to interpret the data. The results indicate that the integration of educational games has great potential to enrich the teaching and learning process, increase student engagement, and support the success of Indonesian language learning. However, this study also reveals technical barriers, including the critical role of teachers in guiding the use of games, the need for adaptive content development, and its compatibility with curriculum standards. This study is expected to contribute both theoretically and practically to the development of innovative learning models based on digital technology, especially educational games. Furthermore, the findings can serve as a reference for teachers, educational media developers, and policymakers in designing effective and sustainable strategies for implementing educational games in Senior High Schools (SMA/MA/SMK).

**Keywords:** Educational Games; Indonesian Language Learning; Senior High School.

### **INTRODUCTION**

The integration of educational games into the Indonesian language learning process at the senior secondary level is a learning innovation that has attracted the attention of educators and educational researchers. Educational games, which combine

entertainment elements with learning objectives, offer an interactive, contextual, and motivational approach, potentially increasing student engagement and enriching the holistic language learning experience. In the digital era, the existence of both online and traditional application-based game media opens up opportunities for adaptation within the Indonesian language curriculum in an effort to bridge the learning styles of Generation Z.

Despite its potential, according to Rahmayanti, et al, (2024), the implementation of educational games in Indonesian language learning at the senior secondary level still faces several challenges. First, there are limitations in developing game content that aligns with the competency standards and learning indicators set by the 2013 Curriculum and the Independent Curriculum. Consequently, there is often a mismatch between language learning objectives (e.g., vocabulary mastery, grammar, and communication skills) and the game mechanics presented. Second, teacher preparedness as facilitators is still suboptimal. Many teachers lack training in designing, managing, and assessing learning outcomes generated by game media, potentially reducing the effectiveness of such integration. Third, the majority of students face significant obstacles in learning Indonesian due to the dominance of conventional methods.

Traditional approaches that emphasize factual memorization and passive learning have implications for decreased intrinsic motivation. This limits active student participation and decreases the quality of language-based interactions in the classroom (Nurisa & Ghofur, 2019). As digital transformation expands learning opportunities, students are increasingly consuming interactive and technology-based media. However, the adaptation of educational games in the Indonesian language context remains spontaneous and not systematically integrated (Nehe, 2023). Technical barriers such as limited network and hardware infrastructure, a lack of teacher competency in designing game-based learning scenarios, and the availability of game materials aligned with curriculum standards exacerbate the gap between the potential of educational games and their practical implementation in the school environment (Danar, et al, 2022). Consequently, proven empirical benefits, such as increased student engagement, deeper conceptual understanding, and greater retention or retention of knowledge, have not been consistently realized in senior secondary education institutions.

From a social constructivist perspective, educational games must be holistically integrated into the Indonesian language curriculum so that the teaching and learning process shifts from a transmission-based model to an interactive, motivational, and student-centered one (Suarmini & Gede Nurjaya, 2023). This integration requires synchronization between learning objectives and game mechanics so that game activities serve as a foundation that supports the development of contextualized language knowledge. However, empirical evidence of contextualization within the Indonesian language subject within this discussion is still limited, particularly regarding cultural and normative aspects. The digital transformation accelerated by national policies demands rapid, inclusive, and data-driven learning solutions. Therefore, this research is urgently needed to identify the inhibiting and enabling factors for the integration of game-based learning into the Indonesian language curriculum and to open up opportunities for developing implementation models that can be adapted for high school learning.

Several literature reviews found by researchers indicate that educational games can improve motivation and learning outcomes in various subjects. At the elementary school level, Nehe (2023) study concluded that the use of challenge- and reward-based games increased interest in learning mathematics by 27% compared to conventional methods, and emphasized the important role of teachers in facilitating learning. At the junior high school level, Hidayat (2021) studied the integration of board games and mobile applications in Indonesian language learning, which was proven to significantly improve verbal interaction and writing skills. However, he noted a lack of alignment between the game's workings or mechanisms with the competency standards of the 2013 Curriculum and the Independent Curriculum. Meanwhile, Rozak, et al, (2023) implemented role-playing games (RPGs) to teaching poetry at senior high school students resulted in improved poetry analysis skills (an average increase of 1.8 points), but identified a major obstacle as the lack of teacher training in designing RPG scenarios aligned with curriculum standards.

This comparative study identified several unfilled research gaps. First, there has been no comprehensive study examining the application of educational games to Indonesian language learning across all levels at the high school level, encompassing reading, writing, listening, and speaking skills. Second, most research focuses on

motivation and short-term learning outcomes, without evaluating long-term impacts such as knowledge retention and the transfer of language skills to real-world contexts (presentations, debates). Third, the mismatch between game design and competency standards remains a challenge, necessitating a game model explicitly integrated with the Independent Curriculum and supported by learning analysis results to provide immediate feedback. Fourth, consistent findings regarding the lack of teacher competency underscore the need for a professional training module specifically for high school teachers in designing, implementing, and assessing game-based learning.

This research bases its primary theory on gamification. Gamification is the application of game elements to non-game contexts with the goal of increasing intrinsic motivation, engagement, and learning behavior (Deterding, et al, 2011). The primary motivational framework underlying gamification is Self-Determination Theory (SDT), which emphasizes three basic psychological needs: autonomy, competence, and relatedness (Deci & Ryan, 2000). When game elements are designed to meet these three needs, students tend to experience a sense of flow (Vygotsky, 1990) and demonstrate increased consistency and performance. In a learning context, these elements can be integrated with learning analytics to provide feedback, instructional differentiation, and self-directed learning (Hamari, et al, 2016).

## RESEARCH METHOD

The research method used was a literature review with a descriptive qualitative approach. The researcher conducted a systematic literature search through databases using keywords such as gamification, Indonesian language learning, high school, and digital learning. The selected literature included international journals, national journals, conference proceedings, dissertations/theses, and monographs. The research instruments included a search strategy, inclusion/exclusion criteria, and a data extraction sheet that recorded source identity, objectives, methodology, key findings, and implications for gamification in Indonesian language learning. Data validity was ensured through source triangulation. The data analysis used descriptive content analysis, which was then synthesized into an integrative narrative and critical interpretation regarding the potential

and challenges of integrating educational games into Indonesian language learning at the high school level.

## **RESULTS AND DISCUSSION**

### **1. Opportunities for Gamification in Indonesian Language Learning at the High School Level**

There are strategic opportunities that can be exploited to optimize the use of educational games in Indonesian language learning. Utilizing game platforms can provide immediate feedback on student learning progress and enable targeted differentiation of instruction. Furthermore, cross-disciplinary collaboration between language experts, game designers, and educational scientists can produce multidimensional game products, synergistically combining linguistic, cognitive, and social elements.

It is important to note that gamification is not solely about utilizing technology-based platforms. Gamification, in the context of this study, also generates recommendations from traditional sources or those that do not utilize technology. Therefore, this research seeks to comprehensively identify these opportunities and challenges and provide recommendations for policies and pedagogical practices that support the sustainable integration of educational games into the Indonesian language curriculum at the high school level.

After conducting an in-depth reference review, gamification that can be integrated into Indonesian language subjects at the high school level includes aspects of listening, reading, speaking, and writing. Furthermore, gamification is also very feasible from a linguistic and literary perspective. The following is a description.

#### **A. Listening Skills**

Gamification can be implemented in Indonesian language learning that emphasizes listening skills, for example, in dialogue and interpersonal discourse. In practice, students participate in virtual talk shows or podcast simulations, where they act as hosts or interviewees in Indonesian-language interviews. They must respond to questions verbally, with a speech-to-text and speech recognition system assessing clarity, intonation, and vocabulary accuracy. Each correct answer earns points, which can be exchanged for clues used in subsequent challenges. This activity builds active and responsive listening skills (Sulmayanti, et al, 2025).

## **B. Speaking Skills**

Gamification can be implemented in debates. Debates in Indonesian language learning are integrated into a tournament format with a scoring system. Each team gets 2–3 minutes to present their arguments, and the system assesses the quality of their speech based on criteria such as clarity of intonation, richness of vocabulary, sentence structure, and coherence. Score bonuses are automatically awarded if teams successfully achieve achievements such as "Independent Speaker," "Use of Idioms," or "Evocative Rhetoric." Winners are selected based on total points and can receive digital medals and certificates (Anshori & Bashir, 2025; Sulmayanti, et al, 2025).

## **C. Reading Skills**

Gamification can also be applied to reading skills, for example, reading narrative texts and short stories. Narrative texts with a clear plot structure (introduction, conflict, climax, resolution) are particularly well-suited to being transformed into mission-based games. These games organize learning as a series of tasks or main missions that students must complete step by step. In the context of Indonesian language learning at the high school level, this concept allows students to experience the learning process like an adventurer, moving from one challenge to the next to achieve the main goal, namely a deep understanding of the text. Another example is students can play the role of "literary detectives" who must complete the story's pieces to understand the plot and hidden meanings. Each story chapter becomes a level, and students earn points and rewards for completing challenges, such as guessing a character's motivation or guessing the ending based on clues (Anshori & Bashir, 2025; Sulmayanti, dkk., 2025).

## **D. Writing Skills Aspects**

Gamification in high school writing skills learning is an effective pedagogical approach to increase students' motivation and quality of writing by integrating game elements such as missions, experience points, levels, and reward systems into the writing process (Hamari, dkk., 2016). In practice, students can be given writing assignments in the form of step-by-step missions—such as writing a daily journal entry in a poetic style, an opinion essay, or a fictional story using specific vocabulary—equipped with an automated scoring system and artificial intelligence-based rubrics to provide quick and objective feedback. Students can also participate in a digital writing community, gain



reputation through positive peer criticism, and track their progress through leaderboards and level achievements such as "Beginner Writer," "Skilled Writer," and even "Legendary Writer" (Dicheva et al., 2015). This approach not only fosters consistent writing habits but also encourages digital literacy, collaboration, and constructive self-editing skills. Furthermore, tools such as Google Docs with voice typing, Miro for concept maps, and Storybird for writing illustrated stories significantly support this practical implementation.

### **E. Language**

Language materials such as Enhanced Spelling (EYD) can be designed in an engaging and effective way through interactive games like the Kahoot platform. This can be achieved by transforming spelling rules into exciting challenges in the form of multiple-choice questions, puzzles, or "true or false" modes, packaged with engaging narratives. Each question emphasizes a specific aspect of EYD, such as the use of punctuation (periods, commas, quotation marks), the spelling of loanwords, or the use of capital letters. Each correct answer earns points and a time bonus, while incorrect answers are explained with a brief explanation, complete with examples and EYD rules from the Indonesian Dictionary (KBBI). According to Suryanto (2020), these games can help students understand errors constructively. This kind of gamification approach not only enhances the absorption of EYD material in a fun way but also develops students' critical thinking skills and reaction time in a linguistic context.

### **F. Literature**

Meanwhile, for short stories and novels at the upper-secondary level, gamification can be made very fun and engaging by transforming reading and Analyzing text can be like a digital adventure! For example, teachers can create a "Short Story Adventure" on platforms like Kahoot! or Genially, where students complete a mini-mission after each chapter or short story: answer questions about specific characters, plot, setting, or meaning, with each correct answer earning "success points" or "secret keys" to move on. For example, if there's a mystery story or family drama, it could be like a digital escape room: students must find clues from key passages, decipher symbols, and then "open the door" to advance to the next chapter. This activity is expected to not only make learning

meaningful but also encourage students to gain a deeper understanding of story structure, characters, and themes (Rahmayanti, dkk., 2024).

## **2. Challenges of Gamification in Indonesian Language Learning at the High School Level**

Based on the literature review conducted by researchers, while gamification has significant potential for further development, it still faces challenges in its implementation. Some of these challenges include the role of the teacher as a guide, adaptive content, and the relevance of the developed gamification to the current curriculum. The following is an explanation.

The teacher's crucial role in guiding the use of games is one of the main challenges in gamifying Indonesian language learning. Teachers are not merely transmitters of material but must also act as facilitators, able to guide students in using game media effectively and in accordance with learning objectives. Teachers are required to design challenging activities while still providing constructive feedback to motivate students and prevent them from simply playing mindlessly. According to Daniar et al. (2022), teachers who are able to design challenge-based learning, provide constructive feedback, and manage the learning process effectively tend to be more successful in fostering student enthusiasm and interest in learning. This confirms that the success of gamification depends heavily on the teacher's skill in guiding and adapting games to students' needs.

The need to develop adaptive content is also a critical challenge in implementing gamification. Learning content must be tailored to students' needs, interests, and ability levels so that gamification is not merely entertainment but also optimally improves language competency (Rahmayanti, et al, 2024). The integration of elements such as points, badges, leaderboards, and challenges into writing activities can create a more interactive and enjoyable learning experience, thus requiring the development of adaptive content to suit varying student characteristics. This adaptive content supports personalized learning that can encourage student engagement and intrinsic motivation, which are crucial in the context of language learning.

The alignment of gamification with national curriculum standards is another equally important challenge. Gamification should not be simply a fun game but should be linked to the achievement of core competencies and basic competencies in the 2013



curriculum or applicable education standards. Gamification can be an integral part of modern instructional design, which significantly emphasizes active and meaningful learning experiences, provided it is aligned with the objectives and achievement indicators of the national curriculum (Nurisa & Ghofur, 2019). This requires careful learning planning so that game elements can systematically support the evaluation process and mastery of language material.

Overall, gamification in Indonesian language learning offers significant potential to increase student motivation, engagement, and competency achievement, particularly in language skills, linguistics, and literature. However, to achieve this effectively, challenges such as the active and competent role of teachers, content development that is responsive and adaptive to student characteristics, and alignment with curriculum standards must be anticipated and seriously addressed.

## **CONCLUSION**

Gamification in the current era significantly supports the implementation of Indonesian language learning at the high school level. It can, among other things, increase students' intrinsic motivation, enrich the reading and writing experience through game elements (points, badges, leaderboards), and foster critical thinking and collaborative skills digitally. However, the main challenges are evident in the role of teachers, who must transform into competent instructional designers capable of preparing adaptive content, monitoring game flow, and providing feedback based on artificial intelligence rubrics; content development must align with the applicable curriculum; and the unequal availability of resources across all schools, potentially creating learning gaps.

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