



Enhancing elementary students' reading interest through the spin the wheel digital game

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ARTICLE INFO

Article History

Received:

5 February 2025

Revised:

10 June 2025

Accepted:

19 December 2025

Available online:

22 December 2025

Keywords

Elementary education;

Gamification;

Indonesian language

learning;

Reading interest;

Spin the Wheel

ABSTRACT

This study aims to examine the planning, implementation, and challenges of using the Spin the Wheel digital game to enhance elementary school students' interest in reading Indonesian language textbooks. A descriptive qualitative approach was employed involving fourth-grade students, a classroom teacher, and a school principal at an elementary school in Bireuen Regency, Indonesia. Data were collected through observations, in-depth interviews, and documentation, and were analyzed using qualitative descriptive techniques with source and method triangulation to ensure trustworthiness. The findings reveal that the Spin the Wheel digital game was systematically integrated into Indonesian language instruction and supported created an interactive, enjoyable, and participatory learning environment. The implementation of the game increased students' reading interest, concentration, reading comprehension, and self-confidence while fostering positive attitudes toward reading activities. Several challenges were identified, including limited instructional time, inadequate supporting facilities, and differences in students' reading abilities. However, these challenges were effectively addressed through adaptive teaching strategies and institutional support. The study concludes that the Spin the Wheel digital game is an effective gamification-based learning medium for promoting reading interest among elementary school students. This study contributes to the growing literature on gamification in elementary education by providing empirical evidence of how digital game-based learning can support literacy development and create more engaging reading experiences in primary school classrooms.

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INTRODUCTION

Reading interest is an essential parameter in evaluating a nation's literacy level, reflecting the extent to which individuals are motivated to engage with written texts and develop literacy competencies. Reading interest has been identified as an important factor associated with literacy development and reading achievement (Dewani et al., 2025). Furthermore, literacy skills are fundamental for understanding, evaluating, and critically analyzing information in contemporary society (The Organisation for Economic Co-operation and Development, 2023). Unfortunately, Indonesia still faces significant challenges in this area. The results of the Programme for International Student Assessment (PISA) 2022 conducted by the Organisation for Economic Co-operation and Development (OECD) indicate that Indonesian students' literacy performance remains substantially below the OECD average, with only a relatively small proportion of students achieving minimum proficiency levels compared to students in many other countries (The Organisation for Economic Co-operation and Development, 2023). This condition suggests that literacy development remains a

critical issue in Indonesia and may affect individuals' ability to absorb, evaluate, and critically interpret information (Dewani et al., 2025).

The research problem concerns students' low interest in reading textbooks, which may be influenced by limited awareness of the benefits of reading and the lack of engaging reading materials in Indonesian language textbooks. Reading interest plays an important role in encouraging students to engage with texts and develop literacy competencies (Dewani et al., 2025). Low reading interest is a fundamental issue that affects the quality of human resources because reading is not merely the recognition of letters and words but a complex cognitive process involving comprehension, interpretation, critical analysis, and the integration of information (Barzilai et al., 2020; Wuwur, 2022). Furthermore, inadequate reading literacy may hinder students' critical thinking skills, creativity, and ability to solve problems in increasingly complex social and global contexts (The Organisation for Economic Co-operation and Development, 2023). Therefore, research on elementary school students' reading interest is essential to identify effective strategies for fostering a reading culture from an early age and building a strong literacy foundation for future generations (Dewani et al., 2025).

In the realm of education, reading interest is a crucial factor influencing the learning process because effective learning requires students to actively engage in understanding, interpreting, and processing information rather than merely receiving knowledge from teachers. Students with higher reading interest tend to demonstrate greater engagement and achievement in learning activities (Dewani et al., 2025; Komsu, 2024). However, the reality in Indonesia indicates that low literacy achievement is often associated with inadequate understanding of basic literacy concepts and the inconsistent implementation of literacy programs in schools (Mayrani & Ramadan, 2025; Setiani et al., 2025). These conditions highlight the need for sustainable literacy interventions that can foster students' reading interest and literacy development from an early age.

The importance of reading interest cannot be separated from its role in developing reasoning, critical evaluation, and problem-solving skills, which are essential components of students' cognitive development (Barzilai et al., 2020). Effective reading instruction should be implemented systematically through three key stages: pre-reading, during-reading, and post-reading activities (Duke et al., 2021). One indicator of successful reading comprehension is students' ability to retell or explain the content of a text using their own words (Duke et al., 2021). In elementary education, the post-reading stage is particularly important because it reflects the extent to which students comprehend and integrate information from a text rather than merely decoding words (Kim, 2023). When students demonstrate low reading interest, this process may not function optimally, resulting in weaker reading comprehension and difficulties connecting information to broader contexts (Barzilai et al., 2020). Therefore, this study investigates the implementation of the Spin the Wheel digital game as a gamification-based learning medium to increase students' interest in reading Indonesian language textbooks and to identify the supporting factors and challenges encountered during its implementation (Li et al., 2024).

Several previous studies have investigated the use of digital games and interactive media to improve students' reading interest and literacy skills at the elementary school level. Research by Selviana et al. (2025) revealed that interactive educational games positively influenced students' reading literacy, motivation, engagement, and interest in literacy activities. Furthermore, Kholisna and Sukasih (2025) found that gamification-based learning media significantly increased students' participation, motivation, and reading comprehension performance. Similarly, Gayatri et al. (2025) reported that educational game-based interactive media enhanced students' reading skills and understanding of learning materials by creating more engaging and enjoyable learning experiences. In addition, digital literacy platforms such as Let's Read have been shown to support reading literacy development and encourage positive learning experiences among elementary school students (Salsabila & Apoko, 2025).

The study emphasized that game-based learning creates a fun and meaningful learning environment that promotes students' engagement and motivation in learning activities (Li et al., 2024). Previous studies have also demonstrated the positive impact of educational games on literacy learning. Selviana et al. (2025) found that interactive educational games improved students' reading literacy, reading engagement, and motivation, encouraging them to participate more actively in

reading activities. Furthermore, gamification elements such as rewards, challenges, and achievements have been shown to increase students' persistence, motivation, and active participation in learning tasks (Hamari et al., 2016).

Research on interactive multimedia learning also revealed that digital media can enhance students' curiosity, attention, and learning interest by providing engaging and interactive learning experiences (Chen et al., 2025). In addition, Kholisna and Sukasih (2025) reported that gamification-based learning media fostered students' reading interest, positive learning attitudes, and reading comprehension. These findings suggest that digital learning tools and educational games are effective in adapting instruction to the needs of contemporary learners and supporting literacy development in elementary education (The Organisation for Economic Co-operation and Development, 2023).

Furthermore, previous studies have shown that gamification, defined as the use of game-design elements in non-game contexts, can create more interactive and enjoyable learning experiences (Deterding et al., 2011). In elementary education, game-based learning has been reported to support students' motivation and engagement (Alotaibi, 2024). More specifically, Wordwall-based gamification has been found to increase students' reading interest by providing interactive features that make reading activities more enjoyable and participatory (Swari, 2023; Yusri et al., 2025). In the Indonesian elementary school context, digital literacy game media have also been developed and validated to support fourth-grade students' reading interest (Muna et al., 2023). Based on these previous studies, digital game-based learning media can be considered a promising strategy for improving students' reading interest and motivation. However, limited research has specifically examined the implementation of the "Spin the Wheel" digital game in Indonesian language textbook learning at the fourth-grade elementary level. Therefore, this study aims to fill this research gap by investigating the use of Spin the Wheel digital games to improve students' reading interest in Indonesian language textbooks.

Therefore, this study addresses this gap by examining the implementation of the Spin the Wheel digital game in Indonesian language learning among fourth-grade elementary school students. The novelty of this study lies in its focus on understanding how a simple gamification-based learning medium can foster students' reading interest, reading engagement, and positive learning experiences, as previous studies have shown that gamification and game-based learning can significantly enhance learners' motivation, engagement, and participation in educational activities (Alotaibi, 2024; Wang et al., 2024). Furthermore, this study contributes to the growing body of literature on gamification and literacy development by providing empirical evidence from an Indonesian elementary school context, where research on the use of digital gamification for reading literacy remains relatively limited (Gayatri et al., 2025; Wang et al., 2024).

Accordingly, this study aims to describe (1) the planning of the Spin the Wheel digital game in Indonesian language learning, (2) its implementation in promoting students' reading interest, and (3) the challenges encountered during its implementation. The findings are expected to provide both theoretical contributions to research on gamification and literacy development and practical implications for teachers seeking innovative strategies to improve students' reading interest in elementary education.

Educational games can stimulate children's cognitive development, creativity, language skills, and positive learning attitudes, while fostering active participation and engagement during learning activities (Alotaibi, 2024; Jin et al., 2018). Furthermore, educational games create an engaging, safe, and enjoyable learning environment that can improve students' learning experiences and outcomes (Oliveira et al., 2021). Teachers can capitalize on these opportunities by designing effective learning activities and utilizing diverse learning resources in the form of text, audio, and visual materials. The integration of visual media is particularly important, as multimedia learning theory suggests that visual representations can facilitate students' understanding and retention of instructional content (Mayer, 2020).

Therefore, learning media that support interactive and meaningful learning experiences are needed, one of which is educational games. There are many applications that teachers can use to develop educational game media, such as Quizizz and Wordwall (Sari & Yarza, 2021). In addition, digital wheel-based games, such as Spin the Wheel, can be used individually by students and incorporated into various learning activities. Such gamified media offer several advantages,

including ease of development and implementation, opportunities for creative and innovative instructional design, and increased student interest, motivation, and engagement in learning (Fleur et al., 2023; Wang et al., 2024).

Reading provides access to a wide range of information and learning opportunities that enable students to expand their knowledge across various subject areas (OECD, 2023). Beyond acquiring information, reading plays a crucial role in developing comprehension, analytical thinking, and critical evaluation skills, as students actively construct meaning, interpret ideas, and integrate new information with their prior knowledge (Barzilai et al., 2020; Duke et al., 2021). Therefore, reading should be viewed not merely as a process of decoding written text but as an active cognitive activity that supports knowledge construction and higher-order thinking. Furthermore, reading contributes significantly to language development by exposing students to a broader range of vocabulary, sentence structures, and writing styles, which in turn enhance their communication skills and ability to express ideas effectively in both written and oral forms (Quinn et al., 2015).

Despite the growing body of research demonstrating the positive effects of gamification and educational games on students' literacy development, motivation, and engagement, limited studies have specifically investigated the use of the Spin the Wheel digital game as a learning medium for promoting reading interest in Indonesian language learning among elementary school students. Most previous studies have focused on general gamification platforms, such as Quizizz, Wordwall, or other interactive educational games, with relatively little attention given to the pedagogical potential of simple wheel-based digital games in fostering reading engagement and literacy-related learning experiences.

Accordingly, this study contributes to the literature in three ways. First, it extends current research on gamification by examining the educational use of a simple wheel-based digital game that has received limited scholarly attention. Second, it provides empirical evidence regarding the role of Spin the Wheel in fostering reading interest and engagement among elementary school students in Indonesian language learning. Third, it offers practical implications for teachers and schools seeking low-cost and easily implementable gamification strategies to support literacy development in primary education.

RESEARCH METHOD

This study aims to explore the implementation of the Spin the Wheel digital game in enhancing elementary school students' interest in reading Indonesian language textbooks. The study employed a descriptive qualitative approach to obtain an in-depth understanding of the planning, implementation process, and challenges associated with the use of the learning media. A qualitative approach was considered appropriate because it enables researchers to examine participants' experiences, perceptions, and interactions within a natural educational setting (As'ari et al., 2017).

Participants were selected using purposive sampling based on their direct involvement in the implementation of the Spin the Wheel digital game during Indonesian language learning activities (Creswell, 2015). This study was conducted at UPTD SD Negeri 11 Peusangan, Bireuen Regency, Indonesia. The participants consisted of fourth-grade students, one classroom teacher, and one school principal. The selection criteria included active participation in learning activities and involvement in the implementation of the Spin the Wheel digital game.

Data were collected through semi-structured interviews and classroom observations. The interviews were conducted with students, the classroom teacher, and the principal to explore their experiences, perceptions, and challenges related to the implementation of the learning media. Classroom observations focused on students' participation, engagement, concentration, and responses during reading activities supported by the Spin the Wheel digital game.

The indicators of students' reading interest presented in Table 1 were adapted from previous studies on reading interest and literacy development and were used as a reference for developing the observation and interview guidelines. Data were analyzed using a qualitative descriptive approach following the procedures of data reduction, data display, and conclusion drawing (Sugiyono, 2021). Interview transcripts and observation notes were coded and organized into categories to identify recurring patterns related to students' reading interest and the implementation of the Spin the Wheel

digital game. These categories were subsequently organized into broader themes through thematic analysis to identify recurring patterns related to reading interest, gamification experiences, reading comprehension, self-confidence, institutional support, implementation barriers, and sustainability expectations.

Table 1. Indicators of Students' Reading Interest

Variable	Dimension	Indicators
Students' Reading Interest	Positive Feelings	Feelings toward the books to be read
		Enjoyment in reading activities
		Need for reading materials
	Students' Interest	Feelings toward reading materials
		Actions to seek reading materials
		Interest in reading activities
	Students' Attention	Interest in reading materials
		Ability to concentrate while reading
		Responses to reading activities
	Students' Involvement	Participation in reading activities
		Participation in learning activities

To ensure the trustworthiness of the findings, credibility was established through source and method triangulation involving observations, interviews, and documentation. Transferability was supported by providing detailed descriptions of the research context and participants. Dependability was maintained through systematic documentation of the research procedures, while confirmability was ensured by comparing findings across multiple data sources and maintaining consistency throughout the analysis process.

RESULT AND DISCUSSION

Results

This study examined the implementation of the Spin the Wheel digital game as a gamification-based learning medium to enhance fourth-grade students' interest in reading Indonesian language textbooks at SD Negeri 11 Peusangan. Data were collected through classroom observations, interviews with students, the classroom teacher, and the school principal, and were analyzed using thematic analysis. The analysis generated 230 coding references organized into 23 nodes, which were subsequently grouped into seven major themes: (1) reading interest, (2) gamification experience, (3) reading comprehension, (4) self-confidence, (5) institutional support, (6) implementation barriers, and (7) sustainability expectations. The emergence of these themes indicates that students' reading interest was not reflected merely in verbal statements of enjoyment, but also in observable classroom behaviors, such as voluntary participation, sustained attention, willingness to read aloud, and active responses to comprehension questions. Thus, the findings suggest a convergence between affective, cognitive, and behavioral indicators of reading interest. The triangulation process involving observations, interviews, and documentation resulted in a triangulation rate of 86%, indicating a high level of consistency across data sources and supporting the trustworthiness of the findings.

Reading Interest and Gamification Experience

The findings revealed that the implementation of the Spin the Wheel digital game increased students' interest in reading and created a more engaging learning experience. Classroom observations showed that students were enthusiastic, actively participated in reading activities, and demonstrated greater curiosity toward reading tasks. Students eagerly waited for their turn to spin the wheel and read the selected text, creating a more enjoyable learning atmosphere. Interview data supported these observations. Students reported that the game made reading activities more enjoyable and reduced feelings of boredom during Indonesian language lessons. The classroom teacher also observed greater enthusiasm and participation among students compared to conventional reading

activities. These findings indicate that the gamification elements embedded in the Spin the Wheel activity positively influenced students' engagement in reading.

For example, several students described the activity as 'more enjoyable' and stated that they were more willing to read because the selected text or question was determined through the wheel. The teacher similarly noted that students who were usually reluctant to participate became more responsive when the reading task was presented as part of a game.

Furthermore, the game mechanics incorporated in the Spin the Wheel activity, such as random selection, anticipation, and participation opportunities, appeared to encourage students' active involvement in reading tasks. Students demonstrated a greater willingness to read assigned texts and respond to questions because the activity was perceived as both challenging and enjoyable. The interactive nature of the game reduced the monotonous impression often associated with textbook reading activities and fostered a more positive attitude toward reading. These findings suggest that gamification elements can serve as effective motivational triggers that promote sustained student engagement in literacy-related learning activities. Pedagogically, the randomization mechanism created a sense of anticipation that transformed reading from a routine textbook activity into an interactive classroom event. This element of uncertainty encouraged students to pay attention because each learner had the possibility of being selected, while the turn-taking structure created equal opportunities for participation.

Reading Comprehension and Self-Confidence

The findings indicate perceived and observed positive changes in students' concentration, reading comprehension, and self-confidence during the learning activities. During classroom observations, students showed greater focus while reading textbook passages and made stronger efforts to understand the content in order to answer questions correctly. Students were also more willing to read aloud and participate in classroom discussions. Interview results revealed that students felt more confident when expressing their opinions and answering questions. The classroom teacher explained that students who were previously passive became more willing to participate during reading activities. These findings suggest that the implementation of the Spin the Wheel digital game positively influenced both cognitive and affective aspects of learning.

Although the primary focus of this study was reading interest, the findings suggest that increased interest may have supported comprehension-related behaviors. Students' willingness to read more carefully and answer questions indicates that gamified reading activities can facilitate deeper engagement with text content. In addition, students demonstrated greater persistence in completing reading tasks and responding to comprehension questions during the learning activities. Observations indicated that students were more attentive to the content of the texts because they understood that active participation in the game required them to comprehend the reading materials. The opportunity to answer questions and receive positive reinforcement encouraged students to express their ideas more confidently. As a result, the learning process not only supported reading comprehension but also helped students develop confidence in communicating their understanding of the texts.

Institutional Support and Implementation Barriers

The successful implementation of the Spin the Wheel digital game was supported by teacher commitment and institutional support from the school. Interviews with the teacher and principal indicated that support for innovative learning practices and the availability of learning resources facilitated the integration of the digital game into classroom instruction. However, several challenges were identified, including limited instructional time, insufficient supporting facilities, and differences in students' reading abilities. Despite these challenges, teachers employed adaptive strategies such as group-based participation, turn-taking mechanisms, and adjustments to game procedures to ensure that learning activities remained effective and inclusive. These barriers suggest that the effectiveness of gamified learning depends not only on the attractiveness of the media but also on classroom ecology, including time allocation, technological readiness, teacher facilitation, and students' heterogeneous reading abilities.

The findings further revealed that collaboration among teachers, school administrators, and students played an important role in overcoming implementation challenges. The principal expressed support for the use of innovative learning media, while teachers demonstrated flexibility in adapting the game to classroom conditions and available resources. Such support enabled the learning activities to continue effectively despite existing limitations. These findings highlight the importance of institutional commitment and teacher adaptability in ensuring the successful implementation of gamification-based learning in elementary education.

Sustainability Expectations

The final theme highlighted positive perceptions and expectations regarding the continued use of the Spin the Wheel digital game. Students, teachers, and school administrators expressed support for the sustained implementation of the learning medium. Students perceived the game as enjoyable and motivating, while teachers viewed it as an effective strategy for increasing reading interest. The principal also emphasized the importance of maintaining innovative learning practices to support literacy development.

Furthermore, participants expressed expectations that the Spin the Wheel digital game could be integrated more consistently into Indonesian language instruction and adapted to other learning topics. Teachers believed that the continued use of gamification-based learning media could help maintain students' motivation and reading engagement over time. School administrators also viewed the innovation as a promising approach to supporting literacy programs and creating a more student-centered learning environment. These expectations indicate a strong commitment among stakeholders to sustaining and further developing the use of interactive digital learning media in elementary education.

The sustainability of Spin the Wheel implementation should therefore be understood as part of a broader school literacy strategy rather than as a one-time instructional innovation. Continuous teacher support, alignment with reading objectives, and integration into regular Indonesian language lessons are necessary to ensure that students' reading interest is maintained over time.

Overall, the findings demonstrate that the implementation of the Spin the Wheel digital game contributes positively to students' reading interest, engagement, concentration, reading comprehension, and self-confidence. The gamification elements embedded in the learning activities created a more interactive, enjoyable, and participatory learning environment, encouraging students to become more actively involved in reading tasks. The findings also indicate that the successful implementation of the learning media was supported by teacher commitment, institutional support, and adaptive instructional strategies that helped address challenges related to time constraints, limited facilities, and differences in students' reading abilities. Furthermore, the positive perceptions expressed by students, teachers, and school administrators suggest strong potential for the continued use of the Spin the Wheel digital game as an innovative literacy-supporting learning medium. The consistency of evidence across observations and interviews reinforces the credibility of the findings and highlights the potential of gamification-based learning to support literacy development in elementary education.

Discussion

The findings of this study indicate that the implementation of the Spin the Wheel digital game positively supported students' interest in reading Indonesian language textbooks. Based on the results of observations and interviews, students showed increased enthusiasm, positive emotions, and active participation during reading activities. This result supports the constructivist learning theory, which emphasizes that knowledge is built through active engagement and meaningful experiences. From a constructivist perspective, the game enabled students to construct meaning through active participation, peer interaction, and direct engagement with reading tasks. Rather than positioning students as passive recipients of textbook content, the activity encouraged them to interact with texts, respond to questions, and negotiate understanding within a social classroom context. By involving students in interactive reading tasks, the digital game helped them construct understanding while maintaining high motivation.

Furthermore, the improvement in students' attention and concentration during reading activities can be attributed to the gamification elements embedded in the learning process. Features such as random selection, challenge-based questions, turn-taking, and anticipation encouraged students to focus on reading materials more carefully. According to [Deterding et al. \(2011\)](#), gamification enhances user engagement by integrating game mechanics into non-game contexts. In line with this theory, the *Spin the Wheel* game motivated students to read attentively in order to succeed in the learning tasks.

In addition, the use of digital games supported the development of positive learning attitudes, motivation, and self-confidence among students ([Alotaibi, 2024](#)). Students appeared more willing to express their ideas, read aloud, and respond to questions, indicating increased confidence and active participation during learning activities ([Jin et al., 2018](#)). This finding is consistent with the study by [Hidayat and Pratama \(2021\)](#), who reported that educational games can enhance students' confidence and learning motivation in literacy-related activities. Furthermore, the interactive nature of the game created a safe and enjoyable learning environment that encouraged engagement and reduced students' fear of making mistakes, allowing them to participate more freely in classroom activities ([Irdalisa et al., 2024](#); [Oliveira et al., 2021](#); [Plass et al., 2015](#)).

Moreover, the increased student involvement observed in this study reflects the importance of student-centered learning, which emphasizes learners' active participation in constructing knowledge rather than passively receiving information ([Bond et al., 2021](#); [Prince, 2004](#)). Through the *Spin the Wheel* game, students became active participants who engaged directly in learning activities and classroom interactions. This result aligns with the findings of [Chen et al. \(2025\)](#), who reported that interactive multimedia environments encourage collaborative learning, active engagement, and meaningful interaction among students. Furthermore, the gamified learning process created a more dynamic classroom atmosphere that promoted interaction between students and teachers while supporting the development of reading comprehension and literacy skills ([Duke et al., 2021](#); [Oliveira et al., 2021](#)).

Finally, this study contributes to the existing literature by highlighting the effectiveness of simple digital games in fostering students' reading interest and engagement at the elementary school level, supporting previous findings on the positive impact of game-based learning and gamification on student motivation and participation ([Alotaibi, 2024](#); [Wang et al., 2024](#)). Although previous studies have extensively examined various forms of digital learning media and gamification-based instruction ([Chen et al., 2025](#); [Oliveira et al., 2021](#)), limited research has specifically focused on the use of *Spin the Wheel* games in Indonesian language learning. Therefore, this study helps address this research gap by demonstrating that *Spin the Wheel* can serve as an effective and practical alternative teaching strategy for promoting reading interest among elementary school students.

The contribution of this study lies not in proposing a technologically complex learning platform, but in demonstrating how a simple, accessible, and low-cost digital game can be pedagogically meaningful when aligned with reading objectives and classroom interaction. This finding is particularly relevant for elementary schools with limited technological infrastructure. Nevertheless, further research is recommended to investigate the long-term effects of this approach and to involve larger and more diverse samples across different educational contexts.

In addition to increasing reading interest, the implementation of *Spin the Wheel* also appeared to improve students' reading comprehension and concentration during learning activities. Students read more attentively and strategically because answering the game questions required them to understand, interpret, and recall information from the text. This finding is consistent with research suggesting that game-based learning can enhance students' attention, engagement, and learning outcomes by encouraging active participation in learning tasks ([Alotaibi, 2024](#); [Oliveira et al., 2021](#)). Furthermore, the observed improvement in comprehension aligns with contemporary reading theories, which view reading comprehension as the result of active interaction between the reader and the text, requiring readers to construct meaning, monitor understanding, and engage cognitively with written information ([Duke et al., 2021](#)).

The implementation of *Spin the Wheel* also contributed to strengthening students' confidence as readers and active participants in classroom activities. Students who had previously shown limited participation appeared more confident in reading aloud and expressing their opinions,

which may be attributed to the supportive and enjoyable learning environment created through gamified instruction (Alotaibi, 2024; Oliveira et al., 2021). This finding is consistent with previous studies indicating that game-based learning can enhance students' confidence, participation, and willingness to engage in learning activities (Jin et al., 2018). Furthermore, the use of visual and interactive learning media has been shown to facilitate students' understanding of instructional content while simultaneously promoting engagement and active participation during learning (Mayer, 2020).

Thus, the implementation of Spin the Wheel not only impacts the affective aspect of reading interest, but also students' cognitive and social aspects, namely reading comprehension, concentration, and self-confidence. This demonstrates that the Spin the Wheel digital game is a holistic learning medium relevant to the needs of Indonesian language learning in elementary schools. Although the implementation of Spin the Wheel demonstrated positive impacts, the research also revealed several obstacles. The main obstacles identified included limited learning time, the availability of supporting devices, and differences in student reading abilities. These obstacles were uncovered through interviews with teachers, principals, and students, and were corroborated by observation notes during the learning process.

Time constraints emerged as one of the barriers to implementing Spin the Wheel because game-based learning activities require careful classroom and time management to ensure that all students have equal opportunities to participate (Fleur et al., 2023). Furthermore, limited digital devices and technological facilities posed additional challenges, particularly in elementary schools located in rural or under-resourced areas where access to digital infrastructure remains constrained (OECD, 2023). These findings are consistent with previous studies indicating that the implementation of digital learning media frequently encounters technical difficulties, limited facilities, and unequal access to educational technology (Bond et al., 2021). Such challenges highlight the importance of adequate technological support and instructional planning to maximize the effectiveness of gamified learning environments.

However, the research findings indicate that these obstacles did not significantly reduce the effectiveness of Spin the Wheel. Teachers employed various adaptive strategies, such as dividing students into groups, arranging turns, and simplifying game mechanics to suit classroom conditions. These strategies reflect the teacher's role as an adaptive and creative learning facilitator, as outlined in theoretical studies on the role of teachers in innovative learning. Despite these contributions, this study has several limitations. The findings were generated from a single elementary school context and relied on qualitative evidence from observations, interviews, and documentation. Therefore, the results should not be generalized statistically. Future studies may involve multiple schools, longer implementation periods, and mixed-method designs to examine the sustained effects of Spin the Wheel on reading interest and reading comprehension.

CONCLUSION

Conclusion that the implementation of the digital game Spin the Wheel has been proven to increase students' interest in reading Indonesian language textbooks. Gamification-based learning creates a fun, interactive, and participatory learning environment, encouraging students to read voluntarily and with greater focus. In addition to increasing reading interest, the implementation of this media also positively impacts reading comprehension, concentration, self-confidence, and active student engagement in the learning process. Barriers to implementing Spin the Wheel include limited learning time, availability of supporting devices, and differences in student reading ability. However, these obstacles do not significantly reduce learning effectiveness because they can be overcome through adaptive teacher strategies, such as time management, group division, and simplifying game mechanics. Positive student and teacher perceptions of this tool also contribute to overcoming the various challenges that arise. The implications of this research strengthen theoretical studies on reading interest and gamification of learning by demonstrating that digital game media can be an effective means of increasing reading interest in elementary school students. These findings confirm that a learning-by-play approach can simultaneously influence students' affective, cognitive, and social aspects.

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