The Effect of Quizizz on Indonesian Language Learning in the Independent Curriculum

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ABSTRACT

This study aims to assess the effectiveness of the Quizizz application in Indonesian language learning based on the Independent Curriculum at SMA Muhammadiyah 10 Rantauprapat. The study was motivated by the low learning interest and academic performance of students in Indonesian language subjects, along with the limited use of digital learning media suited to the needs of today's learners. The research employed a quasi-experimental design using a pretest-posttest control group model. The participants were two eleventh-grade classes, one taught using Quizizz-assisted learning and the other through conventional instruction. The findings revealed a significant improvement in student learning outcomes in the experimental class, where the average posttest score increased from 62.1 to 81.4, compared to an increase from 61.5 to 72.3 in the control class. The t-test result showed a significance value of 0.001 (<0.05), confirming a meaningful difference between the two groups. Observation results also indicated that students in the experimental class were more active and engaged during lessons. The novelty of this study lies in its focus on integrating Quizizz specifically within the context of the Independent Curriculum, emphasizing its alignment with learner-centered, technology-based, and interactive pedagogical principles. Thus, the use of Quizizz proved effective in improving both student achievement and participation, making it a relevant and practical learning medium in the current digital education era.

Keywords: Quizizz; Indonesian Learning; Independent Curriculum

INTRODUCTION

Indonesian language learning in many high schools remains dominated by conventional classroom practices such as lectures, note-taking, and written assignments. At SMA Muhammadiyah 10 Rantauprapat, observations show that students often appear passive and disengaged during lessons. Teachers tend to use traditional methods that focus more on content delivery than on interactive learning. As a result, many students struggle to develop interest, motivation, and consistent

achievement in Indonesian language subjects. Meanwhile, these same students are already accustomed to using smartphones, social media, and online platforms in their daily lives. This contrast between students' digital habits and classroom learning methods highlights a growing gap between educational practice and the technological realities of today's learners.

The introduction of the Independent Curriculum (Kurikulum Merdeka) in Indonesia encourages teachers to create flexible, meaningful, and student-centered learning environments. It emphasizes differentiated instruction and the use of digital tools that promote active participation and personalized learning experiences (Kemendikbudristek, 2022). However, interviews with teachers at SMA Muhammadiyah 10 Rantauprapat reveal that many still feel unprepared to integrate technology effectively into their teaching. They cite limited training, lack of familiarity with digital tools, and uncertainty about how to align technology use with curriculum objectives. These issues contribute to underutilization of interactive learning media and a continued reliance on conventional methods that fail to engage students meaningfully.

One promising solution is Quizizz, an interactive digital platform that allows teachers to create and deliver quizzes online. The application provides features such as real-time scoring, leaderboards, music, and visual feedback that make learning more enjoyable for students. Teachers can easily monitor students' progress, analyze results, and identify areas that need improvement. According to Aji (2020), Quizizz enhances student motivation and concentration because its game-based format transforms evaluation into an engaging activity. Similarly, Susanti and Rahmawati (2021) found that Quizizz improves participation and learning outcomes by creating a more interactive and collaborative environment. In a related study, Lestari (2022) concluded that digital tools like Quizizz support the implementation of the Independent Curriculum by providing flexible and technology-driven learning experiences.

Although previous studies have demonstrated that Quizizz can improve learning motivation and achievement, most of these studies were conducted at the junior high school level or in subjects such as mathematics and science (Aji, 2020; Susanti & Rahmawati, 2021; Prasetyo, 2021). Research specifically focusing on Indonesian language learning at the senior high school level, particularly within the framework of the Independent Curriculum, remains limited. This represents a clear research gap that needs to be addressed. The context of Indonesian language learning presents unique challenges, as it involves comprehension, writing, and cultural understanding rather than memorization of factual information. Therefore, it is necessary to explore whether Quizizz originally designed as a general educational quiz platform can be effectively adapted to support learning outcomes in a language-focused subject that emphasizes analytical and communicative skills.

In addition to this contextual gap, there is also a methodological gap in how previous studies have used Quizizz. Most existing research has focused on its

function as an assessment or testing tool (Susanti & Rahmawati, 2021; Prasetyo, 2021). Very few studies have investigated its dual role as both a learning medium and a formative evaluation tool that provides immediate feedback and supports differentiated instruction. In the current educational landscape, where feedback and flexibility are key components of the Independent Curriculum, understanding this dual function is essential. Thus, this study not only examines whether Quizizz can improve learning outcomes but also explores how it can be integrated into daily classroom activities as a means of promoting active engagement and formative learning.

The novelty of this study lies in its focus on applying Quizizz within the context of Indonesian language learning under the Independent Curriculum, emphasizing its potential to bridge the gap between technological familiarity and academic engagement. While previous research has primarily explored Quizizz in general or STEM-based subjects, this study investigates its implementation in language instruction, where comprehension, interpretation, and contextual understanding play crucial roles. Furthermore, this research examines the extent to which Quizizz aligns with the core principles of the Independent Curriculum—differentiation, flexibility, and active participation—thus offering practical insights for teachers on how digital platforms can be used not just for assessment but also as learning facilitators.

Several factors make this study significant for teachers and policymakers. First, it provides concrete evidence on how a readily available platform like Quizizz can enhance students' engagement and achievement in Indonesian language lessons. Second, it offers a model for integrating technology meaningfully into the Independent Curriculum, where teachers are encouraged to adapt learning processes according to students' needs and interests. Third, it contributes to the growing literature on digital learning in Indonesia by presenting findings from a rural or semi-urban context, where access and exposure to digital tools may differ from schools in large cities. This localized focus is important because the effectiveness of educational technology often depends on contextual factors such as infrastructure, teacher readiness, and student attitudes (Kurnia & Suparyati, 2023; Hidayatullah et al., 2021).

The present study was conducted to respond to these gaps and to provide empirical evidence on the effectiveness of Quizizz as a learning medium in Indonesian language education. Specifically, it investigates whether the use of Quizizz can improve students' learning outcomes and engagement compared to conventional teaching methods at SMA Muhammadiyah 10 Rantauprapat. By analyzing both quantitative test results and qualitative classroom observations, this research aims to offer a more comprehensive understanding of how digital platforms can support active learning and continuous assessment. This study seeks to address the problem of low engagement and limited use of digital learning tools in Indonesian language teaching by introducing and evaluating Quizizz as a practical and interactive medium. It fills an important gap in the literature by focusing on the senior high

school level and aligning the use of digital media with the goals of the Independent Curriculum. The findings are expected to provide actionable insights for teachers who wish to modernize their teaching approaches and for policymakers who aim to promote the integration of technology in language education. Ultimately, this study contributes new knowledge on how simple, accessible digital platforms can transform traditional classroom practices into more dynamic, student-centered, and technology-supported learning experiences.

LITERATURE REVIEW

Independent Curriculum

The Independent Curriculum (Kurikulum Merdeka) was introduced to provide greater flexibility for teachers and schools to adapt learning to the needs, interests, and abilities of students. It emphasizes competence-based learning, differentiated instruction, and character development through meaningful and student-centered activities (Kemendikbudristek, 2022). The curriculum encourages teachers to move away from uniform and teacher-dominated approaches toward contextual and technology-supported practices that foster autonomy and creativity. In Indonesian language education, this means shifting from passive knowledge transfer to interactive learning that builds communicative competence and critical thinking.

However, studies on the implementation of the Independent Curriculum show that many teachers are still struggling to realize these principles effectively. Lestari (2022) found that although teachers understand the philosophy of flexibility and differentiation, they often lack practical strategies to apply it, especially through technology. Similarly, Kurnia and Suparyati (2023) highlighted that teachers tend to use technology only as a presentation tool rather than as an interactive learning medium. These studies demonstrate a gap between curriculum ideals and classroom practice, indicating the need for practical models of technology integration that align with the spirit of the Independent Curriculum. The present research responds to this gap by introducing Quizizz as an example of how technology can be applied to make Indonesian language learning more interactive and differentiated. Quizizz allows teachers to adjust question levels, provide instant feedback, and track progress individually all features that support the curriculum's goals of personalization, engagement, and formative assessment.

Indonesian Language Learning

Indonesian language learning aims to develop students' ability to use the language effectively in various contexts listening, speaking, reading, and writing. Recent approaches emphasize communicative competence and critical literacy, where students are not only able to understand texts but also to interpret and produce them meaningfully (Hidayatullah et al., 2021). Under the Independent Curriculum, language learning is expected to be contextual, activity-based, and aligned with

students' interests. This requires teachers to create engaging and authentic learning experiences that integrate media and technology.

Previous research has mostly focused on improving Indonesian language skills through traditional exercises or printed materials. While these studies have contributed to understanding basic language development, they often overlook how digital media can enhance students' motivation and participation. Rahmatullah and Andi (2020) argue that technology-based media can bridge this gap by making abstract language concepts more concrete and relatable. Yet, there is still limited evidence on how digital platforms specifically affect learning outcomes in Indonesian language subjects at the high school level. This study fills that void by examining the impact of Quizizz a digital, game-based platform on students' learning engagement and achievement in Indonesian language learning.

Interactive Learning Media

Interactive learning media refer to digital platforms that enable active communication between learners and content. They incorporate visual, auditory, and feedback elements that sustain attention and deepen understanding. Research has shown that such media can significantly enhance student motivation and comprehension because they encourage participation and autonomy (Melinda & Saputra, 2021; Ilmiani et al., 2020). Pratama et al. (2023) further noted that interactive media stimulate multiple senses, making learning experiences more memorable and effective.

However, most studies on interactive media focus on general outcomes such as engagement or satisfaction rather than specific subject achievements. Moreover, few have examined how interactive media can be aligned with national curriculum reforms like the Independent Curriculum. Lestari (2022) found that teachers tend to use interactive tools sporadically, without linking them directly to curriculum competencies or assessment criteria. This limits their pedagogical potential. The current study builds on this gap by integrating Quizizz systematically into Indonesian language learning within the Independent Curriculum framework. It explores not only whether interactive media increase engagement but also how they contribute to measurable learning improvements consistent with curriculum standards.

Quizizz Application

Quizizz is a web-based learning application that combines gamification with formative assessment. It enables teachers to design quizzes with competitive features such as leaderboards, timers, and rewards to create a fun learning environment. Students participate using mobile devices or computers, receiving immediate feedback after each question. Fitriani and Hapsari (2022) found that Quizizz effectively increases learning motivation and comprehension because of its visual appeal and instant feedback mechanism. Aji (2020) and Susanti and

Rahmawati (2021) also observed that students using Quizizz showed greater enthusiasm and performed better than those taught using conventional methods.

While these findings confirm the general effectiveness of Quizizz, they also reveal several limitations. First, most studies have been conducted in non-language subjects or at the junior high school level. Second, Quizizz is often treated solely as a testing tool rather than as an integral part of the learning process. Third, little attention has been given to how Quizizz aligns with the Independent Curriculum's principles of differentiation and formative assessment. Consequently, there remains a gap in understanding how Quizizz can be adapted to promote meaningful learning in language subjects, especially at the senior high school level. This study addresses that gap by exploring Quizizz not merely as an evaluation platform but as a learning medium embedded in the teaching process. It investigates how the application's interactive features such as live quizzes, feedback loops, and visual design can enhance comprehension, engagement, and achievement in Indonesian language lessons. By aligning Quizizz with the Independent Curriculum, this study demonstrates how technology can operationalize curriculum values like flexibility, creativity, and student-centered learning.

Engagement and Learning Outcomes

Student engagement refers to the emotional, behavioral, and cognitive involvement of learners in the classroom (Melinda & Saputra, 2021). High engagement correlates strongly with improved learning outcomes, as engaged students pay attention, participate actively, and persist in completing tasks. Studies by Aji (2020) and Putri and Suryani (2021) show that interactive digital media, including Quizizz, significantly increase engagement because they provide immediate feedback and a sense of achievement. Similarly, Rahmayanti and Jaya (2020) found that interactive tools enhance students' collaboration and motivation, leading to better academic results.

However, most previous studies have examined engagement or outcomes in isolation, focusing on one dimension of learning effectiveness. Few have analyzed how these two variables interact in the context of technology-assisted instruction. This research contributes to closing that gap by evaluating both engagement and learning outcomes simultaneously in Indonesian language learning. It examines whether increased engagement through Quizizz translates into measurable improvement in students' test performance, providing empirical evidence on the relationship between participation and achievement in digital learning environments.

From the reviewed literature, it is clear that previous studies have established the general benefits of Quizizz and other interactive media in improving motivation and performance. However, there remains a lack of context-specific research that connects these tools directly to the objectives of the Independent Curriculum and to Indonesian language instruction at the senior high school level. Most earlier

research treated technology as an accessory rather than an integral pedagogical component. The novelty of this study lies in its integration of Quizizz into Indonesian language learning as both a teaching and assessment medium that supports the Independent Curriculum's vision of flexible, differentiated, and student-centered education. Unlike prior studies, this research critically examines how the interactive features of Quizizz immediate feedback, adaptive assessment, and gamified engagement can directly enhance both student participation and academic outcomes. By addressing this gap, the study contributes practical evidence on how digital learning tools can bridge the divide between curriculum ideals and classroom realities in Indonesian secondary education.

METHOD

Design and Sample

This study used a quantitative approach with a quasi-experimental design to examine the effect of using the Quizizz application on students' Indonesian language learning outcomes in line with the Independent Curriculum. The research used a pretest–posttest control group design, where both the experimental and control groups were given the same pretest before treatment and a posttest afterward to see the improvement. The study was carried out at SMA Muhammadiyah 10 Rantauprapat during the odd semester of the 2025/2026 academic year, from April to May 2025. The population included all eleventh-grade students of the school. The purposive sampling technique was used to select two classes with similar characteristics. Class XI-A was chosen as the experimental group, which learned using Quizizz, while Class XI-B served as the control group, which learned through conventional methods. Each class consisted of 30 students, bringing the total sample to 60 participants.

Instruments and Procedures

The study used two main instruments: a multiple-choice test and an observation sheet. The multiple-choice test was used to measure students' learning outcomes before and after treatment. The test was developed based on the learning indicators of the Independent Curriculum for Indonesian language subjects, especially those focusing on reading and understanding text. The observation sheet was used to record students' engagement and activeness during lessons, including their attention, participation, and collaboration. Before being used, the test was checked for validity and reliability to ensure accuracy. Content validity was determined by two Indonesian language teachers and one curriculum expert who confirmed that the test items matched the learning goals. Construct validity was tested using item-total correlation, and items with a correlation value higher than 0.30 were kept. Reliability was measured using the Cronbach's Alpha method, which showed a score of 0.86, indicating that the test was reliable and consistent.

The treatment process lasted four meetings, each lasting 90 minutes. Both groups studied the same material with the same objectives, but with different learning methods. The experimental class used Quizizz as a learning and assessment tool. In each meeting, the teacher first explained the lesson briefly, then guided students to join a Quizizz game using their smartphones. Each session included 10 to 15 questions related to the topic. After answering each question, students could immediately see whether their answer was correct and read short explanations provided by the teacher. The teacher reviewed common mistakes and used the Quizizz report feature to discuss students' performance and clarify difficult points. At the end of each session, the teacher conducted a short quiz as a review and reinforcement activity. In contrast, the control class learned using conventional methods such as lectures, textbook reading, and written exercises. Students in this class received feedback only after completing all exercises, without real-time interaction. At the end of the treatment, both groups took a posttest to measure learning improvement. Meanwhile, student engagement was observed during each session using a checklist to see how active and focused students were in the learning process.

Data Analysis

Data were analyzed using both descriptive and inferential statistical methods. Descriptive analysis was used to find the average (mean) and standard deviation of pretest and posttest scores from both the experimental and control classes. Inferential analysis used an independent samples t-test to determine whether there was a significant difference between the two groups' learning outcomes. The significance level used was 0.05. Observation data on students' engagement were analyzed using percentages to describe their activeness and participation in class activities. All data were reviewed carefully to ensure accuracy before analysis. This analysis process helped determine how effectively Quizizz improved students' engagement and learning outcomes in Indonesian language learning. By comparing both quantitative test results and classroom observations, the study provided a clear picture of how the Quizizz application supports interactive and student-centered learning in accordance with the goals of the Independent Curriculum.

RESULT AND DISCUSSION

The findings of this study provide clear evidence that the use of the Quizizz application significantly improved students' learning outcomes and engagement in Indonesian language learning compared to conventional methods. The results are presented in three parts: (1) pretest and posttest score comparisons, (2) statistical test results, and (3) classroom observation results.

Comparison of Pretest and Posttest Scores

Before the treatment, both the experimental class (XI-A) and the control class (XI-B) had almost the same average pretest scores 62.1 and 61.5, respectively. This

indicates that both groups started with similar levels of understanding of the Indonesian language material. After the treatment, there was a significant difference between the two groups' posttest results. The experimental class, which learned using Quizizz, achieved a posttest average of 81.4, while the control class, which used conventional methods, obtained 72.3. The improvement in the experimental class reached 19.3 points, while the control class improved by 10.8 points.

Table 1. Average Pretest and Posttest Scores of Experimental and Control Classes

Class	Pretest Average	Posttest Average	Difference
Experiment (XI-A)	62.1	81.4	19.3
Control (XI-B)	61.5	72.3	10.8

The data in Table 1 show that both classes improved after the learning sessions, but the improvement in the experimental class was almost twice as large. This suggests that the use of Quizizz had a stronger impact on student achievement. The difference of 8.5 points in posttest averages between the experimental and control groups illustrates that interactive learning media can substantially boost performance when compared to teacher-centered approaches.

Figure 1 presents a visual comparison of pretest and posttest results between the two groups. The bar chart shows a sharp increase in the experimental class's scores, while the control class demonstrates only moderate growth. The figure provides a clear overview of how the use of digital, game-based media such as Quizizz produced a more significant learning improvement.

Figure 1. Comparison of Pretest and Posttest Scores

The visual data confirm that Quizizz played an important role in improving students' comprehension and recall. Students in the experimental group consistently performed better on posttest items that required application and understanding, not just memorization. This means that they not only remembered the lesson material but also understood how to apply it, especially when answering analytical or contextual questions about Indonesian texts.

T-Test Results

To test whether the differences in learning outcomes were statistically significant, an independent sample t-test was conducted on the posttest results of both groups. The analysis results are shown in Table 2. The calculated t-value was 3.71, which exceeded the t-table value of 2.00 at a significance level of 0.05. The p-value of 0.001 was also below 0.05, indicating that the difference between the experimental and control classes was statistically significant.

Table 2. T-Test Results

Information	T-value	Table t value (α = 0.05)	Sig. (p-value)	Result
Experimental vs Control Posttest	3.71	2.00	0.001	Significant

These results mean that the learning method using Quizizz had a real and measurable effect on students' academic achievement. The statistical evidence confirms that the score improvement in the experimental class was not due to chance but rather the effectiveness of the Quizizz-assisted learning approach. Further analysis of the posttest data showed that students in the experimental group were more consistent in answering comprehension and vocabulary questions correctly. In contrast, students in the control group made more errors in items that required interpretation and critical thinking. This suggests that Quizizz not only improved scores but also helped students better grasp more complex aspects of the Indonesian language.

Observation Results of Student Engagement

In addition to test results, the study also examined students' engagement and activeness during the learning process. Observation data were collected using a checklist that assessed enthusiasm, participation, and collaboration. The results are summarized in Table 3.

Table 3. Student Observation Results

Observed Aspects	Experimental Class (XI-A)	Control Class (XI-B)
Enthusiastic about following the learning	4.5	3.2
Actively answering questions	4.7	3.1
Collaboration with friends	4.3	2.9

The data show that students in the experimental class demonstrated a much higher level of engagement than those in the control class. In the experimental class, students were highly enthusiastic (average score 4.5), frequently answered questions voluntarily (4.7), and worked well with peers (4.3). On the other hand, students in the control class displayed only moderate enthusiasm and rarely interacted during lessons.

Classroom observations also revealed that the competitive and interactive features of Quizizz encouraged students to participate more actively. The use of

leaderboards and instant feedback motivated students to focus on each question. Many students expressed enjoyment when their names appeared on the top ranks, which increased their willingness to participate in subsequent rounds. In contrast, students in the control class tended to lose focus more quickly, and fewer students volunteered to answer questions during lessons.

The engagement data complement the test findings, showing that improved performance in the experimental group was supported by higher levels of participation and motivation. The presence of immediate feedback in Quizizz helped students identify errors during learning, while the game-like format reduced boredom and anxiety. As a result, students were more confident and comfortable responding to questions, which likely contributed to their improved posttest results. Based on the analysis, it can be concluded that using the Quizizz application significantly improved both student achievement and classroom engagement in Indonesian language learning. The experimental group showed a larger increase in average scores, a significant difference confirmed by statistical testing, and higher engagement levels during lessons. The combined results of test data and observations clearly demonstrate that digital interactive learning through Quizizz created a more engaging, enjoyable, and effective learning experience for students.

The findings of this study show that the use of the Quizizz application had a significant impact on improving students' learning outcomes and engagement in Indonesian language learning. The increase in the experimental class's average score from 62.1 to 81.4, compared to the control class's smaller rise from 61.5 to 72.3, indicates that Quizizz contributed to stronger comprehension and retention of learning materials. These results confirm that integrating digital tools into classroom learning can create a more active and enjoyable learning atmosphere. Similar improvements were reported by Aji (2020), Susanti and Rahmawati (2021), and Fitriani and Hapsari (2022), who found that Quizizz increases student motivation and performance due to its interactive and game-like features.

One of the main reasons for this improvement is the interactive and gamified nature of Quizizz, which transforms assessment into an engaging learning experience. Students do not just passively receive information but actively participate by answering questions, reflecting on their mistakes, and observing their real-time progress. The instant feedback provided by Quizizz helps students recognize errors immediately and understand correct answers, which improves their comprehension. According to Melinda and Saputra (2021), digital platforms that combine interactivity, color, sound, and real-time feedback help sustain attention and deepen understanding. In this study, students' high engagement levels—indicated by their enthusiasm and cooperation—show that the use of game-based media like Quizizz can increase motivation and participation during lessons.

These findings are consistent with Mayer's Cognitive Theory of Multimedia Learning (2017), which emphasizes that learning is more effective when information is presented through both verbal and visual channels. The combination

of text, color, sound, and feedback in Quizizz enhances information processing and memory retention. The app's visual design and game elements reduce cognitive load by presenting information in a way that is easy to understand and enjoyable. For students accustomed to technology, this type of digital learning environment supports better focus and a stronger sense of control over their learning process.

In addition, the results align with Vygotsky's Constructivist Learning Theory (1978), which views learning as a process of active knowledge construction through social interaction and collaboration. In the Quizizz-based class, students were not passive recipients of information but actively involved in building understanding. The competitive yet cooperative atmosphere encouraged them to discuss questions, compare results, and share strategies with peers. This experience aligns closely with the Independent Curriculum, which emphasizes student-centered learning, collaboration, and meaningful engagement. Under this curriculum, teachers are encouraged to design lessons that stimulate creativity, independence, and problem-solving—qualities that were clearly supported through the use of Quizizz.

The results of the t-test confirm that the observed differences in posttest scores between the experimental and control groups were statistically significant. The calculated t-value (3.71) exceeded the table value (2.00), with a p-value of 0.001, indicating that the Quizizz-assisted learning approach had a real and measurable effect on students' achievement. This supports the findings of Lestari (2022) and Kurnia and Suparyati (2023), who concluded that integrating technology-based assessment tools improves both learning efficiency and student motivation. The current study contributes new evidence by showing that Quizizz is equally effective for Indonesian language instruction, where comprehension, analysis, and creative expression are key outcomes—not just factual recall.

Observation data further strengthen these results. Students in the experimental class were far more enthusiastic, responsive, and cooperative than those in the control group. The use of leaderboards, points, and sound effects in Quizizz created a dynamic classroom atmosphere where students felt challenged yet comfortable. These features not only fostered competition but also developed persistence, as students were motivated to improve their scores after each round. The sense of enjoyment reduced anxiety often associated with tests and encouraged active participation. Rahmatullah and Andi (2020) and Pratama et al. (2023) have noted similar outcomes, showing that gamified learning platforms increase engagement and support deeper learning because they appeal to students' intrinsic motivation.

Another important aspect is that Quizizz also functions effectively as a formative assessment tool. Teachers can use its analytics feature to identify which questions students struggled with most and adjust subsequent lessons accordingly. This aligns with the differentiated instruction principle of the Independent Curriculum, which encourages teachers to adapt teaching methods to meet varied student needs. In this study, the teacher used Quizizz data to address difficult topics and provide feedback tailored to student performance. This approach reflects the flexibility and

personalization central to the Independent Curriculum (Kemendikbudristek, 2022; Lestari, 2022).

Beyond cognitive gains, the use of Quizizz also supported the development of social and emotional learning skills. Students collaborated more effectively, helped peers understand difficult questions, and expressed excitement during activities. The increase in collaboration scores (from 2.9 in the control class to 4.3 in the experimental class) suggests that interactive digital learning can strengthen communication and teamwork. This finding aligns with Hidayatullah et al. (2021), who emphasized that collaborative, technology-driven learning environments foster students' communication and problem-solving abilities—two essential 21st-century competencies.

Overall, the findings demonstrate that Quizizz is not only an assessment tool but also a powerful learning medium that supports the core values of the Independent Curriculum: active participation, meaningful learning, creativity, and independence. The combination of visual design, feedback, and gamification helps students experience learning as an enjoyable challenge rather than a routine task. Teachers, therefore, can use Quizizz to transform Indonesian language lessons—often perceived as theoretical and monotonous—into interactive and dynamic sessions that promote genuine understanding.

The results of this study have several practical implications for teachers, schools, and future researchers. For teachers, Quizizz can be used as both a learning and evaluation tool that encourages active participation and immediate feedback. It helps identify students' strengths and weaknesses quickly, allowing teachers to design follow-up lessons more effectively. This supports the Independent Curriculum's emphasis on differentiated learning.
For schools, integrating Quizizz or similar platforms can modernize the learning process and motivate students to be more independent and creative. Schools should provide professional development or training for teachers so that they can use digital platforms confidently and align them with learning objectives.
For future researchers, this study opens opportunities to explore how Quizizz can be integrated with other digital learning tools or combined with collaborative strategies such as project-based or blended learning models. It would also be valuable to investigate long-term effects on writing skills, reading comprehension, or vocabulary development in Indonesian or foreign language learning contexts.

Despite its positive outcomes, this study has several limitations. First, it was conducted in only one school with a relatively small number of participants, which may limit the generalizability of the results. Future studies could involve more diverse samples from different regions to confirm the findings. Second, the study covered only a short time period (four meetings), so it measured short-term rather than long-term effects. A longer implementation period might provide a clearer picture of how Quizizz affects learning retention. Third, this study focused mainly on cognitive outcomes and observable engagement; it did not measure emotional

or attitudinal changes in depth. Future research could include interviews or questionnaires to capture students' perceptions and attitudes toward technology-based learning.

This study proves that using the Quizizz application in Indonesian language learning significantly improves students' achievement and engagement. The improvement results from Quizizz's ability to combine visual design, instant feedback, and gamified learning in ways that align with the Independent Curriculum's goals. It encourages active participation, fosters collaboration, and supports differentiated instruction. Although the study has limitations in scope and duration, it offers practical guidance for teachers seeking innovative and interactive teaching approaches. By integrating Quizizz effectively, educators can create learning experiences that are not only enjoyable but also meaningful and relevant to students' digital lives bridging the gap between traditional instruction and 21st-century education.

CONCLUSION

This study aimed to determine the effectiveness of using the Quizizz application in improving students' learning outcomes and engagement in Indonesian language learning based on the Independent Curriculum. The results showed that students who learned using Quizizz achieved higher posttest scores and demonstrated greater enthusiasm, participation, and collaboration than those taught using conventional methods. The findings indicate that Quizizz not only enhances students' understanding of the material but also creates a more interactive and enjoyable learning environment. The improvement occurred because Quizizz combines visual design, real-time feedback, and gamification, which help students stay focused and motivated. These features align with the Independent Curriculum's principles of flexibility, active learning, and meaningful engagement. Therefore, teachers are encouraged to integrate Quizizz as a learning and assessment tool to support differentiated instruction and promote digital literacy. Schools should also provide training for teachers to use interactive media effectively. Future research is recommended to explore the long-term effects of Quizizz and its use in other language skills or subjects.

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