

Improving Students' Grammar by Using Wayground Quiz at Eleventh Grade of Senior High School

Eka Noftriana Ciptaningdiah⁽¹⁾, Lailatul Musyarofah⁽²⁾

^{1,2}Universitas PGRI Delta Sidoarjo, Indonesia

Email: ¹ekanovtriana57@gmail.com, ²lailatulmusyarofah@universitaspgridelta.ac.id

Abstrak: This classroom action research investigates the effectiveness of Wayground Quiz in improving the grammar mastery of eleventh-grade students at a senior high school. The study was conducted in two cycles, each consisting of planning, acting, observing, and reflecting stages. The participants were eleventh-grade students whose main difficulties included the use of tenses, subject-verb agreement, and pronouns. Data were collected through grammar tests, classroom observations, and students' questionnaires. The results indicate that the implementation of Wayground Quiz significantly enhanced students' grammar achievement as well as their motivation and participation in learning. Quantitatively, students' mean grammar scores improved from 65.50 in the first cycle to 82.15 in the second cycle, showing a 25.42% increase and surpassing the minimum mastery criterion. Qualitative findings from observations and questionnaires reveal that students became more active, confident, and enthusiastic during grammar activities. They responded positively to the digital quiz features such as immediate feedback, time limits, and competitive elements, which made grammar practice more engaging and less monotonous. The study concludes that integrating Wayground Quiz into grammar instruction can effectively improve students' grammar performance and create a more enjoyable and interactive learning environment for senior high school students.

Tersedia Online di

http://journal.unublitar.ac.id/pendidikan/index.php/Riset_Konseptual

Sejarah Artikel

Diterima pada : 01-02-2026

Disetujui pada : 20-03-2026

Dipublikasikan pada : 28-04-2026

Kata Kunci:

Wayground quiz, grammar mastery, classroom action research, student motivation and participation

DOI:

http://doi.org/10.28926/riset_konseptual.v10i2.1459

INTRODUCTION

Grammar is a basic part of language capability because it sustains the structural rules that empower learners to construct meaningful and authentic sentences. According to Richards and Schmidt (2010), grammar contains of the concepts governing the formation of clauses, phrases, and sentences, producing it essential for effective communication. Mastery of grammar supports learners in derivation ideas clearly in both spoken and written forms (Harmer, 2015). In the context of senior high school, students are awaited to demonstrate grammatical accuracy as part of their communicative competence; however, many still struggle with applying grammar rules in meaningful communication.

Research has shown that grammar is often perceived as difficult, abstract, and monotonous, which affects students' motivation and achievement. Leki (1995) and Schulz (2001) highlight that learners commonly view grammar instruction as boring and challenging, leading to low engagement. Traditional grammar teaching methods such as worksheet drills and teacher-centered explanations tend to provide limited interaction and feedback, which may contribute to students' persistent errors and limited progress (Koç & Sütçü, 2023).

To place these summons, digital tools and online quiz platforms have become progressively popular in language classrooms. In Technology-Assisted Language Learning (TALL) theres feathers alternatives for collaborative learning, lightning feedback, and increased learner motivation (Solanki & Shyamlee, 2012). Quizzes, in specific, have been shown to raise active learning, reinforce concepts, and improve long-term retention. Segaran and Hashim (2022) stated that online quiz tools guidance

learners understand grammar rules more effectively by assuming an enjoyable and competitive learning environment. When merged with gamification elements such as points, timers, and leaderboards quizzes can increase student engagement and motivate consistent practice (Deterding et al., 2011).

Recent studies contribute strong evidence that digital quiz tools can enhance grammar achievement. Koç and Sütçü (2023) create that students who learned grammar through gamified quizzes significantly outperformed those taught through traditional methods. Digital platforms such as Wayground Quiz provide instant feedback, repeated practice opportunities, and interactive item formats, all of which support grammatical competence. This aligns with behaviorist learning theory, which states that immediate corrective feedback strengthens accurate language production (Skinner, 1953).

According to these theoretical and empirical foundations, integrating Wayground Quiz in grammar instruction may support a more engaging and effective approach for senior high school learners. Therefore, the aim of this study is to investigate whether the use of Wayground Quiz improves the grammar performance of eleventh-grade students at a senior high school. Specifically, the study examines how digital quiz-based learning influences students' understanding of grammar rules and their motivation to engage in grammar activities.

METHOD

This study employed a classroom action research design aimed at improving students' grammar achievement through the implementation of Wayground Quiz as a learning medium. Action research was chosen because it allows the teacher-researcher to identify classroom problems and apply practical solutions in a cyclical process consisting of planning, acting, observing, and reflecting.

The participants of this study were 20 eleventh-grade students from a senior high school. The class was selected through purposive sampling based on the teacher's recommendation, considering the students' learning characteristics and their difficulties in grammar. This ensured that the participants were appropriate for the objectives of the study.

The research was conducted in two cycles, with each cycle consisting of four stages: planning, action, observation, and reflection. In the planning stage, lesson plans were prepared, including grammar materials and activities using Wayground Quiz. In the action stage, the planned lessons were implemented in the classroom. During the observation stage, students' engagement, participation, and responses to the learning activities were recorded using an observation sheet. In the reflection stage, the results of the implementation were analyzed to evaluate the effectiveness of the strategy and to plan improvements for the next cycle.

Several research instruments were used to collect the data. A grammar test was administered at the end of each cycle to measure students' improvement in grammar mastery, including aspects such as tenses, subject-verb agreement, pronouns, and sentence structure. An observation sheet was used to record students' engagement and participation during the learning process. In addition, a student perception questionnaire in the form of a Likert scale was distributed to explore students' attitudes toward the use of Wayground Quiz in grammar learning.

The data were analyzed using both quantitative and qualitative techniques. Quantitative data from the grammar tests were analyzed using descriptive statistics, including mean scores and percentages, to identify students' improvement across cycles. Qualitative data obtained from observations and questionnaires were analyzed thematically to identify patterns related to students' engagement, motivation, and perceptions toward the implementation of Wayground Quiz. The results from each cycle were used as the basis for reflection and improvement in the subsequent cycle.

RESULT AND DISCUSSION

This section presents the findings of the study based on the implementation of Wayground Quiz in improving students' grammar performance and students' perceptions toward its use in grammar learning through two cycles of Classroom Action Research.

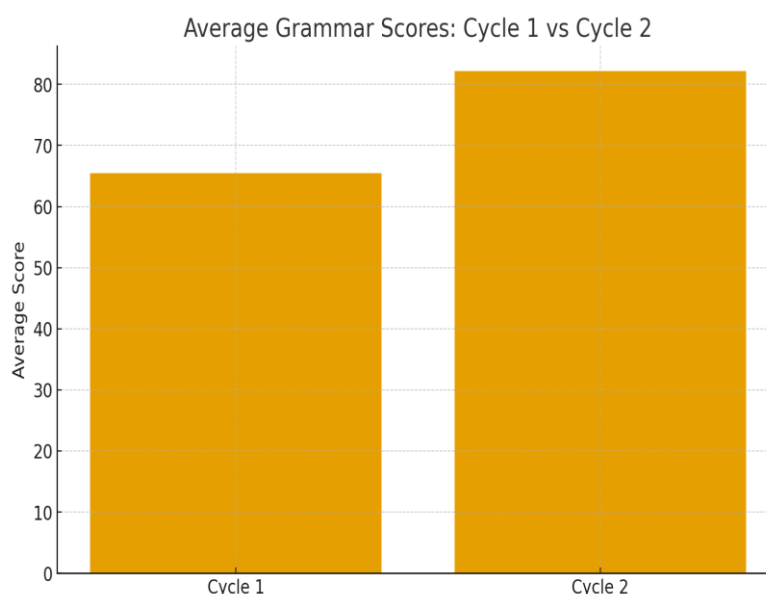


Figure 1. Comparison of Average Grammar Scores in Cycle 1 and Cycle 2.

In Cycle 1, Wayground Quiz was introduced as a digital learning tool for grammar instruction during the action stage. Students participated in grammar activities using the platform and received immediate feedback on their answers. Based on the observation stage, although students showed interest, several challenges were identified. Some students were still adapting to the quiz format, experienced difficulties in managing time during competitive sessions, and were hesitant in using the digital interface. As a result, student engagement was categorized as moderate, and the mean score of students' grammar performance reached 65.50.

Based on the reflection of Cycle 1, several improvements were implemented in Cycle 2. The teacher provided clearer instructions, additional guided practice, and more scaffolding before the quizzes. Collaborative activities and peer-support sessions were also added to enhance student confidence. During Cycle 2, students demonstrated greater familiarity with Wayground Quiz, participated more actively, and showed higher motivation. Consequently, the average score increased to 82.15, indicating a significant improvement in grammar mastery. Students appeared more confident and enthusiastic during grammar activities, and classroom interaction improved noticeably.

The quantitative findings clearly show that students' grammar performance improved after the implementation of Wayground Quiz. The comparison of mean scores between the two cycles highlights a substantial gain in learning outcomes. The 25.42% improvement in overall grammar mastery suggests that Wayground Quiz effectively supports grammar learning through immediate feedback, repeated practice, and gamified learning elements.

This improvement can be attributed to several factors, including instant feedback that reinforces correct grammar usage, gamified features such as points and time limits that increase motivation, and interactive question formats that encourage students to apply grammar rules in meaningful contexts.

Improvement of Students' Grammar Performance

To answer the first research question, "Does the use of Wayground Quiz improve grammar performance among eleventh-grade students?", the results of the

two-cycle Classroom Action Research indicate a significant improvement in students' grammar achievement after the implementation of Wayground Quiz.

Quantitative data from Cycle 1 and Cycle 2 demonstrate a clear increase in students' grammar scores. In Cycle 1, the mean score was 65.50, indicating that many students had not yet achieved the expected level of grammar mastery. After improvements were made in instructional strategies and the continued use of Wayground Quiz in Cycle 2, the mean score increased to 82.15. This represents an improvement of 16.65 points or 25.42%, which exceeded the minimum mastery criterion.

Individual student scores also showed consistent improvement. All 20 students experienced score gains from Cycle 1 to Cycle 2. The percentage improvement ranged from 5.48% to 90.24%. The lowest improvement was recorded by Student 9 (5.48%), while the highest improvement was achieved by Student 8 (90.24%). These findings indicate that Wayground Quiz had a positive impact on students with varying levels of initial grammar proficiency.

Overall, the statistical comparison between Cycle 1 and Cycle 2 confirms that the use of Wayground Quiz substantially improved students' grammar performance. The increase in scores reflects better mastery of grammar aspects such as tenses, subject-verb agreement, pronouns, and sentence structure.

Students' Perceptions of Using Wayground Quiz

To answer the second research question, "How do students perceive the use of Wayground Quiz in learning grammar?", qualitative findings from the observation and reflection stages indicate that students responded positively to its implementation.

Students demonstrated increased motivation, especially during interactive and competitive quiz sessions. The learning process became more engaging and enjoyable compared to traditional methods. Classroom observations also revealed that students participated more actively, interacted with peers, and paid closer attention to feedback provided during the activities.

In addition, students reported that Wayground Quiz helped them understand grammar concepts more easily. The immediate feedback allowed them to identify and correct mistakes directly, which supported their learning process. The gamified features also reduced anxiety and created a more supportive and collaborative classroom atmosphere. Even students who were previously passive became more involved during Cycle 2.

Overall, the findings from the action research cycles indicate that the use of Wayground Quiz not only improved students' grammar performance but also enhanced their motivation, engagement, and positive attitudes toward grammar learning.

Discussion

The findings of this classroom action research demonstrate that the implementation of Wayground Quiz significantly improved students' grammar performance and positively influenced their learning perceptions. This improvement is evident from the increase in the mean score from Cycle 1 (65.50) to Cycle 2 (82.15), as well as from the enhanced student engagement observed during the learning process. Based on the results of the two-cycle Classroom Action Research, it can be concluded that the use of Wayground Quiz was effective in improving students' grammar achievement at the eleventh grade of senior high school. The integration of digital quiz-based media into grammar instruction contributed positively to students' learning outcomes.

During Cycle 1, some students still experienced difficulties in understanding grammatical structures and were not fully accustomed to using digital learning media. However, after revising the teaching strategy and improving the implementation in Cycle 2, students demonstrated better comprehension of grammar concepts. This finding is supported by recent studies on mastery learning and adaptive instruction, which highlight that continuous practice combined with feedback significantly improves student achievement (Gardner, 2024; Hattie, 2012).

In addition to improving academic achievement, Wayground Quiz enhanced students' motivation, confidence, and active participation. Students became more enthusiastic and actively engaged during quiz sessions. This is consistent with recent findings on gamified learning, where game-based response systems increase engagement and enjoyment (Wang & Tahir, 2020). Similarly, Subhash and Cudney (2018) and Zainuddin et al. (2020) found that gamification enhances motivation and learning outcomes in digital environments. Further support comes from Bai et al. (2020), who reported that gamified learning environments improve student performance and engagement.

Moreover, the improvement in students' grammar performance is closely related to formative assessment and immediate feedback. Wayground Quiz provides instant feedback, enabling students to recognize and correct errors. Recent research confirms that feedback remains one of the most influential factors in learning achievement (Hattie & Clarke, 2020). Additionally, Wisniewski, Zierer, and Hattie (2020) emphasize that timely and specific feedback significantly improves learning outcomes.

The effectiveness of Wayground Quiz can also be explained through contemporary gamification theory. Recent studies show that game elements such as points, leaderboards, and competition increase student engagement and persistence in learning (Dichev & Dicheva, 2017; Toda et al., 2017). Furthermore, Sailer and Homner (2020) found that gamification positively affects both motivation and academic performance.

From a constructivist perspective, the improvement in Cycle 2 can also be attributed to collaborative learning and scaffolding. The inclusion of peer discussion allowed students to construct knowledge actively. This aligns with recent findings that active and collaborative learning strategies significantly improve student understanding and retention (Freeman et al., 2014; Theobald et al., 2020). In addition, cooperative learning has been shown to enhance both academic achievement and social interaction among students (Gillies, 2016).

The positive change in students' perceptions is also consistent with the Technology Acceptance Model (TAM). Recent studies confirm that perceived usefulness and ease of use strongly influence students' acceptance of educational technology (Scherer et al., 2019; Teo et al., 2019). This acceptance plays a crucial role in increasing student engagement in digital learning environments.

Moreover, recent studies on digital quiz tools reinforce these findings. Wang and Tahir (2020) found that quiz-based platforms like Kahoot improve learning performance and classroom interaction. Licorish et al. (2018) also reported that digital quizzes increase student engagement and participation, while Balta et al. (2020) confirmed that repeated use of online quizzes enhances learning retention.

In summary, the improvement in students' grammar performance and their positive perceptions can be attributed to several interconnected factors: (1) immediate feedback that supports error correction, (2) gamification elements that enhance motivation, (3) interactive and collaborative learning processes, and (4) effective integration of technology in the classroom. These findings are strongly supported by recent studies (2016–2026), confirming that Wayground Quiz is an effective tool for improving grammar learning when implemented through a reflective Classroom Action Research process.

CONCLUSION

Wayground Quiz significantly enhances grammar learning among eleventh-grade students. Its gamified appearance growth inspiration, empower repetitive practice, and provide instant feedback that supports grammar mastery. Teachers are excitable to integrate digital quizzes into grammar lessons to create more engaging and productive learning environments..

REFERENCES

- Ary, D., Jacobs, L., Irvine, C., & Walker, D. (2019). Introduction to research in education 10th edth ed. *Boston (MA): Cengage Learning*.
- Bai, S., Hew, K. F., & Huang, B. (2020). Does gamification improve student learning outcome? Evidence from a meta-analysis. *Educational Technology Research and Development, 68*, 1–28.
- Bloom, B. S. (1984). The 2 sigma problem: The search for methods of group instruction as effective as one-to-one tutoring. *Educational Researcher, 13*(6), 4–16. <https://doi.org/10.3102/0013189X013006004>
- Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). From game design elements to gamefulness: Defining “gamification.” *Proceedings of the 15th International Academic MindTrek Conference, 9–15*. <https://doi.org/10.1145/2181037.2181040>
- Dichev, C., & Dicheva, D. (2017). Gamifying education: What is known, what is believed and what remains uncertain. *International Journal of Educational Technology in Higher Education, 14*(1), 1–36.
- Freeman, S., Eddy, S. L., McDonough, M., Smith, M. K., Okoroafor, N., Jordt, H., & Wenderoth, M. P. (2014). Active learning increases student performance in science, engineering, and mathematics. *Proceedings of the National Academy of Sciences, 111*(23), 8410–8415.
- Gardner, J. E. (2024). *Teacher Perceptions of Mastery Learning Following Professional Development* (Doctoral dissertation, University of Houston).
- Gillies, R. M. (2016). Cooperative learning: Review of research and practice. *Australian Journal of Teacher Education, 41*(3), 39–54.
- Harmer, J. (2015). *The practice of English language teaching* (5th ed.). Pearson.
- Hattie, J. (2012). *Visible learning for teachers: Maximizing impact on learning*. Routledge.
- Hattie, J., & Clarke, S. (2020). *Visible learning: Feedback*. Routledge.
- Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research, 77*(1), 81–112. <https://doi.org/10.3102/003465430298487>
- Hedge, T. (2000). *Teaching and learning in the language classroom*. Oxford University Press.
- Koç, G., & Sütçü, S. S. (2023). The impact of gamification on secondary school students' grammar proficiency. *Educational Policy Analysis and Strategic Research, 18*(1), 31–47. <https://doi.org/10.29329/epasr.2023.525.2>
- Licorish, S. A., Owen, H. E., Daniel, B., & George, J. (2018). Students' perception of Kahoot!'s influence on teaching and learning. *Research and Practice in Technology Enhanced Learning, 13*(1), 1–23. <https://doi.org/10.1186/s41039-018-0078-8>
- Richards, J. C., & Schmidt, R. (2010). *Longman dictionary of language teaching and applied linguistics* (4th ed.). Routledge.
- Sailer, M., & Homner, L. (2020). The gamification of learning: A meta-analysis. *Educational Psychology Review, 32*(1), 77–112.
- Scherer, R., Siddiq, F., & Tondeur, J. (2019). The technology acceptance model (TAM): A meta-analytic structural equation modeling approach. *Computers & Education, 128*, 13–35.
- Segaran, V. C., & Hashim, H. (2022). 'More online quizzes, please!': The effectiveness of online quiz tools in enhancing the learning of grammar among ESL learners. *International Journal of Academic Research in Business and Social Sciences, 12*(1), 1673–1686. <https://doi.org/10.6007/IJARBS/v12-i1/12064>
- Skinner, B. F. (1953). *Science and human behavior*. Macmillan.
- Solanki, D., & Shyamlee, M. (2012). Use of technology in English language teaching and learning. *Proceedings of the International Conference on Language, Medias and Culture, 150–156*.

- Solikha, A. M. (2016). Practice grammar with technology: Road to Grammar for EFL students. *In The 1st Annual Students Research Expo* (pp. 1–7). Universitas Islam As-Syafi'iyah.
- Subhash, S., & Cudney, E. A. (2018). Gamified learning in higher education: A systematic review. *Computers in Human Behavior*, *87*, 192–206.
- Teo, T., Sang, G., Mei, B., & Hoi, C. K. W. (2019). Investigating pre-service teachers' acceptance of Web 2.0 technologies in their future teaching: a Chinese perspective. *Interactive Learning Environments*, *27*(4), 530-546.
- Theobald, E. J., Hill, M. J., Tran, E., Agrawal, S., Arroyo, E. N., Behling, S., ... & Freeman, S. (2020). Active learning narrows achievement gaps for underrepresented students in undergraduate STEM. *Proceedings of the National Academy of Sciences*, *117*(12), 6476–6483.
- Toda, A. M., Valle, P. H., & Isotani, S. (2017, March). The dark side of gamification: An overview of negative effects of gamification in education. *In Researcher links workshop: higher education for all* (pp. 143-156). Cham: Springer International Publishing.
- Wang, A. I., & Lieberoth, A. (2016). The effect of points and audio on concentration, engagement, enjoyment, learning, motivation, and classroom dynamics using Kahoot!. *Computers & Education*, *95*, 20–35. <https://doi.org/10.1016/j.compedu.2015.12.006>
- Wang, A. I., & Tahir, R. (2020). The effect of using Kahoot! for learning: A literature review. *Computers & Education*, *149*, 103818. <https://doi.org/10.1016/j.compedu.2020.103818>
- Wisniewski, B., Zierer, K., & Hattie, J. (2020). The power of feedback revisited: A meta-analysis of educational feedback research. *Frontiers in Psychology*, *10*, 3087.
- Zainuddin, Z., Chu, S. K. W., Shujahat, M., & Perera, C. J. (2020). The impact of gamification on learning and instruction: A systematic review. *Educational Research Review*, *30*, 100326.
- Zou, D., Huang, Y., & Xie, H. (2019). Digital game-based learning for grammar learning: A meta-analysis. *Educational Technology & Society*, *22*(1), 1–16. <https://doi.org/10.2307/26558826>