

Development of basic English Grammar Learning Material with Interactive Multimedia for SD Negeri 03 Rantau Selatan

Anna Leli Harahap^{1*}, Rizki Lestari², Agati Sri haryati³
^{1,2,3}FKIP, English Education Study Program, Al-Washliyah University

Abstrak

Penelitian ini bertujuan untuk mengembangkan materi pembelajaran berbasis multimedia interaktif untuk mengajarkan tata bahasa Inggris dasar di SD Negeri 03 Rantau Selatan, dengan tujuan untuk meningkatkan pemahaman tata bahasa dan keterlibatan siswa. Pengajaran tata bahasa tradisional sering kali gagal untuk mempertahankan perhatian siswa atau memberikan kesempatan yang cukup untuk belajar secara aktif. Pembelajaran multimedia, yang mengintegrasikan elemen visual, pendengaran, dan interaktif, menawarkan solusi potensial untuk tantangan ini. Penelitian ini menggunakan pendekatan metode campuran, termasuk penilaian pra dan pasca-tes, survei, dan observasi kelas, untuk mengevaluasi keefektifan materi multimedia. Materi pembelajaran yang dikembangkan meliputi video, kuis, permainan tata bahasa, dan latihan interaktif yang dirancang untuk memperkuat konsep-konsep tata bahasa utama seperti struktur kalimat, bentuk kata kerja, dan persetujuan subjek-keterangan. Materi tersebut diimplementasikan selama enam minggu dengan 30 siswa di kelas lima. Data dikumpulkan melalui penilaian sebelum dan sesudah untuk mengukur peningkatan pengetahuan tata bahasa, serta melalui survei dan umpan balik dari guru untuk menilai keterlibatan dan motivasi siswa. Hasil penelitian menunjukkan peningkatan yang signifikan dalam kemampuan tata bahasa siswa, dengan nilai rata-rata post-test meningkat 24% dari pre-test. Siswa melaporkan bahwa mereka merasa lebih senang dan tertarik dengan pelajaran yang diberikan, dengan 90% siswa menyatakan bahwa mereka merasa lebih termotivasi dan percaya diri dalam menerapkan aturan tata bahasa. Para guru mengamati peningkatan partisipasi siswa dan mencatat bahwa materi multimedia memungkinkan pembelajaran yang lebih individual. Temuan ini menunjukkan bahwa multimedia interaktif adalah alat yang efektif untuk meningkatkan pembelajaran tata bahasa, meningkatkan motivasi siswa, dan menumbuhkan lingkungan kelas yang lebih menarik.

Kata kunci: Multimedia interaktif, pembelajaran tata bahasa, keterlibatan siswa, integrasi teknologi.

Abstract

This study aimed to develop interactive multimedia-based learning materials for teaching basic English grammar at SD Negeri 03 Rantau Selatan, with the goal of improving students' grammar comprehension and engagement. Traditional grammar instruction often fails to maintain students' attention or provide sufficient opportunities for active learning. Multimedia learning, which integrates visual, auditory, and interactive elements, offers a potential solution to these challenges. The study utilized a mixed-methods approach, including pre- and post-test assessments, surveys, and classroom observations, to evaluate the effectiveness of the multimedia materials. The developed learning materials included videos, quizzes, grammar games, and interactive exercises designed to reinforce key grammar concepts such as sentence structure, tenses, and subject-verb agreement. The materials were implemented over a period of six weeks with 30 students in the fifth grade. Data was collected through pre- and post-assessments to measure improvements in grammar knowledge, as well as through surveys and teacher feedback to assess student engagement and motivation. The results showed a significant improvement in students' grammar skills, with the average post-test score increasing by 24% from the pre-test. Students reported greater enjoyment and engagement with the lessons, with 90% expressing that they felt more motivated and confident in applying grammar rules. Teachers observed increased student participation and noted that the multimedia materials allowed for more individualized learning. These findings suggest that interactive multimedia is an effective tool for enhancing grammar learning, increasing student motivation, and fostering a more engaging classroom environment.

Keywords: Interactive multimedia, grammar learning, student engagement, technology integration.

1. INTRODUCTION

The development of educational materials has become a key focus in improving the quality of teaching and learning, particularly in primary education. In the context of learning English, effective teaching methods and appropriate learning resources are essential in helping students understand the complexities of the language, especially grammar. For young learners, traditional methods of teaching grammar often fail to capture their attention or encourage active participation, which can hinder their learning process. Therefore, innovative approaches, such as the use of multimedia, have been explored to address these challenges and improve language learning outcomes. This study aims to develop basic English grammar learning materials with interactive multimedia for students at SD Negeri 03 Rantau Selatan, a primary school located in Rantau Selatan District. The importance of learning grammar in language acquisition cannot be overstated. Grammar serves as the backbone of language structure, enabling students to communicate clearly and effectively. However, in many schools, teaching grammar has often been restricted to rote memorization of rules and repetitive exercises, which may not engage students effectively. Research indicates that traditional grammar instruction methods may lead to a lack of understanding and long-term retention of grammatical concepts (Nassaji & Tian, 2015). Consequently, there is a growing interest in finding alternative methods that make grammar learning more engaging and accessible to young learners.

Multimedia learning, defined as the integration of text, images, audio, and video in an educational context, offers numerous benefits for teaching and learning. According to Mayer (2009), multimedia learning can enhance students' understanding and retention of information by presenting it in various formats that cater to different learning styles. In the case of grammar instruction, interactive multimedia can provide opportunities for students to actively engage with the material, receive immediate feedback, and practice in a dynamic and enjoyable environment. This is especially important for primary school students, who often find traditional grammar lessons monotonous and difficult to follow. Interactive multimedia materials, such as games, animations, and quizzes, have been proven to be effective tools for increasing student motivation and participation (Cheng & Tsai, 2014). These tools not only provide visual and auditory stimuli that enhance understanding but also create a sense of fun and challenge, which encourages students to take an active role in their learning. For instance, language games that focus on grammar structures can allow students to practice their skills in a low-stakes, enjoyable way, making the learning process more engaging. At SD Negeri 03 Rantau Selatan, many students face challenges in mastering basic English grammar due to limited access to engaging educational resources. The lack of interactive learning tools and teaching materials has made it difficult for students to stay engaged during lessons. Teachers have expressed the need for more innovative and interactive resources that can stimulate students' interest in learning English grammar while also helping them retain the key concepts. The development of interactive multimedia learning materials for grammar aims to address these challenges by offering an alternative to traditional teaching methods.

The integration of technology into education has become increasingly important, particularly in the context of interactive learning. According to the Ministry of Education and Culture of Indonesia (2020), incorporating multimedia in the classroom can improve students' motivation, foster a deeper understanding of content, and develop their digital literacy skills. This aligns with the Indonesian government's efforts to enhance the quality of education through digital learning resources. The development of multimedia materials for teaching basic English grammar at SD Negeri 03 Rantau Selatan will not only improve students' language skills but also introduce them to the world of technology, preparing them for a more digitalized future. In this study, the focus is on developing a set of multimedia materials that cater to the specific needs of students at SD Negeri 03 Rantau Selatan. These materials will be designed to be interactive, engaging, and aligned with the curriculum for basic English grammar. The project will involve collaboration between teachers, instructional designers, and multimedia experts to create a series of lessons that integrate animations, quizzes, and games, which will allow students to practice grammar in a fun and interactive way.

Furthermore, this development project aims to create learning materials that are adaptable to various learning styles. The interactive multimedia will allow students to learn at their own pace, providing opportunities for those who need extra practice while allowing more advanced learners to progress faster. This personalized approach ensures that all students can benefit from the materials, regardless of their learning speed or level of understanding. Additionally, the study will evaluate the effectiveness of the multimedia materials in improving students' grammar skills. This will be done through pre- and post-assessment tests to measure students' understanding of the grammar topics covered. The findings of the study will be valuable for educators and instructional designers who seek to implement similar multimedia-based learning solutions in other schools or classrooms. Finally, this study will contribute to the growing body of research on the use of interactive multimedia in language education. While much

research has been conducted on the use of multimedia in higher education, there is a need for more studies that focus on the application of multimedia for primary school students, particularly in developing countries. The results of this study may provide insights into how multimedia can be effectively integrated into the primary school curriculum to enhance language learning outcomes and improve overall student engagement.

2. RESULTS AND DISCUSSION

This section presents the results and discussion of the development and implementation of interactive multimedia-based learning materials for teaching basic English grammar at SD Negeri 03 Rantau Selatan. The results were based on data collected through classroom observations, student surveys, teacher feedback, and pre- and post-assessment tests. The purpose of this development project was to improve students' engagement with English grammar and to evaluate the effectiveness of interactive multimedia in enhancing their learning experience.

1. Improvement in Students' Grammar Understanding

The primary objective of the development of multimedia learning materials was to enhance students' understanding of basic English grammar. Pre-assessment tests conducted before the implementation of the multimedia materials revealed that many students struggled with fundamental grammar concepts, including sentence structure, tenses, and subject-verb agreement. The average score on the pre-test was 58%, indicating a need for more engaging and effective learning resources. After the implementation of the interactive multimedia materials, which included video lessons, quizzes, and grammar games, a significant improvement was observed. The average post-test score increased to 82%, a 24% improvement. The results demonstrate that the use of multimedia learning materials had a positive impact on students' grammar understanding. This improvement can be attributed to the interactive nature of the materials, which allowed students to engage actively with the content, practice grammar rules in context, and receive immediate feedback on their performance. The findings align with Mayer's (2009) multimedia learning theory, which suggests that presenting instructional material through multiple modalities—such as text, images, and sound—helps students understand and retain information more effectively. Interactive multimedia materials provide varied inputs that appeal to different learning styles, thus catering to the diverse needs of students at SD Negeri 03 Rantau Selatan.

2. Increased Student Motivation and Engagement

One of the key goals of integrating interactive multimedia was to increase student motivation and engagement with English grammar lessons. Traditional methods of grammar instruction, often relying on textbooks and rote memorization, were not enough to keep students engaged. Based on teacher observations and student surveys, there was a notable increase in student interest and involvement in grammar lessons after the multimedia materials were introduced. Approximately 90% of students reported enjoying the interactive games, quizzes, and animations incorporated into the learning materials. Students mentioned that they found the games especially motivating, as they could practice grammar in a more enjoyable and less stressful environment. These activities encouraged students to actively participate and provided them with opportunities for self-paced learning. Teachers also observed that students were more eager to volunteer answers, participate in group activities, and collaborate with their peers during grammar exercises. This increase in student motivation and engagement is consistent with findings by Cheng and Tsai (2014), who suggested that interactive multimedia not only enhances students' understanding but also increases their motivation to learn. The integration of fun, game-like elements into the learning process appears to have played a significant role in making grammar lessons more engaging for the students.

3. Student Confidence and Autonomy

Another important result of the development of interactive multimedia learning materials was the enhancement of student confidence and autonomy in learning English grammar. The multimedia resources allowed students to work at their own pace, providing the opportunity for them to review challenging grammar concepts multiple times. Many students expressed that they felt more confident practicing grammar independently after using the multimedia materials. In the post-study survey, 85% of students reported that they felt more confident using grammar correctly after engaging with the interactive materials. Students mentioned that the ability to go back and review videos and explanations helped them understand difficult concepts better. Moreover, the quizzes and games provided immediate feedback, which allowed students to assess their progress and identify areas for improvement. This personalized learning experience empowered students to take ownership of their learning, a critical factor in fostering long-term retention and mastery of grammar. This finding supports the theory of self-regulated learning,

which suggests that when students are given more control over their learning process, they tend to become more confident and motivated (Zimmerman, 2002). By allowing students to engage with the material at their own pace and offering opportunities for self-assessment, the interactive multimedia materials helped build their autonomy and self-efficacy in grammar learning.

4. Positive Teacher Feedback and Classroom Impact

Teachers also provided valuable feedback on the impact of the multimedia materials on classroom dynamics. Teachers reported that the multimedia resources allowed for more dynamic and interactive lessons. They noted that the materials provided a variety of teaching strategies that accommodated different learning preferences and kept the students more engaged during lessons. In particular, the multimedia tools helped students who might have struggled with traditional methods by offering visual, auditory, and kinesthetic modes of learning. Furthermore, teachers observed a positive shift in students' behavior. Students became more enthusiastic about grammar lessons, asking questions, and engaging in peer discussions. Teachers also found it easier to assess students' progress in real-time, as the quizzes and games provided instant feedback that could inform instructional decisions. The multimedia materials allowed teachers to focus more on providing individualized support and less on delivering content. This outcome is consistent with the findings of the Ministry of Education and Culture of Indonesia (2020), which emphasized that technology in the classroom can not only improve student learning outcomes but also enhance teacher effectiveness by providing more varied and accessible instructional tools.

5. Challenges and Areas for Improvement

While the results were generally positive, the study also identified some challenges in the implementation of the multimedia materials. One of the main obstacles was the limited access to technology in the classroom. Although the school had computer facilities, there were times when technical issues, such as slow internet connections or malfunctioning computers, interfered with the smooth delivery of the multimedia lessons. These issues occasionally caused delays or interruptions during lessons, which impacted students' learning experience. Additionally, some students faced difficulties with the navigation of the multimedia resources. While the materials were designed to be user-friendly, a few students initially struggled to interact with certain features, such as the quizzes or games. To address these challenges, additional training for students on how to use the multimedia tools effectively could be provided, as well as ensuring better access to technology in the classroom.

CONCLUSION

The development of interactive multimedia-based learning materials for teaching basic English grammar at SD Negeri 03 Rantau Selatan has demonstrated substantial effectiveness in improving students' grammar skills and overall language learning experience. The integration of multimedia elements such as videos, quizzes, and grammar games resulted in a significant increase in students' understanding of key grammar concepts, as evidenced by the improvement in their pre- and post-test scores. The 24% increase in test scores highlights the potential of multimedia tools in enhancing comprehension and retention of grammatical rules. Additionally, the use of interactive multimedia not only helped improve students' grammar skills but also increased their motivation and engagement. Students expressed greater enthusiasm and participation during grammar lessons, which were made more dynamic and enjoyable through the incorporation of multimedia elements. The multimedia tools allowed students to learn at their own pace, receive immediate feedback, and engage in interactive exercises, which built their confidence and encouraged independent learning. Teachers also reported positive outcomes, noting that the multimedia resources facilitated a more student-centered approach to instruction, with increased opportunities for personalized learning. By catering to various learning styles, the multimedia materials helped address the diverse needs of students, enhancing their overall classroom experience. Despite some challenges, such as technical issues and initial difficulties with navigation, the results suggest that interactive multimedia is a valuable tool for improving English grammar instruction in primary education. This study underscores the importance of integrating technology into the curriculum to make learning more engaging and effective, fostering both academic achievement and student autonomy. Moving forward, further investment in multimedia learning resources and teacher training will be essential to maximize the benefits of this approach, ensuring that it can be implemented successfully in other schools and educational contexts.

4. REFERENCES

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