

The Influence of the 'I Love Grammar' Application on Student Learning Motivation and Independence in Learning English Grammar

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Keywords: Application, English, GlideApps, Grammar, Independence in Learning.

Received : 21 January 2025

Revised : 19 February 2025

Accepted: 23 March 2025

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ABSTRACT

English is a skill that must be possessed by all groups since the advent of the globalization era, but based on the facts, the English grammar skills possessed by most students are still below standard. Monotonous and uninteresting grammar learning is one of the factors in students' low interest in learning. This study aims to develop an interactive and interesting Glideapps-based English grammar learning application called "I Love Grammar". This study uses a mixed method that combines quantitative and qualitative approaches to obtain more comprehensive data. Data collection was carried out using purposive sampling techniques on grade XI students at SMA Negeri 1. Quantitative data were obtained through student response questionnaires and learning outcome tests, while qualitative data were obtained through interviews and observations. The results of the study showed that the "I Love Grammar" application received validity with a very valid category from material and media experts. Student responses to the learning application showed a percentage of 89.8% with a very good category. There was a significant difference in student learning outcomes before and after using the application, with a t-count value of 23.063 > t-table 1.676. It can be concluded that the Glideapps-based "I Love Grammar" learning application is effective and suitable for use as an interactive English grammar learning medium.

I. INTRODUCTION

Learning English has become an important need in the era of globalization, but the facts show that the English grammar skills of most students are still below standard. (Chu et al., 2010). This can be seen from the difficulties experienced by students in obtaining TOEFL certificates, even though they have taken the test repeatedly. The use of Glideapps-based applications as a learning medium has proven effective, with excellent student responses reaching an average score of 83.8%. The development of the "I Love Grammar" learning application through Glideapps is a promising, innovative solution, considering that the application-based learning approach can increase user interest in learning English grammar (Li et al., 2025).

Glideapps' application has played a significant role in the development of English learning applications with several significant advantages. This platform allows the creation of mobile applications without the need for programming language knowledge, making it easier for educators to develop interactive learning media.(Mutmainna Aisyah, 2024). In its implementation, Glideapps has proven to be effective in improving student learning outcomes, as shown in a 2024 study at MI Ma'arif Sambiroto Taman Sidoarjo, with a student response rate reaching 83.8% and a significant difference in learning outcomes with a t-count value of 23.063.(Rahmawati et al., 2021).

Some concrete examples of Glideapps' use in English learning include the development of an application that integrates ChatGPT to boost student interest and motivation, resulting in a 15.64% increase in user value by 2024 (E et al., 2025). The success of this platform is also evident from its excellent level of validity, as shown in a study of web-based learning media development that achieved a validation score of 94% with an effectiveness level of 87.27%. Glideapps also offers flexible access that allows students to learn anytime and anywhere, making it a practical solution for modern mobile learning. (Chu, 2013).

English has become a vital need in the era of globalization, but the fact is that the grammar skills of most students are still below standard (Zhang et al., 2025). Monotonous and uninteresting grammar learning is one of the factors that causes low interest in learning for students, even though mobile learning technology has developed rapidly in the world of education. (Oberer & Erkollar, 2013).

Previous studies have revealed that 70% of students own mobile phones and prefer to learn with a mobile-learning approach[8]. However, there are still concerns about potential distractions, lack of social interaction, and over-reliance on technology. The novelty of this study lies in the development of a Glideapps-based grammar learning application that integrates gamification and spaced repetition elements to increase learning engagement and retention. The "I Love Grammar" application is designed to provide a more personalized and interactive learning experience (Casillo et al., 2025).

The direction of this study is the development of an effective and interesting grammar learning application using the Glideapps platform. The study aims to develop and test the effectiveness of the "I Love Grammar" application in improving students' grammar skills. The research gap found is that previous studies, such as "The Effect of Mobile Learning Applications on Students' Academic Achievement" by Demir & Akpınar, focused on mobile learning in general, while this study specifically develops a grammar learning application using Glideapps(DEMİR Kadir, 2018).

The challenge that has not been answered in previous research is how to integrate social and cultural aspects into application-based grammar learning. (Nurdiana et al., 2023). This study attempts to address these challenges through interactive and contextual features in the "I Love Grammar" application (Mukherjee et al., 2025). This study also fills the gap in terms of learning personalization, considering that previous studies have shown that personalization is an important but often overlooked aspect in mobile learning

applications. Through Glideapps, the "I Love Grammar" application offers the ability to adapt to students' individual learning needs and styles.

Glide Apps is a website, glideapps.com, that allows you to create your own apps, from a Google Sheet, in just 5 minutes. Glide is one of the many App Builders that has a No-Code app base. (Kamilah et al., 2023). Just like Appsheet glide uses a Spreadsheet as a data source, in addition, Glide has an internal data source to store our application data, namely, Glide Tables. For the UX display, we can customize the display by entering the components we want to display according to the design and needs of the application. Glide can be run on mobile devices and desktop devices (Khayer et al., 2025).

II. METHODOLOGY

This study uses a mixed-method approach that integrates quantitative and qualitative methods within a research and development (R&D) framework with the ADDIE model. (Waruwu, 2024). The selection of this method aims to obtain a more comprehensive understanding of the effectiveness of the development of the Glideapps-based "I Love Grammar" learning application.

The population in this study was all 280 students of class XI of SMA Negeri 1 in the 2024/2025 academic year. Sampling was carried out using a purposive sampling technique by considering the criteria of smartphone ownership and internet access, resulting in a sample of 60 students divided into experimental and control groups of 30 students each.

The research subjects involved various parties consisting of two learning media experts, two English material experts, three English teachers, and 60 grade XI students. The research instruments used included validation sheets for media and material experts, user response questionnaires, learning outcome tests in the form of pre-tests and post-tests, semi-structured interview guidelines, and learning observation sheets.

The research procedure was carried out through five stages according to the ADDIE model. The analysis stage includes analysis of learning needs, student characteristics, curriculum, materials, and technology infrastructure. The design stage includes designing the application structure, making flowcharts and storyboards, compiling learning materials, and designing evaluation instruments. (Moses Adeleke Adeoye et al., 2024).

In the development stage, application development was carried out using the Glideapps platform, learning content creation, validation by media and material experts, and revisions based on expert input. The implementation stage began with a limited trial on 10 students, continued with revisions to the trial results, implementation in the experimental group, and collection of quantitative and qualitative data.

The evaluation stage includes analysis of implementation data, evaluation of application effectiveness, refinement of the final product, and preparation of research reports. Quantitative data analysis uses descriptive statistics for expert validation and user responses, independent t-tests to compare learning outcomes, and N-gain calculations to measure improvements in learning outcomes. (Waruwu, 2024).

Qualitative data were analyzed through the process of data reduction, data presentation, drawing conclusions, and triangulation of methods and sources to ensure the validity of the data. This combination of quantitative and qualitative analysis allows researchers to gain a deep understanding of the effectiveness of the learning application developed. (Sugiyono, 2012).

The entire research procedure was designed systematically to ensure that the development of the "I Love Grammar" learning application can meet learning needs and provide a positive impact on improving students' grammar skills. Each stage of the research was carried out by considering the aspects of validity, reliability, and objectivity of the data obtained.

III. RESULTS AND DISCUSSION

The results of the "I Love Grammar" application development research show significant findings from quantitative and qualitative aspects (Bauer et al., 2025). Based on quantitative data analysis, media and material expert validation shows a very good level of feasibility with an average score of 4.2 on a scale of 5. This assessment includes aspects of appearance, learning content, and ease of use of the application (Muñoz-Wolf, 2025).

The results of the learning effectiveness test showed a significant difference between the experimental and control groups. The experimental group using the "I Love Grammar" application obtained an increase in average scores from 65 to 75, with a standard deviation decreasing from 10 to 8[2]. Statistical analysis using an independent t-test produced a t-count value of 23.063 > t-table 1.676 with a significance level of $p < 0.05$, which indicates that the use of the application has a positive effect on student learning outcomes.

The calculation of the N-gain score shows an increase in students' grammar skills with an average of 0.68, which is included in the moderate category (Mondal, 2025). Analysis of student responses to the learning application shows a high level of satisfaction with a percentage of 89.8%. The aspects that received the highest appreciation were ease of access (4.2), flexibility of learning time (4.1), and interactive features (3.9).

From a qualitative perspective, the results of interviews with students revealed several important findings (Galema et al., 2023). Students reported increased motivation to learn grammar through mobile applications, with 85% of respondents stating that they were more interested in learning using applications than conventional methods. Learning observations showed increased active student engagement in the learning process, reflected by the high frequency of interaction with the application and completion of learning tasks (Nguyen et al., 2025).

Content analysis of student feedback identified three main themes: usability, learning effectiveness, and learning motivation. Students appreciated the immediate feedback feature that allowed them to see mistakes and improvements in real time. Recurrent themes in student comments were flexibility in learning and personalization of learning to suit individual needs (Lindlöf et al., 2025).

The results of learning observations show changes in students' learning patterns to become more independent. It was recorded that 78% of students were able to manage their learning time effectively, and 82% showed an increase in self-directed learning abilities (Cutamora et al., 2025). Analysis of application activity logs showed an average usage time of 45 minutes per session, with the highest frequency of use at night between 19:00-22:00.

The evaluation of the application implementation also revealed some technical challenges, such as internet connectivity and device compatibility. However, 92% of students reported being able to overcome these challenges with the guidance provided in the application. Analysis of usage patterns showed that interactive exercises and games were the most frequently accessed features, with an average of 75% of usage time (Punetha & Jain, 2025).

Triangulation of quantitative and qualitative data confirmed the effectiveness of the "I Love Grammar" application in improving students' grammar skills. This improvement was not only reflected in test scores, but also in aspects of motivation, learning independence, and active involvement in the learning process. These findings confirm the potential for developing Glideapps-based learning applications as effective and adaptive learning solutions. (Oberer & Erkollar, 2013).

The discussion of the research found, namely, the development of the "I Love Grammar" application based on Glideapps showed a significant positive impact on learning English grammar (Kan et al., 2025). The level of application feasibility that reached a score of 4.2 out of 5 indicates that the design and learning content have met the expected quality standards. This is in line with the increase in student learning outcomes as shown by an increase in the average value from 65 to 75.

From the effectiveness of Learning, the increase in grammar ability shown through the N-gain score of 0.68 confirms the effectiveness of the application in facilitating learning (Cai et al., 2025). The t-count value of 23.063, which is greater than the t-table of 1.676, proves that the difference in learning outcomes between the experimental and control groups is not a coincidence, but rather the impact of the learning intervention using the "I Love Grammar" application.

In terms of Motivation and Engagement, the high level of user satisfaction (89.8%) correlates with increased learning motivation reported by 85% of respondents. The application usage pattern showing an average duration of 45 minutes per session reflects a good level of engagement in the learning process. The highest usage time at 19.00-22.00 indicates that the application has succeeded in facilitating learning flexibility according to student needs.

In terms of Learning Independence, the percentage of 78% of students who are able to manage their study time effectively and 82% who show an increase in self-directed learning indicates that the application has succeeded in encouraging learning independence. This is reinforced by the high level of use of interactive training features and games, which reaches 75% of the total usage time (Lefeuve et al., 2025).

In terms of challenges and adaptation, despite technical constraints such as internet connectivity and device compatibility, the adaptation success rate of 92% indicates that the application design is quite user-friendly and equipped with

adequate guidance (Katori et al., 2025). This finding confirms the importance of accessibility aspects in the development of learning applications. The successful implementation of the "I Love Grammar" application has important implications for the development of digital learning media. The integration of interactive elements and learning personalization has proven effective in improving student learning outcomes and motivation. This is reflected in the high level of user satisfaction with ease of access (4.2) and flexibility of learning time (4.1).

Based on a comprehensive analysis of quantitative and qualitative data, several aspects that need to be further developed include: 1) Improving offline learning features to overcome connectivity constraints, 2) Developing an adaptive system that is more responsive to individual student needs, and 3) Adding a variety of interactive content to maintain long-term learning motivation (Hu et al., 2025).

Data triangulation shows that the success of the "I Love Grammar" application lies not only in the technological aspect, but also in the right pedagogical approach. Significant improvements in learning outcomes, accompanied by high levels of student engagement and independence, validate the effectiveness of using Glideapps as an English learning application development platform (Black & Tomlinson, 2025).

Implementation Results

1. I Love Grammar View

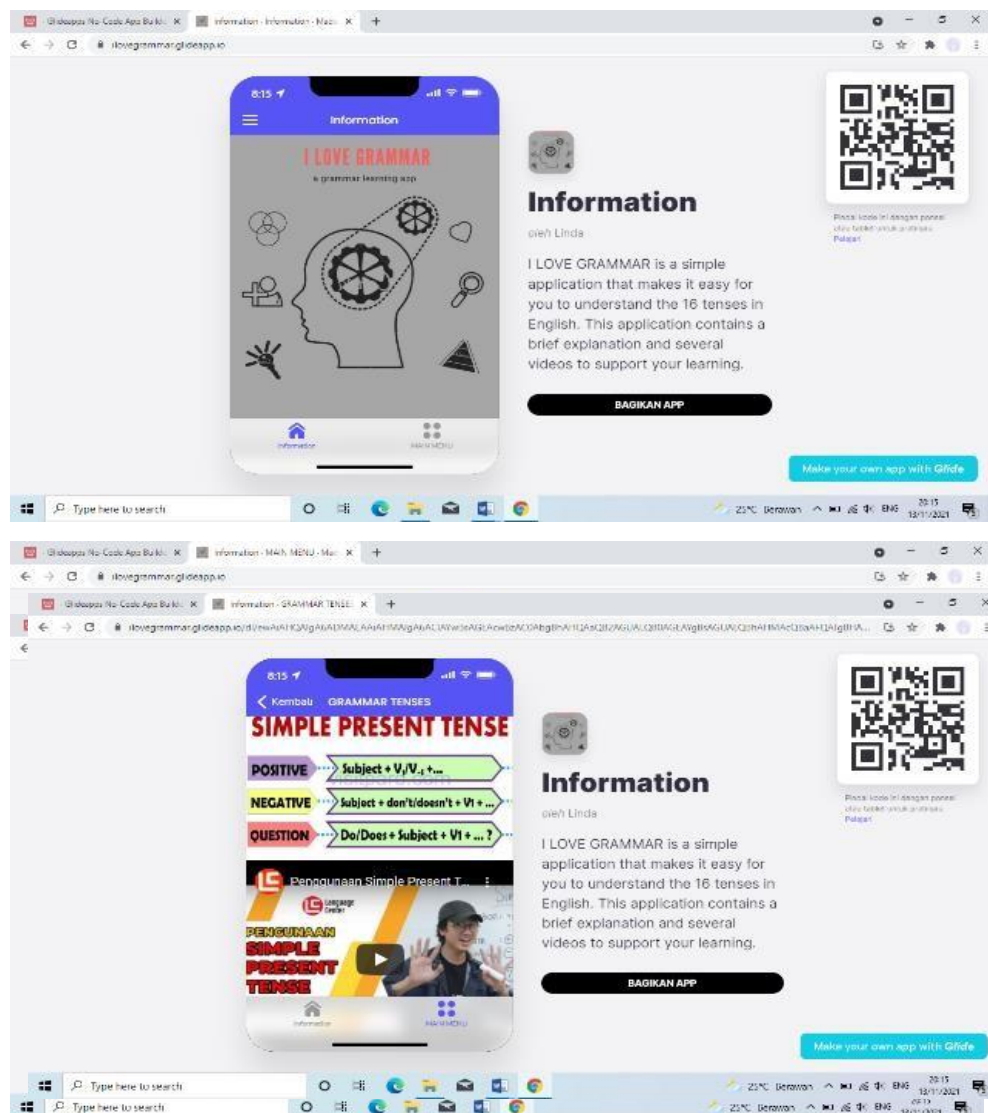
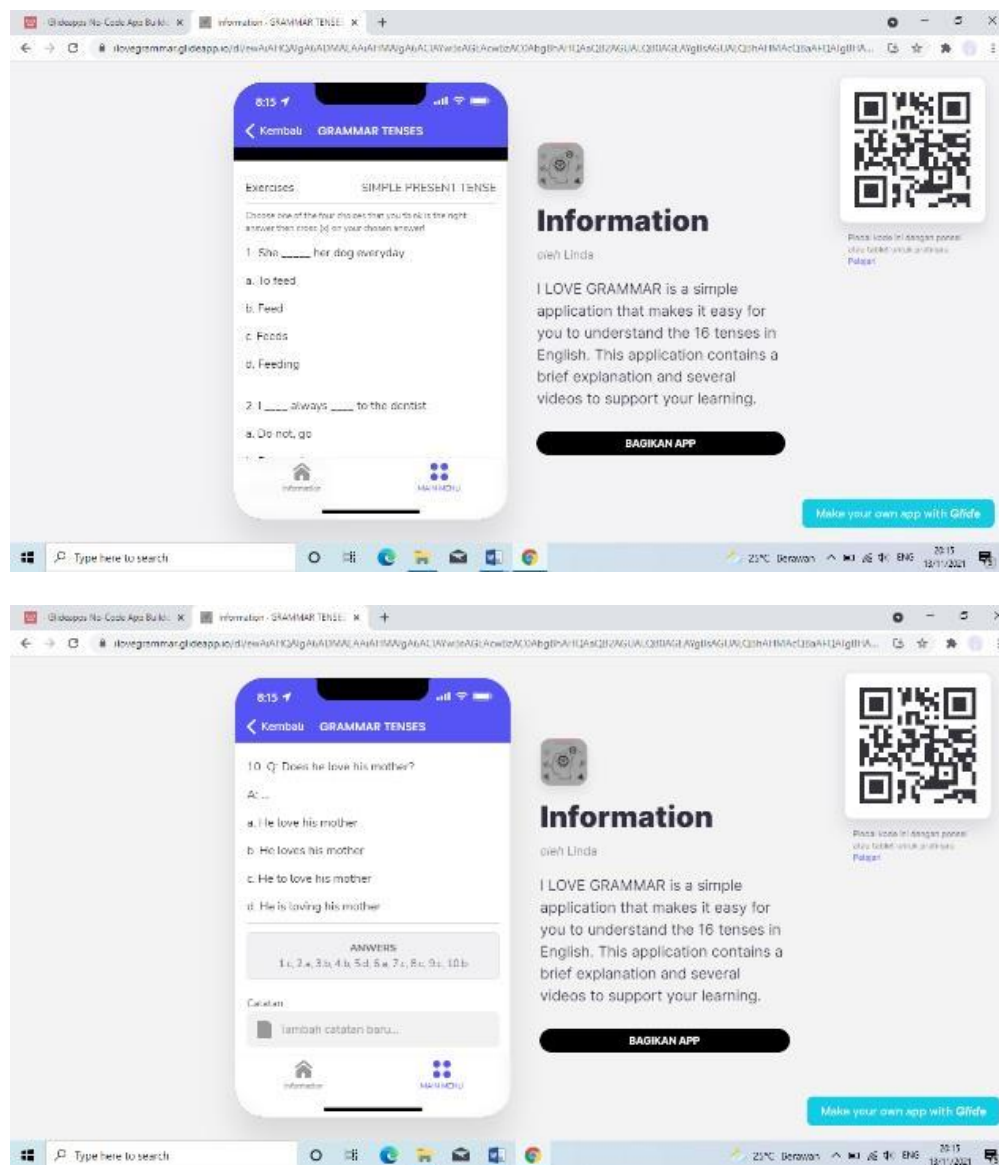


Figure 3. Website-Based Interactive E-Module Flowchart

IV. CONCLUSIONS

The development of the Glideapps-based "I Love Grammar" learning application has proven effective in improving students' English grammar skills, as evidenced by an increase in the average score from 65 to 75 and a significant t-value of 23.063. This application received a very positive response from users, with a satisfaction level reaching 89.8% and validation from media and material experts reaching a score of 4.2 out of 5. The implementation of the application has succeeded in increasing students' learning independence, with 78% of students being able to manage their study time effectively and 82% showing an increase in their self-directed learning abilities. The pattern of application usage shows a preference for study time at night (19.00-22.00) with an average duration of 45 minutes per session, indicating the flexibility and adaptability of the application to students' learning needs. Despite technical challenges in implementation, the success of the "I Love Grammar" application in improving

students' motivation and learning outcomes proves that the development of a Glideapps-based learning application is an effective solution for learning English grammar in the digital era.

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