

DESIGNING ENGLISH GRAMMAR EXERCISES VIA THE WEBSITE EDUCANDY TO IMPROVE GRAMMAR COMPETENCE FOR HIGH SCHOOL STUDENTS

Ngo Thi Bich Ngoc and Luong Ngoc Huyen

Faculty of Foreign Languages Education, Thai Nguyen University of Education, Viet Nam
Correspondence Author – Ngo Thi Bich Ngoc, leminhngoc2911@gmail.com, (+84) 868319626

<https://doi.org/10.54922/IJEHSS.2025.0954>

ABSTRACT

Mastering grammar is a vital aspect of studying English, yet many students struggle to understand and memorize grammatical structures, as well as apply grammar to their homework. This study intends to examine the efficiency of the exercises on the Educandy website to help 11th graders at a high school in Vietnam enhance their grammar competency. The grammar contents that students learned during the experiment were the knowledge from the English textbook used in their school. An experimental group of 15 students took part in a 7-week experiment, in which they were required to apply the exercises via Educandy website. Research tools included a grammar test given before and after the intervention, along with two questionnaires for the student groups involved. The results showed a significant improvement in students' post-test scores and a strong connection between practicing online exercises and better grammar performance. Additionally, students gave positive feedback on using the Educandy website, suggesting that it could be an effective tool for improving grammar learning.

Keywords: Grammar Competence; Grammar Practices; The Educandy Website; 11th Graders

1. INTRODUCTION

In today's highly technologically advanced world, every country must constantly change its education and put education first. This means that not only do teachers need to update what they teach, but also how students practice. Learning is no longer limited to the classroom, as students can learn anytime, anywhere (Alias N. (., 2010). When teachers integrate technology and provide a variety of methods and types of exercises, learning becomes more flexible, and students can practice more effectively. Game-based learning combines traditional teaching methods with technology to support the development of each student (Alias N. (., 2014). Meanwhile, flexible practice improves the learning experience by allowing students to choose their own schedule, learning methods, teaching styles, assessment forms, etc. Therefore, both flexible learning and game-based practice can enhance student engagement, improve grammar skills, and create meaningful learning experiences (Alias N. (., 2014).

It is essential to understand English grammar when studying a language. Scholars such as (Larsen-Freeman, 2015) and (Ellis R. (., 2006) emphasise the significance of this. Effective communication is built on grammar, which is also essential for college students' academic and professional development. In the Vietnamese education system, students start learning English from primary school and continue through high school, and even university. Despite the acknowledged importance of English, students at institutions like Thai Nguyen Specialized High school often grapple with challenges related to grammar competence. Factors such as limited exposure to the language, inadequate resources, and a deficiency of emphasis on language skills in coursework contribute to these difficulties. Language exchange programs, while fostering cultural exchange,

might not provide the focused attention required to address specific grammar issues. Consequently, students find themselves caught in a cycle of ineffective practices that do not yield significant improvement. Students may feel uneasy and stressed as they try to understand the complexities of English grammar (Muhammad Rizky (. , 2021)

To address these difficulties, digital tools have been increasingly used in language teaching to improve student engagement and motivation. I proposed using the website called **Educandy**, an interactive online platform that enables teachers to design game-based activities for grammar practice (Educandy, 2024). Studies indicated that game-based learning can greatly enhance students' motivation and involvement in language learning (White & Mills, 2020). By integrating gamified exercises into grammar lessons, teachers could create a more dynamic learning environment that encourages active participation and helps reduce students' anxiety about learning grammar (Muhammad Rizky (. , 2021). Moreover, White and Mills as cited in (Anggraini, 2020) state that students have a strong tendency to use smartphones for learning foreign languages. This shift in learning preferences highlights the importance of integrating digital tools like Educandy into English grammar instruction. The flexibility and accessibility of Educandy allow students to practice grammar both inside and outside the classroom, promoting autonomous learning and consistent reinforcement of grammatical rules. Additionally, using Educandy can support differentiated instruction by providing various levels of difficulty, enabling teachers to cater to the diverse needs of students with varying levels of proficiency (Nguyen & Tran, 2019).

Based on this background, research has been conducted with the title *"Designing English Grammar Exercises via the Website Educandy to Improve Grammar Competence for High School Students."*

2. RESEARCH METHODS

2.1. Participants

The study focused on 11th-grade students in the 2024-2025 academic year. Geography K35 from Thai Nguyen Specialized High School includes 30 students who were chosen as the research participants. Fifteen students (from S1 to S15 of the list) participated in grammar exercises using Educandy in the experiment for 7 weeks and shared their opinions through questionnaires. These students attended three English lessons per week following the 11-grade *Global Success* textbook. The remaining 15 pupils served as the control group and were taught grammar using traditional techniques. These students actively participated in the afternoon supplementary classes organized by the school, making them ideal subjects for studying English learning. Their participation added relevance to the study, in line with the context and academic goals of the institution.

2.2. Research design

This research purposed to create online activities to help grade 11 students at Thai Nguyen Specialized High School improve their grammatical competence. The study used a quasi-experimental methodology to assess the effectiveness of the exercises via Educandy on students' grammar ability.

To assess the level of grammar competence among students at Thai Nguyen Specialized High School, quantitative data was collected using standardized tests and surveys with multiple-choice questions during the first week. To evaluate the impact of exercises via the Educandy website on students' grammar competence, a mix of quantitative and qualitative data was gathered.

Quantitative data came from assessments conducted before and after the intervention, including grammar tests and performance evaluations. Qualitative insights were gathered through open-ended questions in surveys. To understand students' attitudes and feedback regarding the Educandy website, primarily qualitative methods were employed. This involved conducting focus group discussions to explore students' attitudes toward the instructional approach. Additionally, Likert-scale surveys were used to gather quantitative data on students' attitudes and preferences.

2.3. Data collection instruments

2.3.1. Tests

In this study, the tests were used to measure individual competence. To gather quantitative data on students' grammar proficiency, the students had to take two test before and after the intervention which consisted of 30 questions, (designed based on the 11th grade Global Success textbook), and covered a range of English grammar knowledge, for insurance, “Past Simple, Present perfect, Modal verbs, The infinitive, cleft sentences,...”. Each correct answer gave 0.3 points. The test format remained consistent for both pre-and post-tests, assessing participants' understanding of grammatical concepts through tasks of multiple choice with A, B, C, D. The pre-test established a baseline of students' grammar proficiency levels, while the post-test measured any improvement after the Educandy website intervention. By comparing pre and post-test scores, the impact of the Educandy website on grammar performance among students at Thai Nguyen Specialized High School during the 2024–2025 academic year was assessed. Analyzing these scores was crucial for evaluating the Educandy website's effectiveness in enhancing students' grammar proficiency.

2.3.2. Questionnaires

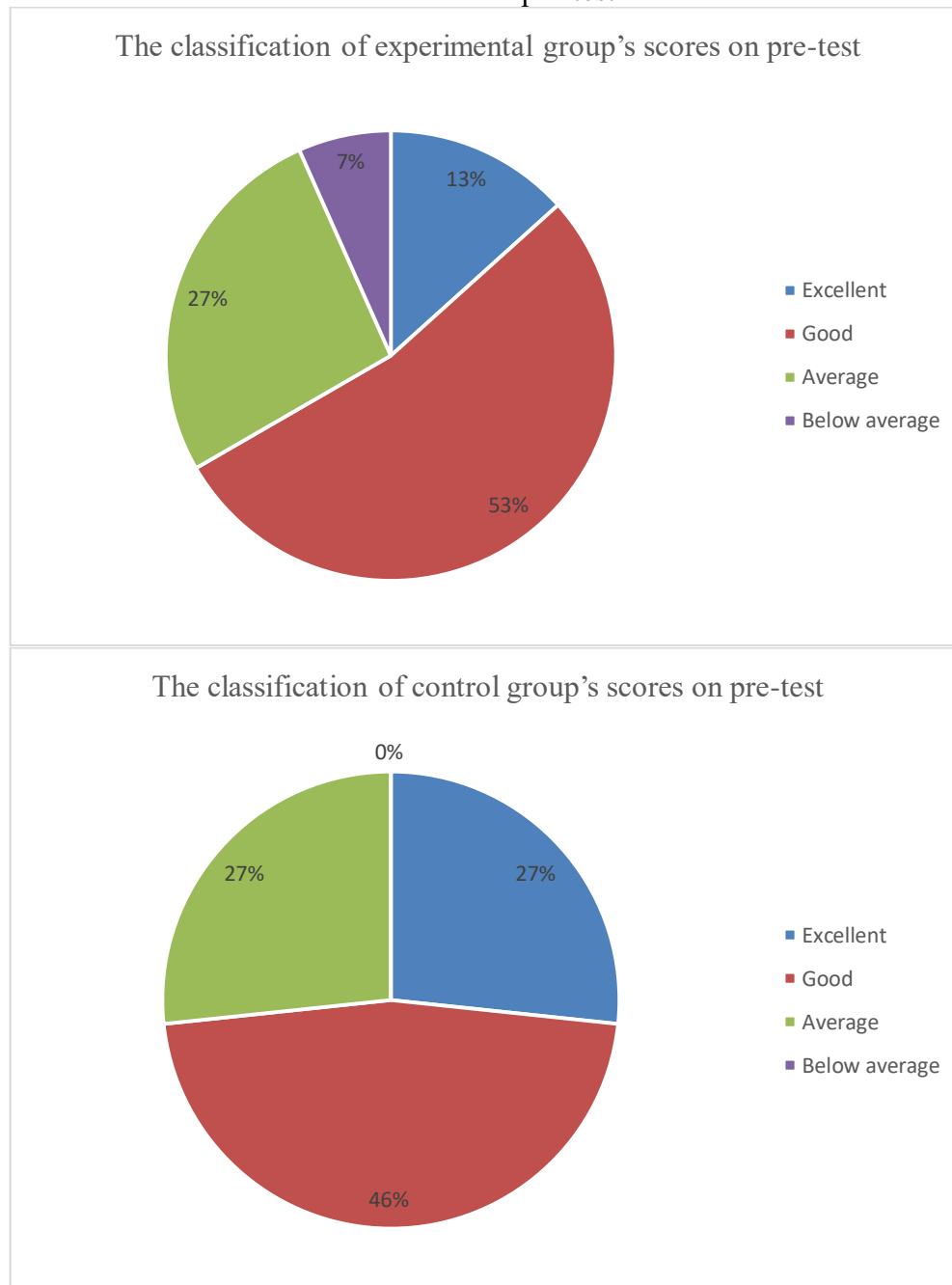
In the current study, paper-based questionnaires were administered to 30 students before and after a 7-week intervention using the exercises via Educandy website to enhance grammar competence. The pre-questionnaire included 15 questions about their challenges in learning English grammar, how high school students study English grammar at home, and grammar activities in their class. The post-questionnaire consisted of 10 questions designed to assess different aspects of the exercises via Educandy website influenced on grammar education. It investigated perceived advantages such as heightened motivation, flexibility, and convenience, along with fostering a more positive learning atmosphere. Moreover, it measured whether the exercises via Educandy website led to enhanced grammar comprehension, better time management, and increased engagement in class tasks. Furthermore, the survey explored students' outlooks on future learning using this method, seeking to identify areas for refinement and future enhancement. A 5-point Likert Scale questions with five response options were used to allow participants to express their views accurately.

3. RESULTS AND DISCUSSION

After 7 weeks of the experiment, the researcher gathered quantitative data from the outcomes of the pre-test and post-test, and the findings of the pre-questionnaire and post-questionnaire. In general, the mean score of students in the experimental group increased dramatically after utilizing Educandy, and their opinions toward learning grammar through this website were good.

3.1. The results of pre-test and post-test

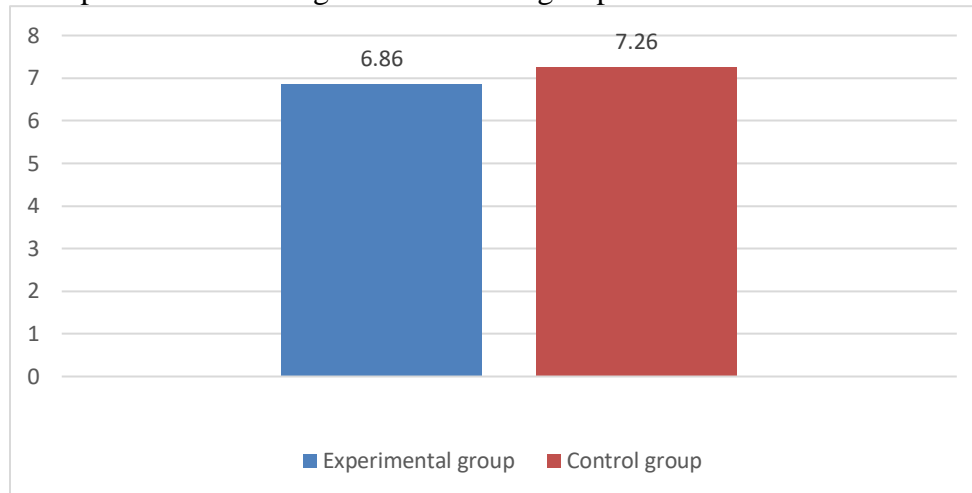
Chart 1. The classification of students' scores on the pre-test



According to the two pie charts, the students' pre-test scores varied in terms of performance level. Analyzing the students' initial grammar competency levels gave a thorough examination of their performance, allowing for a more accurate picture of their proficiency level. Looking at the pre-test scores classification of students in the experimental group, it is clear that the majority is “Good” and the least common classification is “Below Average”. While “Good” is the highest

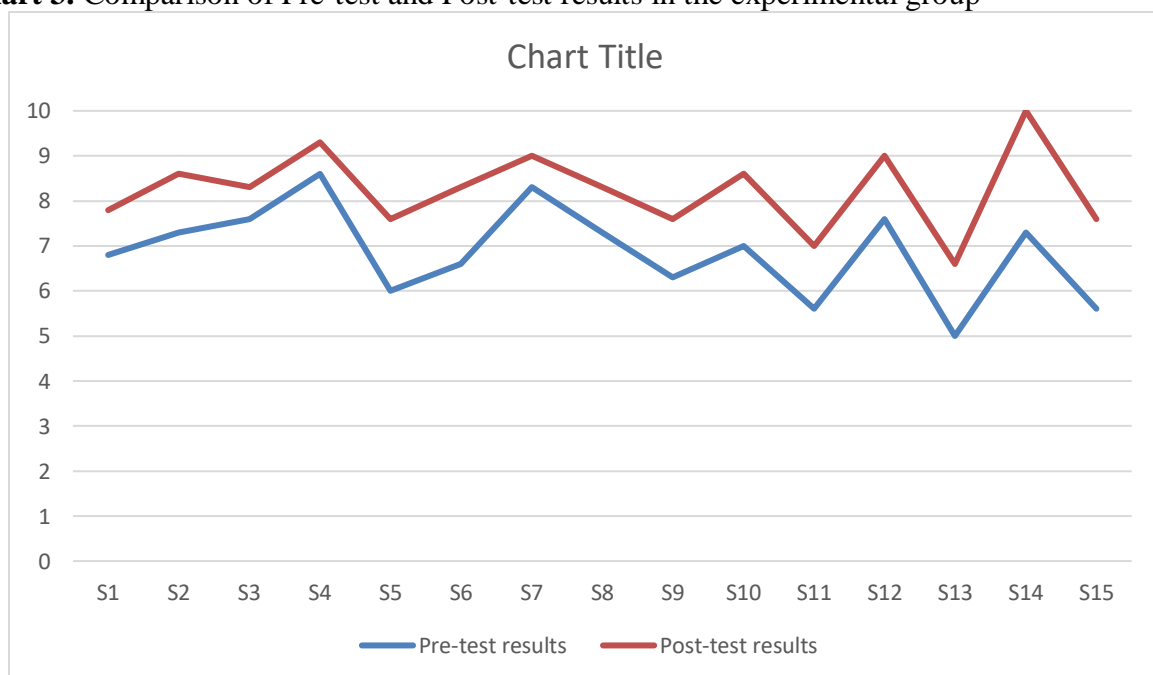
proportion of the chart with 53% of the experimental group and 46% of the control group, the percentage of “Average” and “Below average” on the first pie chart is more than a third.

Chart 2. Participants' initial average scores in both groups



The experimental and control groups' respective mean scores of 6.86 and 7.26 place both groups in the "Good" category, suggesting that the two groups' mean score classifications are comparable. Additionally, it is clear that the averages of the experimental and control groups differ somewhat, with the former being only 0.4 points lower than the latter.

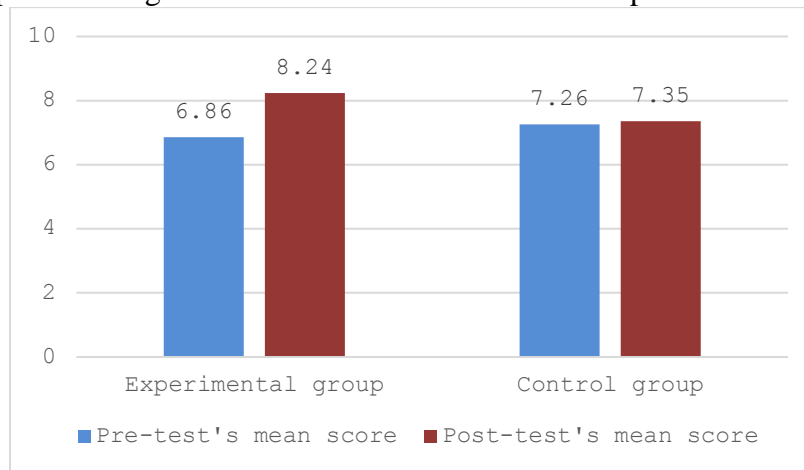
Chart 3. Comparison of Pre-test and Post-test results in the experimental group



The line graph illustrates the experimental group's grammar proficiency before and after the 7-week intervention. After completing the program, students' results on the grammar tests changed significantly overall. The students' mean score of 6.86 points before the experiment showed that

their grammar proficiency was classified as "Good", but only 0.37 points above the "Average" category. To provide further details, only 2 students were classified as "Excellent" with 8 or more points and 8 scored "Good" in the pre-test, while the remaining students (5 students) were classified as "Average" and "Below Average". However, after 7 weeks of intervention using the Educandy website, the grammar proficiency of students in the experimental group was classified as "Excellent", as shown by an average score of 8.11 points. Notably, there was one student who scored 10 points.

Chart 4. Participants' average score before and after the research period



The chart above shows an obvious difference between the scores before and after the treatment period. Specifically, the grammar performance of participants was significantly improved after the experiment. In other quarters, applying the exercises via Educandy website in learning and practicing grammar had a significant effect on the students. This development is shown in the disparity of 1.38 between the pre-test's and post-test's average scores in the experimental group. In the experimental group, the lowest score was 5 and the highest was 8.6 in the pre-test, which was respectively 6,6 and 10 in the post-test. The average level of students' grammar increased from "Good" to "Excellent." The control group improved even though they did not take part in the experiment. Compared to the average pre-test score, the average post-test score was over 0.1 points higher. The students received a "Good" rating since their average grammar level was constant following the experiment. This implies that while pupils did continue to get better at grammar with conventional teaching, their progress was not as great as that of the experimental group.

3.2. The attitudes of students toward the Educandy website

Table 1. Students' attitude toward the Educandy website.

Categories	Statements	Mean	Level of agreement
Students' opinions about the Educandy website	1. I enjoy learning and practicing English grammar through Educandy.	4.63	Strongly agree
	2. I find the ease of use of the Educandy website	3.6	Agree
	3. I'd like my teacher to continue using the Educandy website in practicing English grammar in both class and home	4.12	Agree
Students' assessment of the effectiveness of the Educandy website in improving grammar performance	4. I find the Educandy website effective in improving my grammar.	4.7	Strongly agree
	5. My grammar is improved after the experimental course.	4.37	Agree
	6. Practicing grammar on Educandy helps I apply grammar to my English writing or speaking skills better	3.5	Agree
Students' assessment of the effectiveness of the exercises via the Educandy website beyond grammar learning and practicing.	7. I will use the Educandy website to improve my other English skills.	4.33	Agree
	8. I will apply the Educandy website for self-learn.	4.67	Strongly agree

	9. I will use the Educandy website in learning other subjects.	3.95	Agree
--	--	------	-------

The table above illustrates students' attitude toward the Educandy website in terms of opinion, assessment of the effectiveness in and beyond improving grammar competence. As can be seen in the table, the respondents gave positive feedback about the educandy website. Beginning with students' opinions about the Educandy website, nearly all participants strongly agree that they were fantastic in using the Educandy website to practice grammar exercises, with the mean score of 4.63 for the statement "I enjoy learning and practicing English grammar through Educandy.". The next statement. "I find the ease of use of the Educandy website", received an average rating of 3.60, pointing to their agreement. However, this score is just higher than the score of neutral level, it seems that while students found the website useful, some of them might have challenged in applying it or may require more guidance and practice to fully master the website. The mean score of the statement "I'd like my teacher to continue using the Educandy website in practicing English grammar in both class and home" is 4.12 indicating that respondents would appreciate their teacher using the Educandy website in both their class and homework.

Regarding the students' assessment of the effectiveness of the Educandy website in enhancing grammar competence, the majority of participants acknowledged the effectiveness of the Educandy website in enhancing their grammar with a mean score of 4.7 for the statement "I find the Educandy website effective in improving my grammar", indicating strong agreement among the participants. Moreover, the participants also showed an improvement in their grammar after the experimental course, with a mean score of 4.37 for the statement "My grammar is improved after the experimental course".

With regards to participants' assessment of the effectiveness of the Educandy website beyond grammar learning and practicing. A mean score of question "I will use the Educandy to improve other English skills" is 4.33, indicating agreement among the participants that the Educandy website was a feasible method for developing other English skills. In the question "I will apply the Educandy website for self-learn", the mean score is 4.57 implying that students generally strongly agreed about using the Feynman technique for self-learning purposes. Furthermore, participants commonly expressed their agreement with the mean score of 3.95 for the question "I will use the Educandy website in learning other subjects", showing their willingness to apply the Educandy website in the process of learning other subjects.

Additionally, this study gathered information showing that all experiment participants felt that the exercises on the Educandy website enhanced their understanding of grammar, and 100% of the study participants said they would like to use Educandy to practice grammar going forward.

3.3. Discussion

This discussion is based on the grammar pre-test and post-test results, as well as the students' feedback collected through a questionnaire after using the Educandy website.

Before using Educandy, many students had difficulties with grammar. The grammar pre-test results showed that most of them did not clearly understand how to use some grammar structures, such as conditionals, passive voice, or reported speech. This means that their grammar knowledge

was limited, and they needed more support and practice. Some students also shared in the pre-questionnaire that they found grammar lessons boring or difficult to follow, which may explain their low scores.

After seven weeks of using grammar exercises on Educandy, the students' grammar improved. The post-test results showed better scores for most students. They were able to do grammar tasks more correctly and with more confidence. These results suggest that practicing grammar through games helped students understand and remember the rules better. Many students said that doing grammar on Educandy was more interesting than learning only from textbooks or copying rules. They enjoyed trying the games after learning new grammar in class.

According to the post-questionnaire, students had more positive attitudes toward grammar learning after the experiment. They said Educandy helped them stay focused during lessons and made them more active in learning. Most students found the grammar games fun and easy to use. Some also mentioned that they liked doing the same activity more than once to check if they improved. The use of different types of games—such as word matching, multiple choice, and fill-in-the-blank—kept them engaged and motivated.

However, a few students still had some small challenges. For example, some students were unsure why they got answers wrong because the website did not explain grammar rules clearly. Also, some students said that the activities focused mainly on form, not on using grammar in speaking or writing. These ideas show that while Educandy is a good tool for grammar practice, teachers should still support students with explanations and use other activities to help them apply grammar in real situations.

Overall, the combination of grammar lessons and Educandy exercises helped students improve both their grammar competence and their interest in grammar. The results of the pre- and post-tests, together with student feedback, show that Educandy is a useful and enjoyable tool for grammar learning. It helped students practice grammar in a fun way and gave them more chances to learn at their own pace. This study suggests that using online tools like Educandy in grammar lessons can be a good method to support students' learning, especially when it is used together with teacher guidance and classroom interaction.

4. CONCLUSION

The purpose of this study was to use Educandy to assist eleventh graders in becoming more proficient in grammar. The influence of this platform on students' grammar competence was demonstrated by the results, which revealed that after the 7-week intervention, students' grammar competency had changed noticeably. The participants' grammar competence was improved by the integration of this online learning application – Educandy. Additionally, students' positive attitudes are tailored to benefit the benefits of utilizing this website.

REFERENCES

- Alias, N. (. (2010). Design of a motivationally adaptive online learning environment for the Malaysian setting: A study of the design process. *Australasian Journal of Educational Technology*, 26(2), 268–279.
- Alias, N. (. (2014). Transforming ESL learning through mobile learning. *International Journal of Social Science and Humanity*, 4(6), 421–425.
- Anggraini, R. S. (2020). The effectiveness of using mobile phone applications in learning English. *Asian EFL Journal*, 27(4.3), 30-45.

- Educandy, (. (2024). Retrieved from Educandy: Making learning sweeter.: <https://www.educandy.com>
- Ellis, R. (. (2006). Current issues in the teaching of grammar: An SLA perspective. *TESOL Quarterly*, 40(1), 82-107.
- Larsen-Freeman, D. (. (2015). Research into practice: Grammar learning and teaching. *Language Teaching*, 48(2), 263-280.
- Muhammad Rizky, (. (2021). Grammar anxiety and its impact on EFL learners' performance. *Journal of Language Teaching and Research*, 12(5), 987-993.
- Nguyen, T. T., & Tran, T. T. (2019). Integrating digital tools in teaching grammar at Vietnamese high schools. *AsiaCALL Online Journal*, 10(1), 21-28.
- White, C., & Mills, J. (. (2020). Mobile learning and gamification in language education. *Language Learning & Technology*, 24(2), 50-68.