

The Suitability Of The Educandy Studio App To Improve Students'senior High School Grammar Achievement

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Abstract. *The study aimed to evaluate how effectively the Educandy Studio Application works to improve grammatical knowledge of senior high school students, particularly focusing on the simple past tense within the context of Narrative Text. Employing a pre-experimental one-group pre-test and post-test design, the impact of the application on the grammar achievement of tenth-grade pupils at SMAN 1 Kesamben Blitar in classes X–H was examined. The research procedure consisted of pre-tests, application of the treatment, and post-tests, with data gathered through test administration. A trial test was conducted to ensure validity and reliability. Results revealed a significant enhancement in students' grammar proficiency in narrative text, with scores rising from 71.87 in the pre-test to 81.90 once the Educandy Studio program was put into use. The statistical examination employing paired sampled T-tests verified a substantial variance between the data collected before and after the intervention (Level of significance < 0.05). These results imply that the implementation of Educandy Studio successfully improved grammar attainment within the narrative text at SMAN 1 Kesamben Blitar. The study recommends integrating the Educandy Studio Application into English teaching, encouraging students to explore its use across subjects. Subsequent studies ought to investigate the feedback from students and teachers and conduct comparisons with similar applications to ascertain the most appropriate resources for improving grammar proficiency in English classrooms.*

Keywords: *Educandy Studio Application, Grammar Achievement, Narrative Text, Pre Experimental Research*

BACKGROUND RESEARCH

Language plays a pivotal role in human existence, serving as a cornerstone for global communication. (Triwahyuni, 2018) affirms that language functions as a structured and symbolic system, incorporating the arbitrary and conventional use of sound articulation, produced through various tools. It is a medium adopted by communities to convey their emotions and ideas effectively.

English, as a global lingua franca, serves as a crucial tool for worldwide communication. According to Richards and Rodger (1986), English is widely employed in international meetings of great significance by people from diverse countries. Consequently, English assumes paramount importance. Crystal (2000), Nunan (2001), and the British Council (2013), along with various other scholars, argue that the widespread use of the English language has provided people with limitless opportunities, including access to the latest information, financial resources, influence, global connections, understanding of

different cultures, entertainment, and numerous other advantages (Rintaningrum, 2015). This phenomenon has led to English becoming a pathway to numerous global benefits and opportunities. When acquiring proficiency in English, individuals must effectively develop four essential skills: Listening, Reading, Speaking, and Writing. Additionally, there are various sub-skills within the realm of English, with grammar being a crucial component among them.

In the realm of English language learning, grammar assumes a significant role, as emphasized by Long (Thariq et al., 2021). Grammar is crucial in reinforcing a wide range of language abilities, like speaking, writing, listening, and reading. To become proficient in English, one must not only be well-versed in the language but also be capable of constructing grammatically correct sentences. As expressed by (PRASETYO, 2020), grammar serves as the foundation for categorizing sentences and crafting eloquent and effective language. In essence, grammar is a fundamental building block in the journey of mastering the English language.

Grammar learning can be a challenging aspect for many students, often causing them to feel uneasy. A significant number of students experience insecurity when speaking English, driven by their fear of making grammatical errors. Al-mekhlafi's perspective underscores that grammar is frequently introduced in classrooms in a manner that hinders students from freely expressing themselves using English. This can lead to a sense of unease and pressure among students as they strive to navigate the intricacies of English grammar (Muhammad Rizky et al., 2021). The apprehension related to grammar can create barriers to effective language acquisition and communication, underlining the importance of finding pedagogical approaches that alleviate these concerns and facilitate a more comfortable and confident learning experience. Furthermore, students in class X at SMAN 1 Kesamben encounter challenges, particularly in mastering grammar, especially when it comes to writing narrative texts, particularly in utilizing the simple past tense.

The progress of technology and the evolution of our time have led to the emergence of numerous educational apps, which can significantly assist both pupils and educators in the instruction and learning journey, precisely in the realm of other languages, like English. According to Dockstader, technological progress can seamlessly align with the expansion of the language of English and transform the way pupils engage in communication (SUHARDIANA, 2019). This intersection of technology and language learning has the potential to revolutionize the educational landscape, offering new and innovative avenues for students to master languages and communicate effectively in the modern world.

According to White & Mills (Anggraini et al., 2020), students exhibit a pronounced inclination to utilize smartphones as tools for foreign language learning. This proclivity towards technology opens up opportunities for leveraging these devices as a way to improve students' English skills, particularly in the realm of grammar. Smartphones can act as a versatile medium for facilitating language acquisition and skill development, offering a convenient and accessible platform for learners to engage with English content and practice their language proficiency.

Educandy is an online educational gaming platform crafted to aid teachers in generating interactive quizzes that captivate learners. Educational games, as (Ridwan & Prasetyawan, 2017), offer several advantages, such as boosting student motivation through their interactive and enjoyable nature. In the Educandy Application, various features allow teachers to craft quizzes, with three primary game elements: words, matching pairs, and quiz questions. Furthermore, Ulya (Muhammad Rizky et al., 2021) mention that a wide array of games, including word searches, hangman, anagrams, tic-tac-toe, crosswords, matching games, memory challenges, and multiple-choice activities, can be generated by combining these three core elements.

With these adaptable capabilities at hand, the researcher intends to showcase how the Educandy Studio Application effectively improves students' grammar skills. This technology presents an opportunity to transform grammar learning into an interactive and engaging experience, potentially leading to improved educational outcomes.

Numerous prior studies have explored the application of Educandy as an educational tool, and the findings align with the current research. Firstly, the findings correspond with the study carried done by (Wahyuni et al., 2022), indicating that after undergoing Educandy training, all participants acknowledged that employing the Educandy app boosted students' enthusiasm for learning English. Secondly, (ARDIANTI, 2022) noted that incorporating Educandy into teaching had a beneficial effect on the academic achievements of seventh-grade students at SMPN 3 Papalang.

Moreover, these findings align with the study conducted by(Khoirunnisa et al., 2023), which asserted that Educandy exerted a notable impact on the acquisition of vocabulary skills among pupils at Mts. Safinatul Huda 02 Karimunjawa in the seventh grade. The findings also correspond with the study by (Rahmawati & Sibuea, 2021), which concluded that Educandy was a suitable educational game for use as a learning tool, particularly in English.

Lastly, the research by (Saputri et al., 2023). in 2023 confirmed the high effectiveness of using Educandy as a learning medium, especially during the COVID-19 pandemic, in

enhancing English learning outcomes. These collective studies underscore the value of Educandy as a powerful and effective tool in various educational contexts.

Considering the obstacles and situations faced by students, along with insights gleaned from prior studies on employing the Educandy Studio application as an educational resource, researchers are eager to conduct an investigation titled "Enhancing Students' Grammar Proficiency in Senior High School Through the Use of the Educandy Studio Application." This research will particularly focus on refining students' grammar abilities, particularly in the simple past tense, with a specific focus on 10th-grade students in senior high school.

RESEARCH METHODS

In this research, scholars will employ an experimental methodology. The experimental method is utilized to assess how the treatment of one variable affects other factors or to examine the causal relationship between one variable and another (Sugiyono, 2013). Additionally, this study will utilize a pre-experimental approach by employing the One-Group Pretest-Posttest Design (Fitri & Haryanti, 2020). This design involves administering a pre-test before administering the treatment to accurately ascertain the initial conditions and facilitate comparison with the outcomes following treatment implementation. In this study, the investigator employed a t-test on paired samples to assess the efficacy of the data. This statistical method was utilized to evaluate the effectiveness of the treatment by comparing the average values before and after the treatment was administered.

The researcher conducted several procedures to analyze the data. These included gathering the scores from student worksheets, tabulating the data into a frequency distribution table, calculating the standard deviation and mean, and standard error of the variable using appropriate formulas, and performing a normality test to assess the distribution's normality. Subsequently, all these metrics were incorporated into the t-test formula for paired samples. The decision to accept or reject the null hypothesis in this test was determined based on specific criteria:

- a) The null hypothesis (H_0) is accepted or the alternative hypothesis (H_a) is denied if the significance value is higher than 0.05.. This suggests that the performance difference is not considered significant.
- b) The alternative hypothesis (H_a) is accepted or the null hypothesis (H_0) is rejected if the significance value is less than 0.05. This suggests a noteworthy distinction in performance.

The researcher utilized the SPSS 22.0 software program to compare the data.

RESULT AND DISCUSSION

The researcher delves into several research findings about the main outcome of the study. These findings encompass the outcomes of the experimental test, the assessment of the test's validity and reliability, the outcomes of the pre- and post-tests, the findings of the normality test, the outcomes of the t-test for paired samples, and the conclusions drawn from the hypothesis.

1) The Tryout Test Outcome

Prior to the X-H class pre-test being given at SMAN 1 Kesamben Blitar, the researcher conducted a trial run to assess the test's reliability and validity as a research instrument. This trial was conducted on June th, 2023, involving the X-A class at SMAN 1 Kesamben, consisting of 30 respondents. The tryout consisted of a set of 50 objective questions focused on Grammar related to Narrative texts. The questions encompassed various aspects, identifying regular verbs and irregular verbs, and using appropriate grammar of simple past tense within the context of narrative texts.

2) The Validity and Reliability Test Outcome

Table 1. The Validity Test Outcome

Question	R count	Question	R count
Q1	0,534	Q26	0,430
Q2	0,408	Q27	0,474
Q3	0,400	Q28	0,490
Q4	0,526	Q29	0,468
Q5	0,534	Q30	0,457
Q6	0,467	Q31	0,523
Q7	0,523	Q32	0,405
Q8	0,494	Q33	0,434
Q9	0,490	Q34	0,400
Q10	0,595	Q35	0,423
Q11	0,476	Q36	0,403
Q12	0,417	Q37	0,453
Q13	0,453	Q38	0,408
Q14	0,534	Q39	0,474
Q15	0,944	Q40	0,435
Q16	0,535	Q41	0,406
Q17	0,459	Q42	0,410
Q18	0,404	Q43	0,497
Q19	0,426	Q44	0,430
Q20	0,476	Q45	0,474
Q21	0,467	Q46	0,446
Q22	0,424	Q47	0,467
Q23	0,439	Q48	0,468
Q24	0,468	Q49	0,408
Q25	0,464	Q50	0,383

According to the data provided in Table 2, it is evident that each question item surpasses the established threshold of the r-table value (0.374), resulting in consistently positive outcomes which they are valid. Consequently, all the test items are deemed valid. Furthermore, following the assessment of validity, the researcher proceeded to conduct a reliability test. A test is deemed reliable when Cronbach's Alpha Coefficient in the score of 0.6. The results of the test's reliability, conducted using SPSS 22.0 as follows.

Table 2. The Result of The ReliabilityTest

Synopsis of Case Processing			
		N	%
Cases	Valid	30	100.0
	Excluded	0	.0
	Total	30	100.0

Cronbach's Alpha	Total Items
.925	50

Taking into consideration the data presented in the table above, it is clear that Cronbach's Alpha Coefficient surpasses the critical threshold of 0.6. Consequently, It might be confidently determined that the test demonstrates a high degree of dependability. This indicates that the test is well-suited for use as a research instrument during the pre-test phase.

3) The Pre-Test and Post-Test Results

Following the try-out test and the assessment of the test's validity and reliability, the researcher proceeded to administer both a both a pre- and post-test. These tests were conducted for the students of Class X-H at SMAN 1 Kesamben, involving a total of 30 participants. The primary objective of the pre-test was to assess the students' existing knowledge of Grammar concerning narrative text before the introduction of the program Educandy Studio as a Grammar teaching and learning tool. Conversely, the post-test aimed to evaluate the students' grammatical achievement in the context of the tense of simple past within the narrative text, following the utilization of the Educandy Studio Application. The subsequent section delineates the outcomes of both the pupils' pre- and post-test results:

Mean Score Pre-test:

$$M = \frac{\sum X}{N} = \frac{2936}{38} = 71.87$$

Mean Score Post-test:

$$M = \frac{\sum X}{N} = \frac{3106}{38} = 81.90$$

The pre-test scores did not meet the minimum mastery criterion of 75.00 for the English subject. Consequently, to improve the pupils' grammatical proficiency in narrative text, the researcher opted to introduce the Educandy Studio Application to the students of SMAN 1 Kesamben, Blitar: Class X-H. Upon analyzing the data presented in the table above, it becomes apparent that the implementation of the Educandy Studio Application has resulted in a noteworthy positive influence on grammatical proficiency of pupils, especially when it comes to the simple past tense within narrative texts. The initial mean score of 71.87 notably increased to 81.90, signifying a substantial improvement. Therefore, drawing from these results, the researcher confidently concludes that the utilization of Educandy Studio proves to be an effective approach for improving students' grammar scores, specifically in the domain inside the basic past tense within the narrative text.

4) The Result of Homogeneity and Normality Test

Following the examination of the post-test findings, the researcher conducted homogeneity and normality tests to validate the regression model. These assessments were carried out to ensure that the independent and dependent variables met the requirements of homogeneity and normal distribution, respectively. The study employed the Kolmogorov–Smirnov One Sample Test to evaluate normality and the Levene statistic for the homogeneity assessment. A significance value (sig.) higher than 0.05 in the normality test indicates adherence to a normal distribution. Likewise, a significance level (sig.) above 0.05 in the homogeneity test suggests homogeneity in the data. The outcomes of the normality test, conducted using SPSS 22.0, are displayed in the subsequent table:

Table 3. The Normality Test's Outcome

KS Test for One Sample		
		Non-standard Residual
N		30
Normal Parameters ^{a,b}	Average	0.0000000
	σ	3.12776408
The Most Severe Disparities	Absolute	.129
	Positive	.127
	Negative	-.129
Examine Statistics		.129
Asymp. Sig. (2-tailed)		.200 ^{c,d}

5) The Paired Sample T-Test Outcome

Table 4. The Paired Sample T-Test Outcome

Relations between Paired Samples				
		N	Correlation	Sig.
Pair 1	Pretest & Posttest	30	.896	.000

Test of Paired Samples											
		Paired Differences					95% Difference		t	df	Sig. (2-tailed)
		Averag	σ	σ average	Confidence Interval						
Pair		e			Min	Max					
1	Pretest - Posttest	10.0333	4.22214	.77085	-11.60991	-8.45676	13.016	29		.000	

According to the findings displayed in the table, it was observed that the significant score (two-tailed) is less than 0.05, indicating a noteworthy distinction between the learning objectives noted in the pre and post test data.

The research hypothesis test is assessed using the following criteria:

- 1) It is usually considered that the null hypothesis (H_0) if the significance value is greater than 0.05, indicating that there is insufficient evidence to reject it. In this scenario, the alternative hypothesis (H_a) would be rejected, suggesting that the observed performance difference lacks statistical significance.
- 2) It is customary to reject the null hypothesis (H_0) if the significance value is less than 0.05, implying that there is sufficient evidence to do so. Conversely, in such cases, the alternative hypothesis (H_a) is accepted, indicating a statistically significant difference in performance.

Considering the information in the aforementioned table, it's apparent that the significance value (two-tailed) is 0.000, indicating statistical significance. With a value lower than 0.05, conclusively that there is a significant difference between the pre- and post-tests scores concerning students' learning outcomes. Consequently, It is possible to disprove the null hypothesis (H_0) and confirm the alternative hypothesis (H_a). These results highlight how effectively the Educandy Studio software works to help students become more proficient in grammar, particularly within the context of narrative text, at SMA Negeri 1 Kesamben, Blitar.

CONCLUSION

It is widely accepted, based on earlier research, that the Educandy Studio Application demonstrates effectiveness in enhancing students' grammar skills, specifically within the realm of narrative text and with a focus on the simple past tense. This conclusion is supported by data collected from 10th grade students at SMAN 1 Kesamben. The pre-test results indicated an average score of 71.87, whereas the post-test scores notably rose to 81.90.

Furthermore, the paired sample t-test outcomes validate the significance of this enhancement, as demonstrated by a 0.000 Sig. (2-tailed) value, which falls below 0.05 as the critical threshold. This implies the endorsement of the H_a while dismissing the H_o . To summarize, these results affirm that leveraging the Educandy Studio Application proves to be a fruitful approach in bolstering students' grammar proficiency, particularly their grasp of the simple past tense in SMA Negeri 1 Kesamben, Blitar's Class X-H.

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