

The Effectiveness of Quillbot's Grammar Checker on Students' Writing Skills

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Abstract

The research aims to investigate the effect of QuillBot's grammar checker on students' writing skills of descriptive text at SMAN 1 Palangka Raya. The motivation to conduct this research is to explore the effectiveness of the QuillBot's grammar checker at SMAN 1 Palangka Raya, especially in enhancing students' writing skills in writing descriptive text. The research employed quantitative research with true experimental randomization subject post-test only control group design. The subject of the research were 44 students of X-I as the experimental group and 44 students of X-J as the control group at SMAN 1 Palangka Raya. The data of the research contains the scores of students writing test in writing descriptive text that collected during both post-test in the control and experimental groups. The result showed the mean score of 74.07 in control group and 82.61 in experimental group in the passing grade of 75.00, indicating a better achievement in the experimental group which applied the QuillBot's grammar checker. The result of hypothesis showed sig. (2-tailed) of 0.000 which lower than probability value of 0.05, indicating H_0 is rejected, or H_a is accepted. This implies that there is an effect of using the "QuillBot's grammar checker" on students' achievement in writing descriptive text by the tenth-grade students at SMAN 1 Palangka Raya.

Keywords: QuillBot's Grammar Checker; Descriptive Text; Writing Skill

INTRODUCTION

Traditional teaching approaches or conventional methods often lead to limited engagement and fail to address individual learning needs, potentially resulting in student disengagement and lower motivation. The use of technology such as artificial intelligence (AI), applications, and websites may help students in the teaching and learning process. The use of educational technology tools in language learning has grown significantly in recent years as educators strive to create engaging, interactive, and effective learning environments. QuillBot presents the grammar checker as an additional tool for learning descriptive writing, enhancing the interactiveness and enjoyment of the learning process.

The use of QuillBot's grammar checker really helps students in writing a text (Nurmayanti, 2023:38). The QuillBot's grammar checker offers features such as grammar correction, sentence restructuring, and vocabulary enhancement, making it a valuable resource for students aiming to refine their writing. By providing real-time feedback and suggestions, the grammar checker allows students to identify and correct grammatical errors, learn proper sentence structure, and develop their language proficiency. Its accessibility and user-friendly interface make it particularly appealing to students who seek additional support outside the classroom (Yoandita, 2024:401).

SMAN 1 Palangka Raya, one of the most popular schools in Palangka Raya, offers facilities that support the teaching and learning process effectively, but pre-research indicates that some teachers, particularly those in the English department, employ traditional teaching methods, particularly in the tenth grade. Therefore, the researcher aims to investigate the impact of the

QuillBot's grammar checker at SMAN 1 Palangka Raya. The use of QuillBot's grammar checker has gained attention in educational research, with studies highlighting their potential to improve writing skills. However, the effectiveness of such tools in specific contexts, such as writing descriptive texts, remains an area requiring further exploration. Descriptive texts, which focus on vividly describing a person, place, or thing, demand precise language and detailed descriptions. The role of QuillBot's grammar checker in helping students enhance these specific aspects of writing is a topic of interest for educators and researchers alike.

A journal article written by Hasnah (2024), Nurmayanti (2023), Baron (2023), and Ilfiah (2024) showed that QuillBot gave a positive impact to students' writing skills. According to the previous study, the researcher concluded that QuillBot's grammar checker helps students improve their writing skills. Then, it may be used to improve students' skills in another topic in English. The previous study utilized other features of QuillBot, in addition to the grammar checker, to enhance students' writing skills. Then, some previous researchers used the student's perception and analysis of the grammar checker provided by QuillBot. This study seeks to explore how the QuillBot's grammar checker influences the writing skills of students at SMAN 1 Palangka Raya, with a specific focus on descriptive text. By examining the impact, this research aims to determine whether QuillBot's grammar checker can serve as an effective tool for enhancing students' descriptive writing abilities, thereby contributing to the field of language education and providing practical recommendations for teachers in similar EFL settings. Therefore, the researcher is interested in conducting research entitled "The Effectiveness of QuillBot's Grammar Checker on Students' Writing Skills."

METHOD

This study was conducted in SMAN-1 Palangka Raya. The study's population consisted of X grade students from SMAN 1 Palangka Raya. The researcher used random sampling to choose the sample. The sample of this research was X-I as the experimental group and X-J as the control group, which consisted of 44 students. This study used a technique known as quantitative research. A research methodology known as quantitative research used numerical data to be collected and examine information about a certain issue or event (Creswell, 2018). This research used a true experimental randomization subject post-test only control group design. According to Creswell (2018), true experimental post-test only control group design is a common experimental design that accounts for any confounding effects from a pretest. Two classes were designated as the control group and the experimental group. Then, the treatment was given only to the experimental group. Both groups were measured on the post-test only.

RESULTS AND DISCUSSION

Results

Tryout involved testing sample class test instruments to test the validity and reliability. The test instrument in this research was writing tests. A tryout was carried out to find out whether the questions given were valid or not and reliable or not. The research instruments have to be valid and reliable so that the research data produces good and accurate data. The tryout was conducted in tenth-grade room A (X-A) in SMAN 1 Palangka Raya. The X-A was chosen because the X-A was quite similar to the sample class according to the pre-research.

The result of validity analysis showed the r-counts (corrected item-total correlation) were 0.557, 0.488, 0.308, 0.407, and 0.372. The result of the t-table showed 0.304 based on the significant level of 5% in $N = 42$. The all of r-count were > 0.304 . Therefore, the aspect item of the test was valid. Then, the result of reliability analysis showed that the value of Pearson correlation

was 0.961, which was $0.961 \geq$ reliability scale of 0.90. This implies that the test had excellent reliability. It concluded that the test was reliable.

The students' test scores in the control and experimental groups were analyzed using a statistical application. Lilliefors normality test in post-test control and experiment showed the sig. value 0.200. Where the sig. value is $0.200 >$ sig. a 0.05. This indicates the post-test control and experiment in the Lilliefors normality test were normally distributed. Then, the Shapiro-Wilk normality test in the control group showed the sig. value $0.328 >$ sig. a 0.05, and the experimental group showed the sig. value $0.170 >$ sig. a 0.05. This indicates the data in both groups were normally distributed. Therefore, parametric test requirements had been met, and the researcher used parametric tests such as the independent sample t-test to test the hypothesis of the research. Then, the homogeneity test showed the sig. based on the mean and ANOVA test value is $0.269 >$ 0.05. Therefore, it was concluded that the data in the post-test control and experimental groups were identical or homogeneous. The parametric test requirements had been met, and the researcher used parametric tests such as the independent sample t-test to test the hypothesis of the research.

The hypothesis of this research was analyzed by an independent sample t-test. The requirements to do an independent sample t-test is that the number of samples in both groups must be the same, the data must be normally distributed, and the data must be homogeneous. The requirement had been met. There are two ways to conclude the data. The first is comparing the sig. value (2-tailed) with a probability value of 0.05. If the Sig value (2-tailed) is $<$ 0.05, then H_0 is rejected, or H_a is accepted. Second, compare the t-count with the t-table value according to the number of df. If the t-count $>$ t-table, then H_0 is rejected, or H_a is accepted. The result showed the sig. (2-tailed) value $0.000 <$ 0.05. Therefore, H_0 is rejected, or H_a is accepted. Then, the result showed t-count value 5.842, t-table value 2.000, and df value 86. The t-count $>$ t-table ($5.842 >$ 2.000). Therefore, H_0 is rejected, or H_a is accepted. This implies that there is an effect of using the "QuillBot's grammar checker" on students' achievement in writing descriptive text by the tenth-grade students at SMAN 1 Palangka Raya.

Discussion

This study used the grammar checker as the teaching and learning media for the experimental group. However, the control group was taught by the conventional method. The mean scores of both groups also showed significant differences. The mean score of students' achievement in writing descriptive text for the experimental group was 82.61, which is higher than 74.07 in the control group. This indicated that the students in the experimental group had a better understanding and performance in writing descriptive text about great athletes. However, there were five students in the experimental group who failed to achieve the required passing grade. The researcher conducted an interview with these students to identify the root of the problem. The students expressed that their lack of interest in learning stemmed from staying up late the previous night and feeling sleepy at school. Additionally, some of them had skipped breakfast, which further hindered their ability to focus on their studies. Some students in the experimental group got a highest score above 90. The researcher conducted an interview with these students to understand why their scores were high. The students stated that they really like the English subject; they like to improve their English independently outside the school, and the use of a grammar checker made them more enthusiastic in learning.

QuillBot's grammar checker gave a good impact in enhancing students' achievement in writing descriptive text of great athletes. It was proven by the data analysis that in the control group, there were 27 students that did not pass the passing grade of 75 and just 17 students who passed. The mean score of 74.07 was also lower than the passing grade of 75. However, in the

experimental group, the mean score of 82.61, which was higher than the passing grade of 75, showed that the students had a better performance in writing than in the control group.

The QuillBot's grammar checker may enhance students' engagement in learning activities. It helped students improve their focus and gain a deeper understanding of generic structure, language features, grammar, mechanics, and vocabulary specific to descriptive writing. By increasing participation, QuillBot's grammar checker are likely encouraging more students to become actively involved in the learning process, which can result in greater comprehension and skill in constructing descriptive text. QuillBot's grammar checker provides instant feedback on students' writing, which can benefit writing instruction. It provides immediate corrections to students' writing, enabling them to identify their mistakes more quickly. The grammar checker checks for punctuation, spelling, grammar, vocabulary and sometimes corrects incorrect sentences. The challenge in applying the QuillBot's grammar checker was that the students had never used the app before. Therefore, it took more time to introduce and explain how to use the QuillBot's grammar checker to students. Then, sometimes there was an interruption of internet network that made the process of the QuillBot's grammar checker checking the students' writing take more time.

CONCLUSION

The use of the QuillBot's grammar checker as the teaching and learning media, helped students learn well, especially in understanding the vocabulary, grammar, mechanics, language features, and generic structure of descriptive text. The students had an interest in learning because they did a teaching and learning process that was different from usual. The use of QuillBot's grammar checker was also open to students' minds that a smartphone can be used as a tool to learn, not only for communication, entertainment, and gaming.

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