

THE EFFECTIVENESS OF QUILLBOT APPLICATION ON STUDENTS' GRAMMAR MASTERY

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Abstrak

Banyak siswa yang kesulitan dalam menyusun kalimat bahasa Inggris ke dalam tata bahasa khususnya Simple Present Tense dan Simple Past Tense, sehingga mereka kehilangan konsentrasi dalam mempelajari bahasa Inggris karena ada bentuk-bentuk yang muncul ketika menyusun kalimat dalam tenses atau aturan lainnya, termasuk bentuk waktu, aturan dan kata kerja yang digunakan. Penelitian ini bertujuan untuk menyampaikan prestasi siswa dalam memanfaatkan aplikasi QuillBot khususnya pada penguasaan tata bahasa dan dengan adanya aplikasi QuillBot siswa dapat mengatur waktu untuk menerjemahkan dan memperbaiki kekurangannya pada tata bahasa. Peneliti mengambil dua kelas secara acak di kelas XI MPLB 1 dan XI MPLB 3 yang masing-masing kelas berjumlah 40 siswa. Peneliti menggunakan tes sebagai instrumennya. Instrumen tes yang digunakan meliputi pre-test dan post-test. Desain penelitian ini adalah penelitian kuantitatif dengan metode penelitian eksperimen. Hasil pengambilan sampel dapat dihitung seperti t_0 adalah 6,24 dan derajat kebebasannya adalah 78. Selain itu, nilai T_{tabel} pada tingkat signifikansi adalah 1,699. Peneliti menyimpulkan bahwa uji T lebih besar dari T_{tabel} ($6,24 > 1,699$) dan H_a diterima dan H_0 ditolak karena pada tahap ini salah satu kelas diberi perlakuan untuk melihat apa pengaruh signifikan penerapan QuillBot pada kelas tersebut. .

Kata kunci: instrumen, penguasaan grammar, aplikasi quillbot

Abstract

A lot of students had problem to arrange English sentence into grammar especially in Simple Present Tense and Simple Past Tense, so they lost their concentrate in learning English because there are forms that occur when composing sentences in tenses or other rules, including the form of time rules and the verbs used. This research aims to convey students' achievement to take advantages of QuillBot application, especially on grammar mastery and with the existance of QuillBot application students could manage the time to translate and fix their lack on grammar. The researcher had taken two classes randomly class XI MPLB 1 and XI MPLB 3 which consists of 40 students each class. The researcher uses a test as an instrument. The test instrument included a pre-test and a post-test. The design of this research was quantitative research with experimental research methods. Result of sample could be calculated as like t_0 was 6,24 and the degree of freedom was 78. In addition, the value of T_{table} in significance level was 1,699. Researcher concluded that T -test was bigger than T -table ($6,24 > 1,699$) and H_a was accepted and H_0 was rejected because in this progressed one of classes was given the treatment to observe what a significantly affects of QuillBot application for that class.

Keywords: instrument, grammar mastery, quillbot appliconati

1. INTRODUCTION

1.1 Background of the Problem

Grammar is essential for learning in the academic province because it raises students' comprehension of the English language. They can also comprehend sentence structure as a result of grammar. Additionally, it enables them to conduct well-written pieces of writing that can be understood by readers

who are not grammar experts. Grammar is often utilized in daily conversation while talking about present, past, and future events.

Grammar mastery is competence to use formal rules on conducting words, to create sentence, and concise phrases (Styaningrum, 2019). Grammar helps students to develop their communication skills. Students use grammar to express their ideas and opinions to one another and to produce messages. Encouraging children to use language to convey more complicated concepts is the key to properly teaching grammar. When it is taught correctly, grammar may have a big impact on children's reading development.

Encouraging children to use language to convey more complicated concepts is the key to properly teaching grammar. When it is taught correctly, grammar may have a big impact on children's reading development. Encouraging children to use language to convey more complicated concepts is the key to properly teaching grammar. While it is taught correctly, grammar may have a big impact on children's reading development. Not only depends on teaching grammar but the effective learning requires teachers to be creative in their presentation of content. This keeps students from getting restless and increases their enthusiasm in media use (Harahap et al., 2022).

Learning grammar is often obtained via teachers, but it may also be obtained from media such as journals, social media, books, and so on, whereas individuals can utilize alternate methods, such as software, like the QuillBot application (Siregar, 2022).

According to Ramos (2023) as cited by Promova Corporation defines that the importance of grammar for five reasonings, they are:

- 1) Increased Clarity: The purpose of grammar rules is to promote efficient and understandable communication.
- 2) Accessibility: Proper grammar improves readability, which increases everyone's capacity to communicate.
- 3) Expert Appearance: It is a subtle yet effective way to make good first impression in academic and professional settings.
- 4) Enhancing Impact and Persuasion: Grammar is a tactical instrument for persuasion, not merely about word choice and punctuation.
- 5) Learning new languages is easier: Understanding grammar can be helpful while learning a new language.

In this era, there are still many students who do not have knowledge of English which is caused by a lot of factors. English being unfamiliar as their mother tongue, bringing into play verbs that have timing rules, creating negative and interrogative sentences that are complicated in their composition, having a huge vocabulary, and others (McKay, 2023).

English is a topic that students learn in both official and informal schooling. It began in primary school and continued until university. As a result, Indonesian students must have a strong command of English. However, most pupils have not yet mastered English. Without knowing English, they would be unable to assimilate information from books or other media. This is demonstrated by the low levels of student achievement. As the following quotes demonstrate, understanding English or any language is not easy (Risnawaty et al., 2021).

Learning English also has a specific structure to make a basic sentence into a great sentence. The structure of grammar makes it complicated for students to recognize it. It is complicated for students to comprehend because there are forms that occur when composing sentences in tenses or other rules, including the form of time rules and the verbs used. Thus, there are also rules for creating positive, negative, and interrogative sentences.

Learning process in this new normal era, the learning process is not only carried out in the classroom but also outside the classroom. Moreover, with the changing times, learning material is not only through books. This material can be provided through online media in the form of E-books, Google Classroom, or many applications or software available on digital devices (Zulfitri et al., 2021). 21st century learning focuses on four fundamental competencies: intellectual curiosity, innovation, interactions and extension, and information and technological mastery (Lubis et al., 2019). Generally, there are a lot of medias to support someone to gather much information as like software or it is known by application. One of the software media is QuillBot, as it can guarantee the examination of grammatical errors in structure.

QuillBot application verifies that grammar checking is free of grammatical errors, and almost all students agree that it can be trusted to check grammar (Baron et al., 2023), titled " Students' Perception on the Use of QuillBot to Improve Grammar." Consequently, the QuillBot is an extremely user-friendly tool that makes grammar checking easier for students who have trouble with it. This program has the solution for students who have a lot of tasks to finish but are not scared to write them down accurately or who cannot check their grammar. Meanwhile, based on *Employing The QuillBot Application In Order To Sharpen Paraphrasing Skills In Writing Academic Essays For English Majored Students At The School Of Foreign Languages Thai Nguyen University* (Bui Van Hieu et al., 2022).

Based on the result of this research, it is normally quite beneficial to use QuillBot in the educational process in order to improve paraphrase abilities. It is evident from the articles that learners' paraphrasing abilities have considerably improved in terms of parallel construction, word order, and sentence structure. The teacher carefully and properly assesses each article's results. In addition, the instructor designs games and group activities to pique students' attention. From there, it is clear that QuillBot may be a useful tool for students looking to get better at English.

With millions of users, QuillBot is a cutting-edge NLP (Natural Language Processing) committed founded by Rohan Gupta, who also serves as co-founder and CEO. He graduated from the University of Illinois at Urbana-Champaign with a B.S. in finance and an M.S. in computer science. He has a strong love for philosophy, technology, and world-changing initiatives. QuillBot is defined as a contemporary online writing and paraphrasing tool run by AI, according to Singh (2023) as cited by Cointelegraph Corporation. It helps users write more efficiently, generate new phrases, and improve the quality and clarity of their text using cutting-edge Natural Language Processing (NLP) algorithms.

QuillBot's ability to accurately paraphrase language is one of its primary features. Users may input a word, a paragraph, or a whole text into QuillBot, and it will produce many interpretations while preserving the original's meaning. Writers, students, and professionals who want to avoid plagiarism, simplify complex language, or come up with fresh ideas for communicating their thoughts will find QuillBot to be of great assistance. According to Hamid (2024) as cited by Ellegant Themes Corporation, QuillBot AI provides a number of tools that make organizing content simple and efficient. Here are these features of QuillBot application:

- 1) The Paraphraser QuillBot AI
- 2) The Checker for Grammar
- 3) Summarizer
- 4) Citation Generator
- 5) The Plagiarism Checker

Meanwhile, according to Singh (2023) as cited by Cointelegraph Corporation, there are a lots of the advantages and disadvantages of Quillbot can be delivered such as:

1. Advantages:
 - 1) Paraphrasing assistance
 - 2) Language enhancement
 - 3) Time-saving tool
 - 4) User-friendly platform
2. Disadvantages:
 - 1) Limitations on accuracy
 - 2) Contextual challenges
 - 3) Limited domain experience
 - 4) Limited domain expertise

Based on the researcher has found from the teacher opinion that one of the main problems for students is when they are asked to translate text manually using a dictionary, they feel unsure about their writing, because they think whether the grammar placement is appropriate or not, the translation of the text is correct or not. Under such circumstances, it would definitely take them a very long time if they were asked to translate a long text. Therefore, the researcher conducts a trial using an application for students to test how much benefits that they would get if they use the application to work on text translation and with this application they could minimize the use of a long time in translating text.

Then, with the existance of QuillBot application researcher hopes that students will understand how to use this application can boost students' confidence to learn the English language without hesitation, reduce time-wasted, and help students feel good about themselves when given multiple assignments by their teachers. Furthermore, researcher is interested to do the research about " The Effectiveness of QuillBot Application on Students' Grammar Mastery."

1.2 Formulation of the Problem

Based on the background of the problem above, the research problem could be formulated as " Does the QuillBot Application Significantly Affect Students' Grammar Mastery?."

1.3 Purpose of the Research

- 1) Students have to be able operating QuillBot so they can boost their Grammar mastery.
- 2) Students are expected to be able to employ technology in learning activities using the QuillBot program.
- 3) To increase up students' ability to understand Grammar in English.

3. RESEARCH METHODS

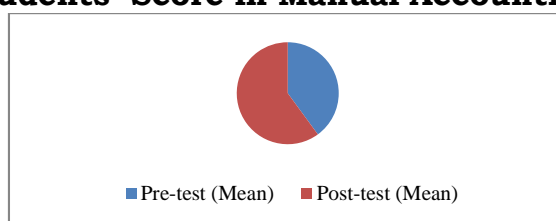
The design of this research was quantitative research with experimental research methods. In conducted this research, there were two classes of second grader who were participated. The first class was the experimental class, and the second class was the control class. The experimental class was a class that uses QuillBot application, and the control class was a class that did not use QuillBot application. Thus, researcher had used basic technique (Manual) to analyse data. In this research, the researcher used the Nonequivalent Control Group Design. Gay argues that the non-equivalent control group strategy involves randomly assigning intact groups to treatments, rather than individuals.

The researcher had taken two classes randomly class XI MPLB 1, which consisted of 40 students and XI MPLB 3 (Management Perkantoran dan Layanan Bussiness) which consisted of 40 students. Then, the researcher had chosen XI MPLB 1 as experimental class and XI MPLB 3 as control class, randomly. Thus, for analysing the data researcher used T-test sample to collecting data.

3. RESULTS AND DISCUSSION

The data in this research were obtained by using translation sentences into English and filling a part of the blank option and the question consists of 10 items. There are 80 students of second-grade in MPLB 1 and MPLB 3. In this situation there were a lot of students getting a lower and higher of their score, for lower was ranged around 5-50 and higher was ranged around 53-93 for pre-test. Meanwhile for post-test there were a lot of score, for lower was ranged around 70 and higher was ranged around 90 in experimental class.

Diagram 1
Sudents' Score in Manual Accounting



Based on the diagram above researcher could conclude that avarage of students' score are different, for this point the avarage of Pre-test was 55,8 and for Post-test was 83,95. Thus, after it could calculated on Standard Deviation (D) was gotten 24,79, Standard Error (SE_{MD}) was gotten 3,97, T_{test} was gotten 6,24, Determining degree of freedom (df) was gotten 78, for degree significance was gotten 1,699. Go back to the hypothesis 1) H_a : The QuillBot application significantly affects students' grammar mastery achievement, 2) H_0 : The QuillBot application does not significantly affect students' grammar mastery achievement. It could be concluded like $T_{test} > T_{table}$ so it was accepted and in brief, T_{test} was bigger that T_{table} ($6,24 > 1,699$) and H_a was accepted and H_0 was rejected because in this progressed one of class was given the treatment to observe what a significantly affects of QuillBot application for post-test in that class.

4. CONCLUSION AND SUGGESTIONS

4.1 Conclusion

Result of sample could be calculated as like t_0 was 6,24 and the degree of freedom was 78. In addition, the value of t_{table} in significance level was 0,05. Researcher concluded that T-test was bigger that T-table ($6,24 > 1,699$) and H_a was accepted and H_0 was rejected because in this progressed one of classes was given the treatment to observe what a significantly affects of QuillBot application for that class.

4.2 Suggestions

Based on the conclusion above, the recommendations are divided into the following phases:

English teachers could apply QuillBot application into learning for students, so that students could be able comprehend their mastery in grammar. It is suggested for students to implement the technology in learning program because

with the existence of technology could be influenced students' style learning, they will not be monotonous on paper or whiteboard only. Thus, they will understand that learning grammar is not only on the books but also through other media for instance is QuillBot application. For readers get interested in learning more about this research, they should explore knowledge to broaden their understanding of how to improve their grammar mastery, and seek out other references. It is hoped that researchers who use another media for learning, especially QuillBot application in the future can combine this media with other medias.

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