# THE EFFECTIVENESS OF INTEGRATING QUILLBOT FOR PARAPHRASING IN WRITING INSTRUCTION

**[1]\*Lalu Thohir, [1]Udin, [1]Mh Isnaeni, [1]Lalu Jaswadi Putera**

[1]English Lecturer, Faculty of Teacher Training and Education, University of Mataram, Indonesia

*Corresponding Author email: thohir@unram.ac.id

| Article Info | Abstract |
|---|---|
| **Article History** <br> Received: August 2024 <br> Revised: September 2024 <br> Published: October 2024 <br><br> **Keywords** <br> Integration; <br> Paraphrasing; <br> Manual Paraphrasing; <br> QuillBot paraphraser; | *QuillBot is one of the online programs that can be utilized to enhance students' writing skills. By integrating the paraphrasing tool QuillBot into the writing instruction, this study aimed to examine the effectiveness of QuillBot paraphraser on the students' paraphrasing ability. Additionally, this study sought to find out the students' opinions on paraphrasing and on the use of QuillBot in paraphrasing. Adopting a mixed method with explanatory design, this study employed quasi-experimental research with a one group pretest posttest design. There were 44 fourth-semester students taking the Academic Writing course in the English study program at the University of Mataram participating in this study. The students' paraphrasing ability was tested before and after the treatment with both manual paraphrasing instruction and QuillBot paraphrasing tool. While, the students' opinions towards paraphrasing instruction integrating the QuillBot paraphrasing tool was discovered through questionnaire. Further, the collected data were analyzed quantitatively and qualitatively to answer the predetermined research objectives. The results of t-test showed that there was a significant difference between the students' paraphrasing ability before and after the treatment with significance value 0.000 lower than 0.05. In addition, most students responded positively to the integration of QuillBot in paraphrasing instruction, as it not only improved their literacy skills but also their motivation in learning paraphrasing in which the use of QuillBot paraphraser is simple, easy, instant and time-saving. This study highlights and confirms the potential of AI tools like QuillBot to enhance language instruction. Other reseachers might compare the efficacy of QuillBot paraphraser to other automatic paraphraser in writing instruction and use both questionnaire and interview to obtain more detailed information about the students' attitudes or opinions.* |

## INTRODUCTION

Plagiarism in higher education is not a new phenomenon and has become an important issue in the academic world. Plagiarism can be defined as a form of copying, theft of ideas, academic misconduct, and misuse or misappropriation of intellectual property. When writing information, opinions, or ideas of others, a writer presents them as if they were his or her own (Bailey, 2014; Swales et al., 2012; Monippally & Pawar, 2012; Axelrod & Cooper, 2014; Chin, 2004; Wallwork, 2016; Roberts, 2008).

In today's digital era, one of the indicators used to detect plagiarism in an article journal is the level of similarity index of words or sentences in the article with pre-existing writings. A number of universities in Indonesia currently require a check of the similarity of writing on students' final projects (thesis) by utilizing online tools such as Turnitin. The similarity report generated from Turnitin can be used as a basis for detecting and preventing plagiarism. The higher the similarity index level obtained from a piece of writing, the more likely plagiarism is

suspected or indicated. The acceptable similarity index level for a general writing is typically no more than 20%. As a matter of fact, many students writings, i.e. their final project in the English department at the university of Mataram, after having been checked for their similiraty index level, were more than 20% and this forced or made them struggle to minimize those similarity level index through paraphrasing and/or summarizing.

One of the ways that can be used to reduce the similarity level of a text is by performing paraphrasing. Bailey (2006: 29) stated that paraphrasing is the process of rewriting a text so that it is noticeably different from the source but preserving the meaning and according to him, a good paraphrase is significantly different from the original wording, without changing the meaning at all. Similarly, Swales and Feak (2012: 202) defined a paraphrase as a restatement of the ideas in the original and good paraphrasing can indicate the comprehension and can avoid plagiarism. They further stated that the most common way in paraphrasing is to replace words with their synonyms and to change the structure of the sentences in the source text. In short, paraphrasing can be simply defined as the rephrasing or rewriting of an idea using different language style – words or structure.

As technology keeps evolving nowadays, there are several tools or programs that can be used to facilitate teaching and learning activities, such as paraphrasing in writing activities. Many studies, such as those conducted by Malvado et al., (2022); Faisal and Sukmaningrum (2023); Bui and Vu (2023); Et.al, (2021); Faisal and Sukmaningrum (2023) confirmed that the incorporation or use of technology in writing instruction had assisted teachers to enhance their students' performance in writing. QuillBot as one of the technology tools was found to be effective in enhancing students' writing skills (Nurmayanti & Suryadi, 2023; Xuyen, 2023; Fitria, 2021) and assisting students in overcoming their difficulties in doing paraphrasing (Drivoka Sulistyaningrum, 2021). Further, it was found that the use of ChatGPT could greatly enhanced the students' writing skills, namely news text writing skills (Mukhlis, 2024)

QuillBot is an online application that can be used to paraphrase sentences, summarize long sentences, check grammar and plagiarism and more. QuillBot is one of the human inventions in the realm of digital technology and it has been acknowledged that in the current era of globalization and digitalization, technology has greatly assisted the teaching and learning process, including English language teaching (ELT) and learning English as a foreign language (EFL) for students in Indonesia.

Integrating technology into English language teaching has been an interest for many researchers but few studies about the use of QuillBot have been done and no study has been done specifically in examining the effectiveness of integrating QuillBot paraphraser as an automatic paraphrasing with manual paraphrasing in teaching paraphrasing to the university students. Fitria (2021) in her study reviewed the QuillBot as an Artificial Intelligence (AI) tool system for students in paraphrasing and rewriting English writing. She further stated that this tool can be the students' alternative which provides a solution by helping paraphrase when students do not have the idea to paraphrase English writing manually. However, a good knowledge of vocabulary and understanding of English grammar, will help the students both in using online or manual paraphrasing to be better or the best quality. In the study about the students' perception of the use of QuillBot, Kurniati and Fithriani (2022) found that post-graduate students respond positively to using Quillbot to assist them in improving the quality of their writing. Furthermore, the employment of QuillBot was found to have three advantages: improving students' positive attitudes toward writing, providing a variety of user-friendly writing tools, and assisting students' language development. This study suggests that students' ability to produce high-quality writing is greatly aided by AI-powered writing tools like Quillbot, particularly in academic writing. Kharbach (2023) affirmed in his writing that QuillBot is an excellent paraphrasing tool for students since it allows them to find better ways to rewrite or paraphrase, improves the quality of their writing, and enables them to convey

textual content in clear and meaningful ways. In addition, Fitria (2023) in her library research provided the potential for introducing manual and automatic summarization to the students. She states that manual conversion or summarization is a laborious process, therefore, automation is required and it can be accomplished by utilizing artificial intelligence technology. However, like other applications, the auto text summarization application has some shortcomings as well, so students need to quickly check self-evaluation for summarizing and this can be well applied if they have been introduced and trained on how to do manual summarizing.

In the light of the description above, this was an interesting issue for introducing and training students on how to do manual paraphrasing before applying automatic paraphraser – QuillBot paraphraser – in doing paraphrasing activities. To this end, the present study aimed to answer the following two research questions: 1) How effective is the integration of manual and automatic paraphraser - QuillBot for paraphrasing instruction?, and 2) How are the students' opinions on the use of QuillBot paraphraser in doing paraphrasing?

## RESEARCH METHOD
### Research Design
This study adopted a mixed method with explanatory design. Crassswall (211: 2009) states that sequential explanatory strategy is categorized by the collection and analysis of quantitative data in a first phase followed by the collection and analysis of qualitative data in a second phase and it is typically used to explain and interpret quantitative results by collecting and analysing follow-up qualitative data. In the first phase of this study, the quantitative data were collected through pre- and post-test. While, in the second phase, the qualitative data were collected through the questionnaire which aimed to discover students' responses or opinions regarding the combined use of manual paraphrasing and automatic paraphraser QuillBot in paraphrasing activities.

### Population and Sample
The population of this study was the fourth semester students in the English study program at the university of Mataram in 2023. There were 260 students who were classified into 10 classes. From those classes, 2 classes consisting of 44 students were involved in this study. The selection of those 2 classes was based on a combination of practical considerations, i.e. population size, cost, accessibility, and methodological factors like homogeneity. The classification of students in this English study program is not based on the students' language performance and/or competencies, but merely by considering their initial names. In addition, the fourth semester students involved in this study were those students taking the academic writing course and they were eligible to take this course because they had passed the requisite writing course, i.e. argumentative writing course, in the third semester. In this Academic writing course, one of the topics they had to study was paraphrasing that was aimed to support them in writing academically and help them avoid plagiarism.

### Instruments
To meet the data needed, two instruments were applied in this study, i.e. test and questionnaire. The test utilized was re-writing test (paraphrasing) consisting of 6 sentences in which the students were required to paraphrase. The validity of the test was maintained through its content and construct. The test also was maintained for its readibility through human review, i.e. colleague or peer review.

Further, the questionnaire was adopted and adapted from questionnaire used by Xuyen (2023) in her study. The questionnaire used in this study was in the form of closed and open ended. There were 9 questions in the form of closed ended which required the students to respond to 5 options – strongly agree, agree, neutral, disagree, and strongly agree. In the open-

ended form, the students were asked to state their preference in paraphrasing – using automatic paraphraser (QuillBot), manual paraphrasing and both manual and automatic – and their reasons for preferring one type over the others.

**Data Analysis**

Quantitative data obtained from the rewriting test were analyzed by *t-test* with the assistance of SPSS, while descriptive statistics were used for quantitative data obtained from questionnaires. Qualitative data obtained from questionnaires were analyzed qualitatively through stages of data reduction and categorization, data presentation, and drawing conclusions. For this purpose, thematic analysis was applied manually by reading the responses thoroughly, indentifying and grouping similar expressions. Thematic analysis, according to Braun and Clarke (2012), is a method for systematically locating, classifying, and providing context for patterns of meaning (themes) within a dataset which then helps researchers see and understand collective or shared meanings or experiences.

To help establish the validity and credibility of the data or measurement from the paraphrasing tests, Inter-Rater Reliability with Percentage Agreement was applied**,** and the students' paraphrased texts were measured based on McInnis' level of paraphrase appropriateness (McInnis, 2009) and **t**o measure the attitude of the students on the integrated automatic paraphraser QuillBot into paraphrasing instruction, the mean scores of their responses were applied which then interpreted into positive if the mean score is ≥ 3.50 and negative when the mean score is ≤3.49.

**RESEARCH FINDINGS AND DISCUSSION**
**Research Findings**

Based on the objectives of this study, the findings of this study are elaborated based on the quantitative and qualitative data, the students' scores in paraphrasing test and their opinions about the integration or the combination of paraphrasing manually and using automatic paraphraser in paraphrasing activities.

In the pretest and posttest (Table 1), the scores obtained by 44 students indicated by their mean scores are 60.43 and 70.23 in pretest and posttest respectively. These different scores show that there is an increase in the scores obtained by the students before and after the treatment.

Table 1
Paired Samples Statistics

|  |  | Mean | N | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| Pair 1 | Pretest | 60.43 | 44 | 4.891 | .737 |
|  | Posttest | 70.23 | 44 | 5.806 | .875 |

Before determining the use of parametric tests to assess the effectiveness of integrating QuillBot in paraphrasing instruction, it is necessary to first ascertain the normality of the pretest and posttest results. From the normality test results, it was found that the Kolmogorov-Smirnov test results for both pretest and posttest have significance values, greater than 0.05, i.e., 0.178 for the pretest and 0.200 for the posttest. Thus, it can be stated that the data from the pretest and posttest results are normally distributed and therefore a parametric test using paired t-test was performed.

The paired t-test results (Table 2) points out that the significance value is 0000 > 005, which means there is a significant difference between pretest and posttest scores. This indicates

that the integration of the paraphrasing tool Quillbot in writing instruction has been proven effective in enhancing students' paraphrasing abilities.

Table 2
Paired Samples Test

|  |  | Paired Differences | | | | | t | df | Sig. (2-tailed) |
|  |  | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference | | | | |
|  |  |  |  |  | Lower | Upper |  |  |  |
| Pair 1 | Pretest - Posttest | -9.795 | 7.990 | 1.205 | -12.225 | -7.366 | -8.132 | 43 | .000 |

Further, Table 3 show data about the students' perception after having been trained to do paraphrasing. In doing paraphrasing, the data shows that majority of the students (56.8%) strongly agreed and the rest of them (43.2%) agreed that by doing paraphrasing, their writing skills could improve. Next, the majority of the students agreed that paraphrasing could increase their comprehension (52.3%) and could enhance their understanding (47.7%).

Table 3
Students' Opinions on the Paraphrasing and QuillBot

| Measure | Items | Weigh | N (%) | Mean |
|---|---|---|---|---|
| Paraphrasing Improves writing skills | Strongly Agree | 5 | 25 (56.8%) | 4.57 |
|  | Agree | 4 | 19 (43.2%) |  |
|  | Neutral | 3 | 0 |  |
|  | Disagree | 2 | 0 |  |
|  | Strongly Disagree | 1 | 0 |  |
| Paraphrasing Increases comprehension | Strongly Agree | 5 | 12 (27.3%) | 4.07 |
|  | Agree | 4 | 23 (52.3%) |  |
|  | Neutral | 3 | 9 (20.5%) |  |
|  | Disagree | 2 | 0 |  |
|  | Strongly Disagree | 1 | 0 |  |
| Paraphrasing Enhances understanding | Strongly Agree | 5 | 16 (36.4%) | 4.20 |
|  | Agree | 4 | 21 (47.7%) |  |
|  | Neutral | 3 | 7 (15.9%) |  |
|  | Disagree | 2 | 0 |  |
|  | Strongly Disagree | 1 | 0 |  |
| QuillBot saves time and energy | Strongly Agree | 5 | 24 (54.5%) | 4.45 |
|  | Agree | 4 | 16 (36.4%) |  |
|  | Neutral | 3 | 4 (9.1%) |  |
|  | Disagree | 2 | 0 |  |
|  | Strongly Disagree | 1 | 0 |  |
| QuillBot is easy to access and use | Strongly Agree | 5 | 22 (50%) | 4.43 |
|  | Agree | 4 | 19 (43.2%) |  |
|  | Neutral | 3 | 3 (6.8%) |  |
|  | Disagree | 2 | 0 |  |
|  | Strongly Disagree | 1 | 0 |  |
| QuillBot improves grammatical knowledge | Strongly Agree | 5 | 12 (37.3%) | 3.93 |
|  | Agree | 4 | 17 (38.6%) |  |
|  | Neutral | 3 | 15 (34.1) |  |
|  | Disagree | 2 | 0 |  |
|  | Strongly Disagree | 1 | 0 |  |
| QuillBot improves vocabulary | Strongly Agree | 5 | 19 (43.2%) | 4.30 |
|  | Agree | 4 | 19 (43.2%) |  |
|  | Neutral | 3 | 6 (13.6%) |  |
|  | Disagree | 2 | 0 |  |
|  | Strongly Disagree | 1 | 0 |  |
| QuillBot improves literacy skills | Strongly Agree | 5 | 18 (40.9%) | 4.23 |

| Measure | Items | Weigh | N (%) | Mean |
|---|---|---|---|---|
| | Agree | 4 | 18 (40.9%) | |
| | Neutral | 3 | 8 (18.2%) | |
| | Disagree | 2 | 0 | |
| | Strongly Disagree | 1 | 0 | |
| QuillBot improves motivation in learning to paraphrase | Strongly Agree | 5 | 18 (40.9%) | 4.25 |
| | Agree | 4 | 19 (43.2%) | |
| | Neutral | 3 | 7 (15.9%) | |
| | Disagree | 2 | 0 | |
| | Strongly Disagree | 1 | 0 | |
| | | | Overall Mean | 4.27 |

In the use of QuillBoot paraphraser, the majority of the students (54.5%) strongly agreed that QuillBot could save time and energy. Whereas 36.4% (16 students) agreed and only 9.1% (4 students) stated neutral. Next, most of the students (50%) strongly agreed if QuillBot is easy to access and use. The rest of them, 43.2% (19 students) agreed and only 6.8% (3 students) stated neutral.

Next, it was found that the majority of the students (38.6%) agreed if QuillBot could improves their grammatical knowledge. Whereas, dealing with vocabulary, the table shows that the same number or students (19 students or 43.2%) strongly agreed and also agreed if QuillBot could improve their vocabularies and only 13.6% (6 students) stated neutral. Next, also the same number of the students (18 students or 40.9%) strongly agreed and also agreed if QuillBot could improve their literacy skills – reading and writing skills, and 18.2% (8 students) stated neutral. Finally, it was found that the use of QuillBot paraphraser could improve the students' learning motivation in paraphrasing in which the majority of them (43.2%) agreed if QuillBot could improve their motivation in learning and doing paraphrasing. In conclusion, based on the mean score for each category and also the over-all mean score of 4.27, it can be concluded that the students have positive attitude toward the integrated automatic paraphraser QuillBot in the teaching of paraphrasing.

On the other hand, when asked their opinions about QuillBot paraphraser, some of the students stated that it is helpful as it can make the paraphrasing process more easily and quickly.

> *"QuillBot paraphraser is an automatic paraphrase and this automatic paraphrase is very helpful for me and makes my work easier."*
> *"The best tool for paraphrasing the word, we can get easily for paraphrasing now, without thinking too long for just getting the synonym."*
> *"Overall, Quillbot was of great use for me as I was able to write stellar academic papers. I like this paraphraser tool very much. I still use it today and I highly recommend it."*

However, some of them stated that sometimes the paraphrased results were not the ones they wanted or meant.

> *"Paraprashing using QuillBot is good, but in some way, the results are not like what we want.'*

Further, when asked about the preferences on using automatic paraphraser, manual paraphrasing and both – manual and automatic, most of the students 50% (22 students) would like to use automatic paraphraser as it is simple, easy to use, fast (time saving) and instant. Whereas the rest of them, in which 43.2% (19 students) would like to use both manual and automatic paraphraser because the results from automatic paraphraser QuillBot still need to be checked and fixed to make them relevant with the context, and only 3 students (6.8%) would

like to use manual paraphrasing as it has high level of accuracy, context sensibility and creative adaptation.

**Discussion**

The integration of the automatic paraphraser QuillBot in teaching paraphrasing to the students shows positive results and this can be seen from the pre- and post-test outcomes. In addition, the significance value resulted from the paired *t-test* confirms the effectiveness of integrating Quillbot paraphraser in assisting the students in paraphrasing activities. On the other hand, the students' positive attitude toward the integrated automatic paraphraser QuillBot in the teaching of paraphrasing highlights and confirmed the quantitative data indicating that integrating QuillBot paraphraser in writing instruction was effective for improving students' ability in paraphrasing. In addition, the students' preference for utilizing the QuillBot paraphraser was consistent with their paraphrasing skill, as evidenced by their posttest performance, which differed considerably from the pretest. The findings of this study highlight and support the demand of integrating or utilizing technology tools in educational system and particularly in the English Language Teaching (ELT).

It has been acknowledged that technology has been widely used in all aspects of human life, including in the field of education. Moreover, during or after the COVID-19 pandemic, technology has played a very important role in the educational system, particulary in Indonesia. Haleem et al. (2022) stated that the educational system has been significantly impacted by the technology and the recent COVID-19 Pandemic has solidified the use of digital tools in education even more. They further explained that the advent of digital technologies has caused a paradigm shift in the whole educational system. It functions as a mentor, assessor, and co-creator of information in addition to transmitting knowledge. For students, technological developments in education have made life simpler. Nowadays, students prepare presentations and projects using a range of software and tools instead of pen and paper.

The integration of technology in language learning, especially ELT, is increasingly beneficial (Adhikari, 2021; Al-Malki (2020); Al-Mohammadi & Derbel, 2014; Arslan, 2008; Wahyuni, 2022). Integrating technology into ELT means using it to achieve learning objectives or to improve learning outcomes and it is not surprising that we rarely find English language teachers who do not use or utilize technology in their English language teaching. Kumar et al., (2022) stated that EFL learning is becoming increasingly dependent on technology in which the use of hardware and software technology for English language instruction and learning can benefit both teachers and students in a number of ways, such as cost-effectiveness and the ability to access materials at any time and to learn quickly in a short time. A study conducted by Adhikari (2021) reported that technology-integrated instruction could improve the performance of teachers and students, strengthens student-centered teaching techniques, creates new learning possibilities, and introduces pedagogical innovations. His study also found that technology could help teachers and students be more productive when teaching and learning languages. In addition, coordination, cooperation, and collaboration between teachers and students are advanced by technology-integrated language teaching and learning.

A number of studies related to the use of online paraphrasing tools have found that paraphrasing integrated with technology can not only improve the students' reading ability (Lee & Von Colln, 2003); Washburn et al., 2021; Hagaman et al., 2012; Nirwana, 2021), their writing ability (Choy & Lee, 2012) Drivoka Sulistyaningrum, 2021; Ramadhani, 2019), and their enjoyment or motivation in learning (Ariyanti & Anam, 2021; Mohammad et al., 2024) but this also avoid students from plagiarism (Fitria, 2022; Prentice & Kinden, 2018; Rogerson & McCarthy, 2017). In this study, the integration of QuillBot into the teaching of paraphrasing was proceded by manual paraphrasing instruction, where students were taught the basic techniques of paraphrasing, such as using synonyms, changing word order, and altering

sentence structures from active to passive or vice versa. This was followed by further instruction on paraphrasing using the QuillBot paraphrasing tool.

On the other hand, from the responses submitted by the students, it was found that most of them prioritized the use of paraphrasers for paraphrasing activities because the QuillBot automatic paraphraser is easy to use, can save time because it can get paraphase results faster. Based on the responses given by the students in the questionnaire, it was found that most of them prioritized using paraphrasing tools for paraphrasing activities because the QuillBot automatic paraphraser is easy to use and can save time as it produces paraphrased results more quickly and thus it was found that their motivation in learning to paraphrase improved after having been introduced with and taught in using QuillBot paraphraser. The findings of this study highlight and confirm the findings of a study conducted by (Asnas et al., 2022). In the study about students' voices on complexities and coping strategies in academic writing, they found that one of the complexities that contribute to academic writing challanges was learners' low motivation and they stated that one of the strategies in coping with challenges or problems in academic writing was the use of online tools or programs such as Google Translate, QuillBot, Grammarly, and Mendeley.

QuillBot paraphraser can help students rewrite and improve the quality of their sentences or paragraphs in terms of vocabulary, tone, and style in one click; they simply need to put the text in the input box, choose the paraphrasing mode and click the paraphrase button. Fitria (2021) in her research on QuillBot found that QuillBot paraphrases use 4 ways of paraphrasing, namely: 1) using synonyms, 2) changing word forms, 3) changing the sentence structure from active to passive and vice versa, and 4) changing the order of words in the sentence. Further, according to Fitria (2022), human intelligence is still crucial because QuillBot is only a tool and a technology product. The students must carefully read and edit their writing to get better or higher-quality paraphrased results. Prentice & Kinden (2018) in their study found that when paraphrasing tools have been applied to text by the students, the output is frequently of such poor quality as to render the text unintelligible. They further found that medical terminology will usually be substituted with inappropriate synonyms. Therefore, the students should be assisted in developing the abilities needed to paraphrase effectively, and it is necessary that language teachers equip their students with knowledge about paraphrasing and train them to do paraphrasing manually before introducing and training them to use automatic paraphraser like QuillBot paraphraser. Through these stages, the students will not merely be dependent on any educational tools such as QuillBot, and they can accept or revise the results or the output of any tools or programs accordingly.

Further, language teachers should be aware that students' language achievement in any language skills is not simply impacted by single factor, such as the use of language learning program, but also by various factors. Therefore, when using QuillBot paraphraser for teaching students paraphrasing, language teachers need to consider their learners' current knowledge and ability in paraphrasing and also any other factors in relation to their learners' psychological aspects, such as motivation, interest, and individual learning differences. Mukhlis (2024), in his study about relationship between digital literacy and ChatGPT, found that there was no discernible interaction between the two in terms of shaping the ability to write news content, and therefore he concluded that it is important to take into account various factors that impact student learning achievement, particularly with regard to digital literacy and psychological aspects that are crucial to the growth of news text writing abilities.

## CONCLUSION

The t-test results indicate that the significance value is 0.000, which is greater than 0.05. In other words, there was a significant difference between pretest and posttest scores, meaning that the integration of the paraphrasing tool Quillbot in writing instruction proved to be effective

in enhancing students' paraphrasing abilities. Further, the results of the questionnaire showing the average score for each category and the overall average score indicated that the students have positive attitude towards the integration of QuillBot into paraphrasing instruction. Paraphrasing not only enhances their literacy skills but also motivates them to learn paraphrasing and helps them avoid plagiarism.

As technology has been an important part of learning activities, it is necessary for language teachers, especially those teaching EFL, to use or integrate any tools, applications, or programs that can assist them in improving their students' language skills. QuillBot paraphraser, as one of the online paraphrasing tools, should be introduced to language learners and they need to be assisted in how to use QuillBot paraphraser appropriately and maximize its benefits in that their writing ability will be better at the same time their potential for commiting plagiarism will be avoided by doing paraphrasing appropriately. However, like other applications, the QuillBot paraphraser also has some shortcomings and therfore, language teachers need to introduce and train their students on how to do manual paraphrasing before they use an automatic paraphraser like QuillBot. Further, next research on comparing the effectiveness of QuillBott paraphraser to other type of automatic paraphraser would be necessary to give language teachers insightful information and a range of resources or options to aid the development or improvement of their students' paraphrasing skills.

## ACKNOWLEDGEMENT

## REFERENCES

Adhikari, Y. N. (2021). Integrating Technology into English Language Teaching in Nepal: Student and Teacher Perspectives. *Prithvi Academic Journal*, *4*. https://doi.org/10.3126/paj.v4i0.37052

Al-Malki, M. A. (2020). Quizlet: An Online Application to Enhance EFL Foundation Students' Vocabulary Acquisition at Rustaq College of Education, Oman. *Arab World English Journal*, *6*, 332–343. https://doi.org/10.24093/awej/call6.22

Al-Mohammadi, S., & Derbel, E. (2014). The effects of embedding information technologies within ELT on EFL learners' motivation and interest. *International Journal of Applied Linguistics and English Literature*, *3*(1). https://doi.org/10.7575/aiac.ijalel.v.3n.1p.181

Ariyanti, A., & Anam, S. (2021). Technology-Enhanced Paraphrasing Tool to Improve EFL Students' Writing Achievement and Enjoyment. *Journal of English Language Teaching and Linguistics*, *6*(3). https://doi.org/10.21462/jeltl.v6i3.698

Arslan, A. (2008). Implementing a Holistic Teaching in Modern ELT Classes: Using Technology and Integrating Four Skills. *International Journal of Human Sciences, Vol 5, No 1, 2008*.

Asnas, S. A. M., Mustofa, M., & Ubaidillah, M. F. (2022). Investigating Academic Writing in EFL Contexts: Students' Voices on Complexities and Coping Strategies. *Vision: Journal for Language and Foreign Language Learning*, *11*(2). https://doi.org/10.21580/vjv12i116326

Axelrod, R. B., & Cooper, C. R. (2014). *The Concise St. Martin's Guide to Writing*. Macmillan Higher Education.

Bailey, S. (2014). *Academic writing: A handbook for international students*. Routledge.

Braun, V., & Clarke, V. (2012). Thematic analysis, APA Handbook of Research Methods in Psychology. In *APA handbook of research methods in psychology, Vol 2: Research designs: Quantitative, qualitative, neuropsychological, and biological.* (Vol. 2).

Bui, D. B. H., & Vu, T. T. (2023). Implementing Online Tools to the Pre-writing Stage: An Investigation into Online Writing Classes. *International Journal of Second and Foreign Language Education*, *2*(1). https://doi.org/10.33422/ijsfle.v2i1.426

Chin, B. A. (2004). *How to Write a Great Research*. John Wiley & Sons, Inc.

Choy, S. C., & Lee, M. Y. (2012). Effects of Teaching Paraphrasing Skills to Students Learning Summary Writing in ESL. *Journal of Teaching and Learning*, *8*(2). https://doi.org/10.22329/jtl.v8i2.3145

Drivoka Sulistyaningrum, S. (2021). Utilizing Online Paraphrasing Tools to Overcome Students' Paraphrasing Difficulties in Literature Reviews. In *Journal of English Language Studies* (Vol. 6).

Et.al, N. A. S. (2021). The Use of Technology to Enhance English as a Second Language (ESL) Learners' Descriptive Writing. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, *12*(3). https://doi.org/10.17762/turcomat.v12i3.829

Faisal, F. A., & Sukmaningrum, R. (2023). Implementation of Wordwall As a Learning Media to Improve Students' Writing Skill. *Pendas Mahakam : Jurnal Pendidikan Dan Pembelajaran Sekolah Dasar*, *8*(1). https://doi.org/10.24903/pm.v8i1.1323

Fitria, T. N. (2021). QuillBot as an online tool: Students' alternative in paraphrasing and rewriting of English writing. *Englisia: Journal of Language, Education, and Humanities*, *9*(1). https://doi.org/10.22373/ej.v9i1.10233

Fitria, T. N. (2022). Avoiding Plagiarism of Students' Scientific Writing by Using the QuillBot Paraphraser. *Elsya : Journal of English Language Studies*, *4*(3). https://doi.org/10.31849/elsya.v4i3.9917

Fitria, T. N. (2023). Using Manual and Automatic Summarization: What Should Students Consider in Writing a Summary? *English Language and Education Spectrum*, *3*(2). https://doi.org/10.53416/electrum.v3i2.140

Hagaman, J. L., Casey, K. J., & Reid, R. (2012). The effects of the paraphrasing strategy on the reading comprehension of young students. *Remedial and Special Education*, *33*(2). https://doi.org/10.1177/0741932510364548

Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers*, *3*. https://doi.org/10.1016/j.susoc.2022.05.004

Kharbach, M. (2023, May 8). *Quillbot - An Excellent Paraphrasing Tool for Students - Educators Technology*.

Kumar, T., Shet, J. P., & Parwez, M. A. (2022). Technology-integration experiences in ELT classrooms as an effective tool: a theoretical study. *Journal for Educators, Teachers and Trainers*, *13*(1), 51–60. https://doi.org/10.47750/jett.2022.13.01.006

Kurniati, E. Y., & Fithriani, R. (2022). Post-Graduate Students' Perceptions of Quillbot Utilization in English Academic Writing Class. *Journal of English Language Teaching and Linguistics*, *7*(3). https://doi.org/10.21462/jeltl.v7i3.852

Lee, S. W., & Von Colln, T. (2003). The effect of instruction in the paraphrasing strategy on reading fluency and comprehension. *Retrieved from the ERIC Database. (ED476287)*.

Malvado, V., Prastikawati, E. F., & Wiyaka, W. (2022). Improving english writing skill by utilizing quizizz as a technology-based assessment. *Linguamedia Journal*, *2*(02). https://doi.org/10.56444/lime.v2i02.2573

McInnis, L. (2009). *Analyzing English L1 and L2 Paraphrasing Strategies Through Concurrent Verbal Report and Stimulated Recall Protocols*. University of Toronto.

Mohammad, T., Nazim, M., Alzubi, A. A. F., & Khan, S. I. (2024). Examining EFL Students' Motivation Level in Using QuillBot to Improve Paraphrasing Skills. *World Journal of English Language*, *14*(1). https://doi.org/10.5430/wjel.v14n1p501

Monippally, M., & Pawar, B. (2012). Academic Writing: A Guide for Management Students

and Researchers. In *Academic Writing: A Guide for Management Students and Researchers*. https://doi.org/10.4135/9788132107897

Mukhlis, M. (2024). The Effect of ChatGPT-Based Project-Based Learning Model and Digital Literacy on News Text Writing Skills. *Journal of Languages and Language Teaching*, *12*(3), 1353. https://doi.org/10.33394/jollt.v12i3.11433

Muslem, A., Marhaban, S., Heriansyah, H., & Utama, R. P. (2022). The Effects Of Using Blog-Assisted Language Learning (Ball) In Improving Non-Native Students' English Writing Skill In Higher Education; Does It Work? *Journal of Technology and Science Education*, *12*(1). https://doi.org/10.3926/jotse.1303

Nirwana, N. (2021). Paraphrasing Strategy in Enhancing The Student's Reading Comprehension. *JLE: Journal of Literate of English Education Study Program*, *1*(2). https://doi.org/10.47435/jle.v1i2.512

Nurmayanti, N., & Suryadi, S. (2023). The Effectiveness Of Using Quillbot In Improving Writing For Students Of English Education Study Program. *Jurnal Teknologi Pendidikan : Jurnal Penelitian Dan Pengembangan Pembelajaran*, *8*(1). https://doi.org/10.33394/jtp.v8i1.6392

Prentice, F. M., & Kinden, C. E. (2018). Paraphrasing tools, language translation tools and plagiarism: An exploratory study. *International Journal for Educational Integrity*, *14*(1). https://doi.org/10.1007/s40979-018-0036-7

Ramadhani, P. (2019). The Role of Paraphrasing in Writing Research Papers. *Alsuna: Journal of Arabic and English Language*, *2*(2). https://doi.org/10.31538/alsuna.v2i2.482

Roberts, T. S. (2008). Student plagiarism in an online world: An introduction. In *Student Plagiarism in an Online World: Problems and Solutions*. https://doi.org/10.4018/978-1-59904-801-7.ch001

Rogerson, A. M., & McCarthy, G. (2017). Using Internet based paraphrasing tools: Original work, patchwriting or facilitated plagiarism? *International Journal for Educational Integrity*, *13*(1). https://doi.org/10.1007/s40979-016-0013-y

Swales, J. M., Feak, C. B., Johns, A. M., & Arbor, A. (2012). *Academic Writing for Graduate Students Essential Tasks and Skills A Course for Nonnative Speakers of English*.

Wahyuni, D. S. (2022). Integrated Classroom-Chatbot Experience : An Alternative Solution For English As Foreign Language Learners. *English Language Education and Current Trends (ELECT)*. https://doi.org/10.37301/elect.v1i1.36

Wallwork, A. (2016). English for Writing Research Papers. In *English for Writing Research Papers*. https://doi.org/10.1007/978-3-319-26094-5

Washburn, E. K., Abdullah, S., & Mulcahy, C. A. (2021). Effects of a paraphrasing strategy on the text comprehension of fourth-grade striving readers. *Elementary School Journal*, *121*(4). https://doi.org/10.1086/714035

Xuyen, N. T. (2023). Using the Online Paraphrasing Tool Quillbot to Assist Students in Paraphrasing the Source Information: English-majored Students' Perceptions. *Proceedings of the 5th Conference on Language Teaching and Learning*. https://doi.org/10.21467/proceedings.150.3