

Challenging Traditional EFL Writing Classroom Using AI Mediated Tool: A Paradigm Shift

Taj Mohammad¹

¹ Associate Professor, Department of English, Preparatory Year, Najran University, Najran, Saudi Arabia

Correspondence: Taj Mohammad, Associate Professor, Department of English, Preparatory Year, Najran University, Najran, Saudi Arabia.

E-mail: tmkhan@nu.edu.sa

Received: November 28, 2023

Accepted: January 2, 2024

Online Published: January 12, 2024

doi:10.5430/wjel.v14n2p211

URL: <https://doi.org/10.5430/wjel.v14n2p211>

Abstract

Students usually find the traditional writing classroom cumbersome due to its teacher centered approach that hardly allows learners take charge of their own learning. As a result of not being actively engaged in the classroom and nature of writing requiring a rigorous practice, students lag behind in developing writing skills including the paraphrasing ones. In order to deal with this situation, this study employs QuillBot, an AI-mediated and learner-centered tool, in a group pre/post quasi-experimental research to mend EFL students' writing and paraphrase skills

Specific focus areas include summarization, grammar and spelling, rewriting sentences, sequencing sentences, identifying correct sentences, and matching phrasal verbs. 25 EFL students enrolled in the Technical Report Writing course and using QuillBot, an AI-mediated tool, comprised the research sample. Through pre- and post-experimental assessments, researchers assessed how well the students' writing skills performed both before and after the experiment. The dependent-sample t-test affected the post-test results. It was shown that the AI-mediated tool QuillBot significantly enhanced the writing skills of EFL students. Furthermore, a semi-structured interview was carried out to cross-validate the information gathered from the written samples. The semi-structured interview included questions about the students' observations and experiences using the instrument. The researchers suggested using QuillBot in a writing class to help students master writing and paraphrasing techniques in light of the findings. The results of the present research into the AI-mediated tool QuillBot may have ramifications for addressing other EFL teaching and learning issues.

Keywords: QuillBot, experimental study, paraphrasing skills, writing skill

1. Introduction

Writing is the hardest aspect of learning a second language. According to Dar and Khan (2015), Hyland (2003), and Mahboob (2014), it is based on the skilled and tactful use of language with structural accuracy and communicative potential. Grammar and syntax errors are typically the main language problems that learners face when writing. The mistakes comprise misusing verbs, prepositions, articles, tenses, singular and plural forms of words, sentence construction, and colloquial and spoken language. In addition, learners struggle with vocabulary since they do not understand the terms' connotations and collocations (Fareed et al., 2016). One important language production skill is writing.

English writing is more significant since it is used so extensively in the global mediation of knowledge (Mahboob, 2014; Rahman, 2002). Hyland (2003) asserts that language development performance and writing proficiency can be enhanced together. But sometimes, writing is merely considered as a part of teaching and studying grammar and syntax, which diminishes the importance and character of writing and prevents its development. Thus, starting at the very beginning of language instruction, learning and teaching of this ability will require a great deal of attention.

As mentioned earlier, writing is often quite challenging for EFL students in a traditional classroom setting. They are uninterested in writing, especially academic writing (Fitria, 2022; Hieu, Huy, & Hang, 2022). It becomes considerably more challenging when students must deal with summary, grammar, and spelling, as well as rewriting sentences, sequencing sentences, detecting accurate phrases, and matching phrasal verbs as part of vocabulary. The writing skills of learners can be improved by using technology to boost their interest in, enthusiasm for, and enjoyment of writing (Graham & Perin, 2007). AI-mediated programs such as Prepotseo, Paraphrasing-Tool, and QuillBot, for example, can help solve the obstacles. In an AI-mediated classroom, unlike a traditional writing classroom, a variety of innovative teaching strategies are used to tackle these challenges. To acquire this skill, according to Na and Mai (2017), one needs first learn the fundamentals of English writing as well as how a paragraph or essay should be written.

Paraphrasing tools are technological instruments that facilitate the modification of textual content without compromising its original meaning. Fitria (2022) states that when paraphrasing, EFL students need to use a variety of strategies, such as finding synonyms, rearranging the words in a sentence, reformulating phrases, analyzing grammar and spelling, recognizing proper sentences, and matching phrasal verbs with vocabulary. According to Hieu et al. (2022), kids struggle to understand this skill because of their low vocabulary

resources, grammatical variety, and accuracy.

Scholars have endeavored to resolve paraphrase skill challenges through technological sophistication, since the majority of students choose to study on tablets, smartphones, and touchpads (Sulistyaningrum, 2021; Ginting and Fithriani, 2022; Fitria, 2022; Ansoorge et al., 2021). Many researchers, including Chui (2022), and Junaidi et al. (2022) assert that the technology used by Quillbot makes use of artificial intelligence to offer grammatical, summarizing, paraphrasing, and even plagiarism detection suggestions. Quillbot can help students by minimizing plagiarism, paraphrasing, and auto-correcting writing.

A number of research have been carried out to investigate how online paraphrasing tools can aid with EFL writing. However, little is known about the use of Quillbot in improving the paraphrasing and overall writing skills of EFL students at PY Najran University. This research focuses specifically on improving grammar and spelling, rewriting sentences, sequencing phrases, recognizing correct sentences, and matching phrasal verbs as part of vocabulary using QuillBot, an AI-mediated tool. Following that, the study objectives evaluated how Quillbot assisted EFL students in developing writing skills and paraphrasing skills.

1. To identify EFL students' writing problems with particular regard to summary, grammar and spelling, rewriting the sentences, sequencing the sentences, identifying correct sentences, and matching phrasal verbs
2. To find significant differences in student writing after using the AI tool
3. To explore students' understandings in improving writing skills through Quillbot.

2. Literature Review

The study's theoretical framework aligns with Computer Assisted Language Learning (CALL), which utilizes computers, computer-based resources, and teaching apps for content presentation, reinforcement, and assessment (Mousavi & Nemati, 2017). CALL is a computer-assisted language learning method that enhances language proficiency through access to resources in reading, writing, grammar, listening, pronunciation, vocabulary, idioms, slang, and conversation (Sperling, 1997).

Computers have become integral to language learning, enabling students to study independently and improve writing abilities, particularly in paraphrasing, as computer-assisted language learning (CALL) becomes an essential aspect of the third millennium (Beatty, 2013). Chapelle (2005) highlights that most studies on computer-assisted language learning (CALL) focus on developing language learning projects and creating software specifically for language learning.

Therefore, the current study highlights the use of AI-mediated tools like QuillBot in education to enhance writing experiences, particularly paraphrasing skills. Teachers can customize learning experiences, and students' attitudes towards using AI tools have improved, highlighting the importance of technology in today's digital world. (Nurul & Siti, 2021).

According to Abdulkareem (2013), academic writing is well recognized as an essential component of English language education and growth in a number of English-speaking places. Although academic writers have challenges when writing for academic audiences, researchers hold a variety of views about the instruction of writing techniques and standards. It might be difficult and frequently results in plagiarism to write essays and paragraphs in English. Without changing the text's content, paraphrasing is a strategy that aids in the development and sequencing of concepts by students in a right, logical, and sequential manner. (Al Hassan & Ahmed, 2019).

While paraphrasing is a cognitive talent that requires excellent reading and writing skills in addition to higher-order thinking, Na, Nhat, and Xuan (2017) also claim that paraphrasing is an important skill in academic writing. According to Basori (2017), sentences that have restrictions on rewording the meaning or sentence structure may be more likely to use paraphrasing approaches. Students frequently struggle with paraphrasing since they just wind up repeating the original text (O'Reilly, 2012).

This assertion is consistent with study by Shi (2012), which found that students struggle to comprehend the need of paraphrasing in order to avoid plagiarism. The act of rewriting a passage from a literary work in the paraphraser's style and manner as opposed to the original author's is known as paraphrasing (Soles, 2003). Wilhoit (2003), who claims that paraphrasing is unlikely to be the same, corroborates this assertion.

This is the case because each writer decides for themselves what details to add, what terminology to employ, and how best to arrange their ideas when paraphrasing. It's unlikely that they are both exactly the same. In order to solve the difficulties experienced by EFL students and teachers, educators and researchers are integrating technology into traditional writing classrooms. One such example is the use of AI-mediated tools like QuillBot.

Several scholars have investigated Quillbot's use in academic writing. Rakhmanina and Serasi (2022), for instance, looked into a study to analyze the influence of Quillbot using observation as the main technique for gathering data. The results draw attention to a number of useful features of the Quillbot, including the way it automatically rewrites phrases and replaces terms with alternatives. The capacity of this program to paraphrase words and sentences is its strongest feature.

Similarly, Nurul and Siti (2021) investigated, via a quantitative study, the challenges faced by vocational education students majoring in mechanical engineering when it comes to paraphrasing in academic writing courses, as well as how they used online paraphrasing tools to get beyond those challenges. The study found that a variety of online tools for paraphrasing, including paraphrasing-tool.com, Quillbot.com, prepotseo.com, spinbot.com, and the bride, helped students modify their vocabulary, structure, synonyms, parts of speech, and other elements.

Kurniati and Fithriani (2022) also investigated Quillbot as a digital tool for academic writing in English in a qualitative study including 20 post-graduate students with an emphasis on English instruction. A semi-structured interview and a questionnaire were used to collect data about the participants' viewpoints. According to the findings of this study, post-graduate students responded positively to utilizing Quillbot to help them improve their writing skills. Additionally, Khabib (2022) used a sequential explanatory mixed methods study to examine the utilization of AI-based digital writing aides to assist teachers in producing scientific publications. Pre- and post-survey surveys were the instrument utilized.

The findings imply that instructors may be able to write scientific articles using a different approach due to AI-based digital writing aids. With the aid of this technology, writing could become more accurate and efficient while reducing errors. Furthermore, the feedback indicates that AI-based tools can help raise students' writing involvement and interest.

Reviewing earlier research on Quillbot reveals that the tool is quite helpful in assisting students in overcoming writing and paraphrasing difficulties. Numerous research have addressed various facets of Quillbot as an online paraphrase tool. However, very little experimental research—especially at Najran University—has looked into how EFL students might utilize Quillbot to improve their writing and paraphrasing abilities. Consequently, the purpose of this study is to respond to the following research questions:

1. What writing problems do EFL students encounter?
2. Is there a significant difference in student writing after using the AI tool?
3. What are students' understandings in improving writing skills through Quillbot?

3. Methods

3.1 Research Design

The quasi-experimental method was used in the study to accomplish its goals. It used a pretest-posttest design with one group. This approach can be used to assess the efficacy of any given treatment on specific learners (Creswell, 2009). The methodology involved administering a pretest to both groups, conducting the experiment, and conducting a post-test for both groups.

The experimental research looked into the problems EFL students had with writing and paraphrasing. Following the use of the QuillBot, the researcher noted the variations in the writing skills of the students.

3.2 Sampling

This study was conducted in Najran University's preparatory year. A convenient sampling method was used to pick twenty-five (Level 2) students.

3.3 Ethical Approval and Informed Consent

The study's ethical approval number is 011078-024177-DS. Students were informed about the research process, requested to participate voluntarily, and given the choice to opt out anytime. They were told that their information would be kept confidential and advised to contact researchers for additional information and clarity. Participation provided no direct or indirect benefits.

3.4 Tools and Procedures for Data Collection

Checklist for evaluation

Researchers developed a checklist for evaluating student writing. There are six categories on this checklist: summary, grammar and spelling, rewriting the sentences, sequencing the sentences, identifying correct sentences, and matching phrasal verbs.

- t-test

The researchers used paired-sample t-tests to demonstrate the significance of the difference between the pre-test and post-test means, as shown in Table 3. The means are somewhat different from one another. The sample proportion (represented by π) in the two-tailed hypothesis does not equal a specific value (represented by π_0).

H1 : $\pi \neq \pi_0$

3.5 Semi-structured Interview

A semi-structured interview was conducted to gather EFL students' observations on QuillBot's effectiveness in improving writing and paraphrasing skills, focusing on difficult concepts like summary writing, grammar, spelling, and sentence sequencing. The interview questions were crafted based on the researchers' teaching experience and consultation with previous studies (Chiu et al., 2023, Cahyono & Rahayu, 2020, Yashima et al., 2009, Gupta & Woldemariam, 2011). A researcher conducted a semi-structured interview lasting 10-15 minutes for each participant. Finally, the data from the interview was content-analyzed following Braun and Clarke's (2006) model for analyzing qualitative data.

The semi-structured interview question was asked under the following prompts:

Q: What are students' understandings in improving writing skills through Quillbot?

Prompts:

- experiences

- observations

3.6 Validity (Assessment Checklist)

Six English Department specialists evaluated the face validity of an assessment checklist that was revised in light of their comments and ideas.

The six domains of the evaluation checklist are— summary, grammar and spelling, rewriting the sentences, sequencing the sentences, identifying correct sentences, and matching phrasal verbs — were incorporated into the final draft.

- Reliability (Evaluation checklist)

To apply the assessment criteria, the researchers used an empirical sample of fifteen students. It was also evaluated by another expert researcher. The stability of the correctors (observers) was determined using the Holste equation, which is the percentage of the number of times of agreement / (the number of times of agreement + the number of disagreements). Table 1 displays the reliability coefficients for the assessment checklist.

Table 1. The assessment checklist’s reliability coefficients

No	Issues of Writing Domains	Number of agreements	Number of disagreements	Reliability coefficients
1	Summary	12	3	0.80
2	Grammar and spelling	13	2	0.87
3	Rewriting the sentences	11	4	0.73
4	Sequencing the sentences	13	2	0.87
5	Identifying correct sentences	13	2	0.87
6	Matching phrasal verbs	12	3	0.80
	Total	74	16	0.82

The coefficient factor for the assessment checklist is (0.82), as indicated in Table 1. The high percentage indicates the assessment checklist's precision.

3.7 Instructional Program

For over four years, technical writing teachers have been utilizing Quillbot, an online tool for paraphrasing. It was used for the third semester, which took place from February 2023 to May 2023. Before it was put to use, the program was tested. Owing to the students unsatisfactory pretest results, the researcher developed an instructional plan that comprised the subsequent actions:

1. Students were provided with a workshop on how to use the QuillBot.
2. Half an hour was devoted to using the Quillbot in the classroom.
3. Students were exposed to different features of the QuillBot and how they could use them.
4. There is a feature used to summarize the text. Students were asked to type or paste the text in the bot and then press the summary button. It taught them how AI uses its default features to summarize the text.
5. While paraphrasing the text, students were asked to pay careful attention to grammar and spelling.
6. Students were trained with the AI tool to rewrite the sentences and observe the differences in the structure of the sentences.
7. During paraphrasing students learnt sequencing the sentences in proper order like following subject, verb and object pattern.
8. Students learnt to identify correct sentence patterns as they were exposed to a variety of sentences on various topics.
9. To gauge the program's impact, a post-test was also administered following three months of instruction via Quillbot.
10. It was noted that students' competence in paraphrasing and writing skills had remarkably improved.

3.8 Data Analysis

The assessment checklist was used on the study's exploratory samples, which included fifteen students. Another experienced researcher also voiced their opinion. As shown in Table 1, the correctors' (observers') stability was assessed using the Holste equation: the percentage of times of agreement / (the number of times of agreement + the number of times of disagreement). Researchers used paired t-tests to highlight the significance of the difference between pre-test and post-test data, as Table 3 illustrates.

4. Results

4.1 Results of the Research Question 1: What Writing Problems Do EFL Students Encounter?

The researchers utilized a checklist in Table 2 to evaluate the problems that EFL students have when writing. They concentrated on summary, grammar and spelling, rewriting the sentences, sequencing the sentences, identifying correct sentences, and matching phrasal verbs.

Table 2. Writing samples to assist teachers in identifying students' writing concern

Rating scale -- Variables	Poor	Good	Best
Summary			
Grammar and spelling checker			
Rewrite the sentences			
Sequencing the sentences			
Identifying correct sentences			
Matching phrasal verbs			

Table 2 displays three different samples (poor, good, and best) of each category: summary, grammar and spelling, rewriting the sentences, sequencing the sentences, identifying correct sentences, and matching phrasal verbs. The samples demonstrate how students, who struggle with English, performed better when an AI technology called QuillBot was used in an instructional program.

4.2 Findings from Study Question 2. Is There A Significant Difference in Student Writing after Using the Ai Tool?

The researcher used a t-test to determine the significance of differences between means on pre- and post-tests, as illustrated in Table 3.

Table 3. T-test (paired samples) to demonstrate the significance of differences in the means of the study sample's scores on the pre and posttests

Domain		Mean	Std. Deviation	t	df	Sig. (2-tailed)	Effect size	level
Summary writing	Pretest	1.65	1.035	-10.024-	24	.000	2.00	large
	Posttest	3.93	1.352					
Grammar and spelling	Pretest	1.69	1.3	-15.500-	24	.000	3.2	large
	Posttest	4.00	1.119					
Rewriting the sentences	Pretest	3.32	1.375	-5.598-	24	.000	1.12	large
	Posttest	4.84	.473					
Sequencing the sentences	Pretest	.80	.956	-3.588-	24	.001	0.71	large
	Posttest	1.75	1.331					
Identifying correct sentences	Pretest	1.17	.899	-11.338-	24	.000	2.28	large
	Posttest	4.48	1.193					
Matching phrasal verbs	Pretest	1.85	1.179	-8.088-	24	.000	1.62	large
	Posttest	4.43	.821					
Total	Pretest	10.45	2.646	-16.782-	24	.000	3.36	large
	Posttest	23.44	3.177					

There is a considerable difference between the pretest and post-test means., as shown in Table 3. The confidence interval (95%), as well as the level of significance (=, 0.05), back up the post-test with a substantial impact size.

4.3 Findings from Study Question 3. What Are Students' Understandings in Improving Writing Skills Through Quillbot?

The study conducted interviews with students to record their experiences using QuillBot to enhance their writing and paraphrasing skills. The data was analyzed to identify major themes and key factors contributing to their experiences. Key topics included summary, grammar, spelling, sentence rewriting, sequencing, correct sentence identification, and phrasal verb matching.

4.3.1 Experiences

- (S1) "Summarizer in QuillBot helps write summary of the text."
(S5) "QuillBot helps me learn grammatical structures."
(S6) "My spelling was improved through the QuillBot."
(S8) "I learnt the spelling of difficult words through QuillBot."
(S7) "QuillBot helps in rephrasing and rewriting the sentences."
(S9) "QuillBot makes it easy to paraphrase and produce three different texts."
(S13) "QuillBot helped me sequence the sentences correctly."
(S14) "AI tool helped the SVO pattern that helped in putting the subject, verb and object at correct place."
(S15) "QuillBot is very rich in providing automated vocabulary that helps learn new words and expressions."

4.3.2 Observations

- (S7) "The AI tool is very interesting."
(S8) "I think QuillBot helps learn phrasal verbs which is very difficult."
(S2) "I think QuillBot is a good learning tool in paraphrasing and writing".
(S9) "I believe QuillBot can solve many writing issues".
(S12) "I believe QuillBot can be fruitful if used regularly."
(S15) "QuillBot is good to build confidence and face writing issues."

5. Discussion

1. What writing problems do EFL students encounter?

The study demonstrates the worth of QuillBot's initiatives for boosting student performance in the AI-mediated writing classroom. In this study, a t-test (paired sample) was used. This indicates that the mean writing performance before and after the exam differs in a statistically significant way ($t=16.782$; $p<0.05$). The QuillBot AI technology has resulted in a notable improvement in the student's performance. This study reveals that the Quillbot instructional program greatly improved students' paraphrasing and writing skills in Technical Writing.

QuillBot is a highly effective tool for students to learn complex grammatical structures and paraphrasing. It helps students rewrite and sequence sentences, identify correct sentences, and predict synonyms. The tool's success can be attributed to students' interest and motivation, making it easier to understand difficult topics. The training workshop provided on QuillBot significantly improved students' command on synonyms.

The findings are consistent with another study by Fitria (2022), which states that Quillbot is a time-saving tool that can help improve text clarity and locate relevant synonyms. It simplifies things for students. The findings also back with Miranda's (2021) findings, which claim that by using the paraphrase tool, students can improve their grasp of the context of a text, learn new terminology, and improve the overall quality of their writing.

According to the study samples, students improved sentence structure by using the AI technology. Similarly, the findings are similar with another study by Sulistyaningrum (2021), which found that online paraphrasing tools helped students overcome academic writing obstacles in terms of content, structure, language use, and paraphrasing style. Furthermore, the paraphrasing capabilities aided in rebuilding the sentence structure of the source material. As evidenced by the test samples, students were able to make better word and vocabulary choices.

The results correspond with another investigation conducted by Kurniati (2022), who believed that using Quillbot improved their academic writing in general. A study by Xuyen (2023) found similar results, claiming that Quillbot paraphraser changes the original wording, making it simple for authors to amend and modify the source content. The results of the study align with those of another study conducted in 2023 by Aqilah & Zalfa, which asserts that many EFL students circumvent paraphrasing challenges by using the online tool Quillbot, which allows them to combine sentences, find synonyms, make better word choices, and modify sentence structures.

On the other hand, the study's results are at contradiction with a study conducted in 2015 by Huang et. al who found that inadequate texts were written by undergraduates and postgraduates alike. Due to insufficient experience and practice, the inability to apply the knowledge of online paraphrase tools to written communication and the absence of formal education were the main causes of this. Applying the AI tool to advanced learners could produce different outcomes.

2. Is there a significant difference in student writing after using the AI tool?

The high level in every category indicated by the results indicates that the students have made progress in every one of them. QuillBot's high popularity among students could be one of the causes for these results. Instead of a traditional classroom, students prefer learning through technology. The fact that almost all students own smartphones or tablets is another factor. This facilitates their usage of paraphrase tools and improves their attitude toward the skill.

The current study's findings partially corroborate those of Zimmerman & Labuhn (2012), who claimed that online learning environments could facilitate students' study habits, motivate them to write more actively, feel good about themselves, and persist in their practice with confidence, motivation, and perseverance. The results support Fitriya's (2021) assertion that paraphrasing can be used to maintain coherence and cohesiveness in the work's flow while making concepts easier to understand.

Similar conclusions are presented by Kurniati and Fithriani (2022), who claim that using QuillBot can enhance students' writing. The study's findings support a different study by Burkhard (2022), which claims that students' assessments of the overall efficacy of writing tools are positive.

The results of the study are in contrast to those of another study conducted by Rogerson and McCarthy (2017), who caution against the dangers of these digital writing tools and the potential misuse that might result in, among other things, the emergence of new forms of plagiarism. This discrepancy may be explained by the fact that using technology improperly might have negative effects.

3. What are students' understandings in improving writing skills through Quillbot?

The interview's findings show that after using QuillBot, the AI tool, for three months, students understood it better. The outcomes could be attributed to the positive experiences students had with the instrument. QuillBot benefited students with their paraphrasing while the tool helped them deal with the challenging topics of technical writing. They learned a lot of skills during the paraphrasing process, including sentence structure and sequencing. They were more adept at expanding their vocabulary, which aided in their acquisition of phrasal verbs.

The findings may be explained by the fact that QuillBot is a well-liked tool among students, who enjoy using technology. The findings of this study are in line with another study by Burkhard (2022), which found that students were more likely to use writing tools driven by AI since they solely mentioned the advantages of these tools rather than bringing up any moral dilemmas or negative aspects.

The results of the study are consistent with a different study conducted by Zefran (2015), who asserts that internal variables such as attitude, anxiety, and self-confidence have a unique impact on each student's effectiveness in learning academic writing. The study's results go counter to those of Ozer and Badem (2022), who contend that the negative aspects of online learning seem to outweigh its benefits for learners.

6. Conclusion

The study aimed to improve EFL students' writing and paraphrasing skills, with a specific focus on summary, grammar and spelling, rewriting the sentences, sequencing the sentences, identifying correct sentences, and matching phrasal verbs. The samples of the test reaffirm that students improved significantly especially in these areas: summary, grammar and spelling, rewriting the sentences, sequencing the sentences, identifying correct sentences, and matching phrasal verbs.

The results of the interview display that EFL students had very enriching experience with the QuillBot. Their observations about the tool reflected in the result after they attended an instructional program on the same. The quantitative and qualitative findings correlate to each other. Students' experiences and observations with the tool demonstrated the positive aspects of the tool. The study has implications for the writing teachers and students who struggle to develop the difficult concepts in a writing classroom. The study might prove a big support for the teachers who could not develop writing skills of students despite their serious in a traditional writing classroom.

The study is restricted to PY, Najran University students. If the study were conducted in a different setting or with a different population size, the findings might be expressed differently. The researchers advise that QuillBot be actively used, particularly in technical writing classes, as it aids in mastering the challenging and essential concepts of technical writing, such as summaries, grammar and spelling, sentence restructuring, sentence sequencing, correct sentence identification, and matching phrasal verbs. It is also recommended that in order to use the AI tool to obtain desired results, teachers and students need receive proper training.

Acknowledgment

The authors are thankful to the Deanship of Scientific Research at Najran University for their support.

Funding: This research was funded by the Deanship of Scientific Research at Najran University under the Research Groups Funding program grant code NU/RCP/SEHRC/12/11.

Authors contributions

Not Applicable

Ethics approval

The study sought ethical approval and Najran University's ethics committee approved with reference number 011080-024179-DS. The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE)

Provenance and peer review

Not commissioned; externally double-blind peer reviewed.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author.

Data sharing statement

No additional data are available.

Open access

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

References

- Abdulkareem, M. (2013). An investigation study of academic writing problems faced by Arab postgraduate Students at Universiti Teknologi Malaysia (UTM). *Theory and Practice in Language Studies*, 3(9), 1552-1557. <https://doi:10.4304/tpls.3.9.1552-1557>
- Al Hassan, O. A. Y., & Ahmed, M. A. (2019). Investigating students' performance of paraphrasing techniques at governmental and private Sudanese Universities. *SUST Journal of Linguistic and Literary Studies*, 20(2), 63-74.
- Ansorge, L., Ansorgeov á K., & Sixsmith, M. (2021). Plagiarism through paraphrasing tools—the story of one plagiarized text. *Publications*, 9(4), 48. <https://doi.org/10.3390/publications9040048>
- Aqilah, K. Z. N. (2023). *Online paraphrasing tools in EFL academic writing: problems, affordances, and students' feelings* [thesis]. Satya Wacana Christian University. Retrieved from https://repository.uksw.edu/bitstream/123456789/30095/2/T1_112019014_isi.pdf
- Beatty, K. (2013). *Teaching & researching: Computer-assisted language learning*. Routledge. <https://doi.org/10.4324/9781315833774>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>
- Burkhard, M. (2022). Student Perceptions of AI-Powered Writing Tools: Towards Individualized Teaching Strategies. *International Association for Development of the Information Society*. Proceedings of the 19th International Conference on Cognition and Exploratory Learning in the Digital Age (CELDA 2022), 72-81. https://doi.org/10.33965/celda2022_2022071010
- Cahyono, B. Y., & Rahayu, T. (2020). EFL students' motivation in writing, writing proficiency, and gender. *TEFLIN Journal - A Publication on the Teaching and Learning of English*, 31(2), 162-176. <https://doi.org/10.15639/teflinjournal.v31i2/162-180>
- Chapelle, C. A. (2005). Computer-assisted language learning. In *Handbook of research in second language teaching and learning* (pp. 743-755). Routledge.
- Chen, M. H., Huang, S. T., Chang, J. S., & Liou, H. C. (2015). Developing a corpus-based paraphrase tool to improve EFL learners' writing skills. *Computer Assisted Language Learning*, 28(1), 22-40. <https://doi.org/10.1080/09588221.2013.783873>
- Chiu, T. K. F., Moorhouse, B. L., Chai, C. S., & Ismailov, M. (2023). Teacher support and student motivation to learn with artificial intelligence (AI) based chatbot. *Interactive Learning Environments*, 31(1), 1-15. <https://doi.org/10.1080/10494820.2023.2172044>
- Chui, H. C. (2022). The Quillbot Grammar Checker: Friend or Foe of ESL Student Writers? *Journal of Creative Practices in Language Learning and Teaching*, 10(1), 10-31. Retrieved from <https://cplt.uitm.edu.my/v1/index.php/journal-volume/volume-10-2022/vol-10-no-1-may-2022>
- Creswell, J. W., & Guetterman, T. C. (2019). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. New York: Pearson Education, Inc.
- Dar, M. F., & Khan, I. (2015). Writing anxiety among public and private sectors Pakistani undergraduate university students. *Pakistan Journal of Gender Studies*, 10(1), 121-136. <https://doi.org/10.46568/pjgs.v10i1.232>
- Fareed, M., Ashraf, A., & Bilal, M. (2016). ESL learners' writing skills: Problems, factors and suggestions. *Journal of education and social sciences*, 4(2), 81-92. <https://doi.org/10.20547/jess0421604201>
- 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), 183-196. <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), 252-262. <https://doi.org/10.31849/elsya.v4i3.9917>
- Ginting, R. S., & Fithriani, R. (2022). Peer and automated writing evaluation (AWE): Indonesian EFL college students' preference for essay evaluation. *Journal on Language and Language Teaching*, 25(2), 461-473. <https://doi.org/10.24071/llt.v25i2.4879>
- Graham, S., & Perin, D. (2007). Writing next-effective strategies to improve writing of adolescents in middle and high schools. <https://education.illinoisstate.edu/downloads/casei/5-15-WritingNext.pdf>
- Gupta, D., & Woldemariam, G. S. (2011). The influence of motivation and attitude on writing strategy use of undergraduate EFL students: Quantitative and qualitative perspectives. *Asian EFL Journal Quarterly*, 13(2), 34-89. Retrieved from

https://asian-efl-journal.com/PDF/June_2011.pdf#page=34

- Hieu, B. V., Huy, H. M., & Hang, C. T. (2022). Employing the Quillbot application in order to sharpen paraphrasing skills in writing academic essays for english-majored students at the school of foreign languages. *TNU Journal of Science and Technology*, 227 (13), 116-124. <https://doi.org/10.34238/tnu-jst.6717>
- Hyland, K. (2019). *Second language writing*. Cambridge university press. <https://doi.org/10.1017/9781108635547>
- Junaidi, M., Hisbullah, M., Burhanudin, M. I., Hovia, B. S., & Azizurrohman, A. (2022). Learners' engagement and perception on corrective feedback of online tools towards students' essay writing in efl context. *Humanities: Journal of Language and Literature*, 9 (1), 175-189. <https://doi.org/10.30812/humanitatis.v9i1.2401>
- Khabib, S. (2022). Introducing artificial intelligence (AI)-based digital writing assistants for teachers in writing scientific articles. *Teaching English as a Foreign Language Journal*, 1(2), 114-124. <https://doi.org/10.12928/tefl.v1i2.249>
- 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), 437-451. <https://doi.org/10.21462/jeltl.v7i3.852>
- Mahboob, A. (2014). *Epilogue: Understanding language variation: Implications for eil pedagogy*. Springer, Switzerland.
- Mahboob, A. (2014). Epilogue: Understanding language variation: Implications for EIL pedagogy. *The pedagogy of English as an international language: Perspectives from scholars, teachers, and students*, 1, 257-265. https://doi.org/10.1007/978-3-319-06127-6_1
- Miranda, D. (2021). *The Impact of Paraphrasing Tools on Students Paraphrasing Skills* (thesis). Universitas Islam Negeri Ar-Raniry Banda Aceh).
- Mousavi, S. S., & Nemati, A. (2017). The comparative study of the Iranian EFL learners vocabulary learning through two different formats: Paper & pencil vs. software. *Journal of Studies in Learning and Teaching English*, 6(1), 113-131.
- Na, C. D., & Mai, N. X. (2017). Paraphrasing in academic writing: a case study of Vietnamese learners of English. *Language Education in Asia*, 8(1), 9-25. https://doi.org/10.5746/LEiA/17/V8/I1/A02/Na_Mai
- Nurul, A. I., & Siti, S. D. (2021). Employing Online Paraphrasing Tools to Overcome Students' Difficulties in Paraphrasing. *STAIRS: English Language Education Journal*, 2(1), 52-59. <https://doi.org/10.21009/stairs.2.1.7>
- O'Reilly, K. (2012). *Strategic reading level 1: Teacher's manual*. Cambridge, UK: Cambridge University Press. <https://doi.org/10.1017/CBO9781139178273>
- Ozer, O., & Badem, N. (2022). Student Motivation and Academic Achievement in Online EFL Classes at the Tertiary Level. *LEARN Journal: Language Education and Acquisition Research Network*, 15(1), 361-382. <https://so04.tci-thaijo.org/index.php/LEARN/article/view/256727>
- Rahman, T. (2002). *Language, ideology and power* (Vol. 1). Oxford University Press, United Kingdom.
- Rakhmanina, L., & Serasi, R. (2022). Utilizing Quillbot paraphraser to minimize plagiarism in students' scientific writing. *Novateur Publication*, 26-33. Retrieved from <http://novateurpublication.org/index.php/np/article/view/5>
- Rogerson, A. M., & McCarthy, G. (2017). Using Internet based paraphrasing tools: Original work, patch writing or facilitated plagiarism? *International Journal for Educational Integrity*, 13(1), 2. <https://doi.org/10.1007/s40979-016-0013-y>
- Shi, L. (2012). Rewriting and paraphrasing source texts in second language writing. *Journal of Second Language Writing*, 21(2), 134-148. <https://doi.org/10.1016/j.jslw.2012.03.003>
- Soles, D. (2003). *The essentials of academic writing*. Boston, MA: Houghton Mifflin Company.
- Sperling, D. (1997). *The Internet guide for English language teachers*. Upper Saddle River, New Jersey: Prentice Hall Regents.
- Sulistyaningrum, S. D. (2021). Utilizing online paraphrasing tools to overcome students' paraphrasing difficulties in literature reviews. *Journal of English Language Studies*, 6(2), 52-59. <https://doi.org/10.30870/jels.v6i2.11582>
- Wilhoit, S. (2003). *A brief guide to writing from readings*. White Plains, NY: Pearson/Longman.
- Yashima, T., Noels, K. A., Shizuka, T., Takeuchi, O., Yamane, S., & Yoshizawa, K. (2009). The interplay of classroom anxiety, intrinsic motivation and gender in the Japanese EFL context. *Kansai University Journal of Foreign Language Education and Research*, 17, 41-64. Retrieved from <https://rb.gy/zn0hvh>
- Zefran, M. (2015). Students' Attitudes towards their EFL Lessons and Teachers: Their Retrospective Study/Staliska studentov do tujejezikovnega pouka in uciteljev: retrospektivna studija. *Revija za Elementarno Izobrazevanje*, 8(1/2), 167. Retrieved from <http://www.dlib.si/details/URN:NBN:SI:DOC-Y74SHWOW>
- Zimmerman, B. J., & Labuhn, A. S. (2012). Self-regulation of learning: Process approaches to personal development. In K. R. Harris, S. Graham, T. Urdan, C. B. McCormick, G. M. Sinatra, & J. Sweller (Eds.), *APA educational psychology handbook, Vol. 1. Theories, constructs, and critical issues* (pp. 399-425). American Psychological Association. <https://doi.org/10.1037/13273-014>