

Improving Students' Translation Skills through Quillbot: A Classroom Action Research Study

Teguh Satria Amin¹, Yulia Sari Harahap², Nila Lestasi³, Nurlaili⁴, Ade Miftahul Jannah⁵, Putra Fahlevi⁶

^{1,2,3,4,5,6}Universitas Muslim Nusantara Al-Washliyah, Medan, Indonesia

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ABSTRACT

Translation is an essential skill that students in the English Language Education Study Program must master. However, many students still face difficulties in identifying effective media to support translation learning. Therefore, this study aims to investigate improvements in students' English translation skills through the use of the Quillbot application. This research employed a quantitative approach using a Classroom Action Research (CAR) design, which consisted of four stages: planning, implementation, observation, and reflection. The participants of this study were fourth-semester students of the English Language Education Study Program at Universitas Muslim Nusantara Al Washliyah, with one class selected as the sample. There were 10 students. Data were collected through translation tests, observation, and documentation, and analyzed using comparative descriptive analysis by comparing students' scores before and after the implementation across two cycles. It can be seen in the increase in the value of cycles I and II that have been carried out. The initial value was only 6 students (60%), then there was a change after the action was taken in cycle I, which was 8 students (80%), and it increased even more after being given action in cycle II, which was 9 students (90%). The findings revealed a significant improvement in students' translation.

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Corresponding Author:

Teguh Satria Amin

Faculty of Teacher Training and Education, English Education Study Program, Universitas Muslim Nusantara Al-Washliyah, Medan, Indonesia

Email: teguhsatriaamin@umnaw.ac.id

1. INTRODUCTION

Communication plays a fundamental role in human life, enabling individuals from diverse linguistic, cultural, and geographical backgrounds to exchange ideas, knowledge, and information. In the globalized era, communication is essential in various domains such as education, politics, economics, and tourism. However, linguistic diversity often creates

barriers to effective communication. Although English is widely recognized as a global lingua franca, not all individuals possess adequate proficiency in English. Therefore, translation becomes a crucial medium to bridge communication gaps among multilingual communities [1].

Ability is an individual's capacity to perform various tasks in a job [2]. Ability is a current assessment of what a person can do. The ability to convey ideas or intentions to be conveyed in communication is an ability that a person must have. In English communication, everyone has different abilities. However, ability can be improved through training or a process. To translate, you need to know both languages very well [3]. Translation is not only a useful way to talk to people, but it is also an important skill for students in English Language Education programs. Translation competence encompasses linguistic proficiency, cultural awareness, and the capacity to accurately convey meaning from a source language to a target language [4]. When you translate, you do not just change words; you also think about the culture and the situation at hand. In translation studies, the examination of translation strategies employed by students has garnered considerable interest, particularly within the educational context. Researchers have examined diverse elements, including cognitive processes, decision-making frameworks, and the influence of linguistic and cultural factors on translation quality [5]. This field recognizes that translation is more than just moving words from one language to another; it is also a complex mental process that requires problem-solving and strategic decision-making [6]. So, translation ability is the ability to translate both spoken and written versions of two languages. However, in reality, many students have a hard time learning how to translate. These problems include limited vocabulary, poor grammar, and difficulty understanding word meaning in context, which all affect the quality and accuracy of their translations [7].

Recent technological advancements, especially in artificial intelligence (AI), have led to new ways to help people learn languages and translate. In schools, machine translation tools and AI-powered writing assistants are becoming increasingly popular. QuillBot is an AI-based app that helps people paraphrase, check their grammar, and translate. Some studies have shown that QuillBot can alleviate writing anxiety and improve rewriting and grammar skills [8], [9], [10]. QuillBot supports multiple languages and provides feedback that can help users write and translate better [11]. QuillBot is an AI-powered writing tool that helps students write better and faster, especially when it comes to translating languages and supporting multiple languages. QuillBot has language translation and multilingual support for people who do not speak English as their first language and for people who need to write in more than one language.

Numerous prior studies have emphasized the advantages of QuillBot in language acquisition. For example, Fitria discovered that QuillBot greatly enhances students' abilities to paraphrase and the quality of their writing [11]. Similarly, reported that the use of QuillBot positively influences students' motivation and engagement in writing activities [12]. The online artificial intelligence tool, QuillBot, has the potential to help and motivate students to improve their paraphrasing skills. Easy access to software and internet applications. This makes writing classes more fun, interesting, interactive, productive, and lively for students [13]. Quillbot, as a digital tool powered by artificial intelligence (AI), can reduce the

challenges of academic writing. Postgraduate students in this study responded positively to Quillbot, which helped them improve their writing quality. Three benefits of Quillbot are 1) to improve students' positive attitudes towards writing, 2) to provide various user-friendly writing features, and 3) to help students' language development. This study implies that AI-powered technology such as Quillbot in writing, especially in academic writing, has a significant role in creating high-quality writing for students [14]. In addition, revealed that AI-based tools like QuillBot help reduce grammatical errors and enhance academic writing efficiency [15].

Furthermore, indicated that students perceive QuillBot as a user-friendly tool that supports language development and improves writing outcomes [16]. QuillBot is one of the paraphrasing and summarizing tools that students can use to rewrite content based on a state-of-the-art AI system. This tool can be a student alternative, providing a solution by helping with paraphrasing when students do not have the idea to paraphrase English writing manually. As one of the modern-era technologies, Quillbot is used by many students in learning. It is an online application that is useful for students to improve their writing, such as finding their writing mistakes. Based on the study, students have many positive perceptions about Quillbot to improve their writing. It helps students in writing and is expected to be applied in writing learning activities so that they can get better results [17]. The Quillbot application is useful for testing students' grammar. So it is very useful for improving students' grammar skills. Students can easily and practically check their grammar by using the Quillbot application so that their writing will be free from grammatical errors [18]. Quillbot uses sophisticated algorithms to understand the context of sentences and produce appropriate translations [19].

Nonetheless, despite the increasing volume of research on QuillBot, most prior studies have focused on its effects on writing proficiency, paraphrasing skills, and grammatical enhancement. There is still not enough research on how well QuillBot helps students improve their translation skills, especially in higher education settings. This shows that there is a research gap that needs to be filled.

Consequently, this study seeks to investigate the efficacy of QuillBot in enhancing students' translation skills within a Translation course. This study suggests incorporating QuillBot as an educational resource to help students address vocabulary deficiencies, enhance grammatical precision, and improve translation effectiveness. The study is anticipated to yield a pragmatic solution by incorporating AI-based technology into translation learning.

The goals of this study are:

1. To evaluate students' translation proficiency prior to and after utilizing QuillBot.
2. To examine how well QuillBot helps students improve their translation skills.
3. To investigate students' perceptions regarding the utilization of QuillBot in translation education.

This study is theoretically based on translation theory and technology-enhanced language learning (TELL). Translation competence theory underscores the amalgamation of linguistic, cognitive, and technological skills, whereas TELL accentuates the significance of digital tools in enhancing language acquisition and learning efficiency [20].

This research is anticipated to provide contributions both theoretically and practically. In theory, it adds to the body of work on using AI tools in translation learning. In practice, it gives teachers ideas for using new digital tools like QuillBot in their lessons to help students improve their translation skills. It is also expected to encourage students to participate more in translation activities and improve their language skills overall.

So, this study seeks to address the existing gap by investigating the role of QuillBot in improving translation skills, offering both academic contributions and practical implications for language education in the digital era.

2. METHOD

This research was classroom action research conducted by the researcher in the classroom. Classroom Action Research (CAR) is a systematic inquiry to inform practice in a particular situation [21]. So, classroom action research is an observation of student learning activities in the classroom, in the form of an action that is deliberately presented and occurs together in class. The action is given by the lecturer or, with the lecturer's direction, carried out by the students [22]. Classroom action research is one of the critical methods for developing teaching and teacher professional development [23], [24], [25]. Classroom action research has several stages that must be carried out, starting from planning, implementation, to reflection and recommendations. The stages in implementing this classroom action research are as follows:

a. Action Planning.

Action planning in this study is carried out using the stages in the learning steps that the researcher uses. Changes in learning planning from cycle to cycle depend on the results of reflection in the previous cycle. The reference for increasing learning in the first cycle is the previous translation test score, and the increase in value in the next cycle is based on the test results in the previous cycle.

b. Implementation of Action

The implementation of the action is carried out based on what has been planned in each cycle. The implementation of this action is the implementation of learning that is assessed by the lecturer using an assessment instrument for the implementation of learning that already has success criteria for a learning process. The implementation of this learning is adjusted to the results of reflection and recommendations from the previous cycle.

c. Observation and Evaluation

Observation of student and researcher activities was carried out during the learning process by two coordinating lecturers as observers. Lecturer observations relate to students' responses to teachers during the learning process and the activities students do during the learning process. The results of the observations are then analyzed and reflected on to identify shortcomings in the learning activities that are recommended for improvement in the next cycle, to improve student learning outcomes in the next cycle.

d. Recommendations and Reflections

At the end of each cycle, the lecturer gives a test that will measure the level of learning success through the understanding obtained by students. The results of the learning

planning assessment, the results of the learning implementation assessment, and the student learning outcomes are used as a reference by researchers to make recommendations and reflections on learning planning in the next cycle.

The subjects of this study were 4th semester students of the English Language Education Study Program for the 2024/2025 Academic Year. They were 10 students. Data were obtained from the average translation test assessment instrument. After the research data was obtained, data analysis was carried out.

The instruments used in this study included:

1. Translation Tests (Pre-test, Cycle I test, Cycle II test).
2. Observation Sheets (for student and lecturer activities).
3. Field Notes.
4. Scoring Rubric for Translation.

The translation tests were based on what students were supposed to learn in the course and included texts they had to translate. The tests in each cycle were made to be equally hard.

The following criteria were used to judge student translations:

1. Correctness (how well it stays true to the meaning of the source text)
2. Grammar (using language structure correctly)
3. Vocabulary (the right words to use)
4. Coherence (how clear and easy to read the translation is)

The highest possible score was 20, and each part was given a score from 1 to 5. This was then changed to a scale from 0 to 100. Inter-rater scoring was used to make sure the results were accurate. The researcher and another lecturer looked over the translations. The final score was calculated as the average of both raters. Additionally, an expert in translation studies validated the test instruments to ensure content validity.

The study was considered successful if:

1. The minimum passing score (KKM) of 75 was achieved by at least 75% of the students, and
2. There was a significant improvement in the mean score from the pre-test to Cycle II, and
3. Observation results showed increased student participation and engagement.

3. RESULTS AND DISCUSSION

3.1 Result

3.1.1. Pre-test Value

Before conducting the assessment in two cycles, the initial value needs to be described to determine students' ability to translate English in this study. The initial value owned by students was low, with an average of 62%, which was taken directly without any action in class.

Table 1. English Value before Action

Number of students	Highest value	Lowest value	Average value	Percentage of completion
10	75	50	61.9%	60%

From Table 1, it was known that 6 people have completed English and 4 people have not completed or have low scores. From the explanation, the completion value is still in the low category, and class action is needed to improve students' translation skills through the Quillbot Application for English Language Education Study Program students.

3.1.2. Cycle I Value

After providing cycle I action in this research class through the Quillbot Application for English Language Education Study Program Students, there was an increase in translation skills as seen in the following table:

Table 2. English Score in Cycle I Action

Number of students	Highest value	Lowest value	Average value	Percentage of completion
10	80	58	69,9%	80%

From Table 2, it was concluded that students' English completion increased by 8 people, and 2 people were still incomplete or categorized as low scores. From the calculation results above, it can be said that there was a change in the progress of the translation skills of English Language Education Students.

3.1.3. Cycle II Value

In the action class in Cycle II, there was a further increase. Students' translation skills improved by giving back the translation task using the application. The percentage change value can be seen in the table below:

Table 3. English value in Cycle II action

Number of students	Highest value	Lowest value	Average value	Percentage of completion
10	89	65	78.5%	90%

From Table 3, it was clear that there was an increase in the ability to translate using the Quillbot Application in the English Language Education Study Program Students.

From the description above that has been analyzed, starting from the initial value to cycle II, an increase in the ability to translate using the Quillbot Application could be seen in the following diagram:

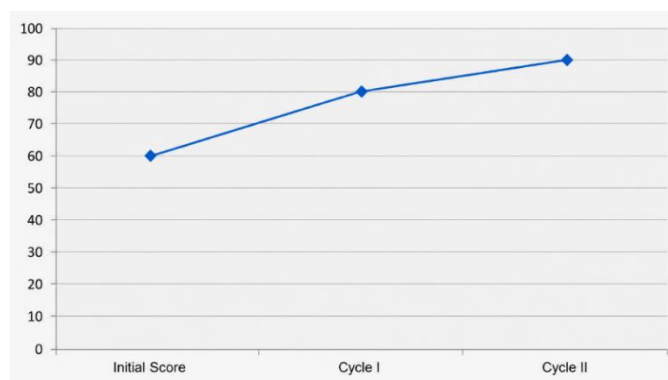


Figure 1. Improvement in Learning Outcomes Across Cycles

From Figure 1, it can be seen that the increase was very good, from the initial value of 60%. After the action was carried out in cycle I, it increased to 80%; then it was carried out again in cycle II by providing the same method as in cycle I, and there was an increase in the ability to translate to 90%. So it is clear that using the QuillBot application can improve students' translation abilities.

3.2. Discussion

This study's results show that using AI-powered translation tools, especially QuillBot, greatly improves the translation skills of students in the English Language Education Study Program at Al Washliyah Muslim Nusantara University. The students' achievement scores have steadily gone up, from 60% in the first stage to 80% in Cycle I and then to 90% in Cycle II. This shows that things are getting better. These results show that using artificial intelligence in language learning not only helps students do better, but it also makes them more motivated and interested in practicing translation.

This finding aligns with recent research in Computer-Assisted Language Learning, which highlights that AI-driven tools can enhance language acquisition by offering prompt feedback, contextualized recommendations, and intuitive interfaces. Prior research (e.g., studies published from 2020 to 2025) has demonstrated that AI-driven writing and translation applications enhance linguistic precision, vocabulary expansion, and learner autonomy. AI tools help students find grammar mistakes, improve sentence structure, and better understand word meanings in context than traditional methods.

Additionally, the enhancement of student motivation noted in this study corroborates previous research indicating that digital tools foster a more interactive and engaging learning environment. Students can try out different translation options with QuillBot, which helps them think critically and learn more about language. This aligns with research showing that technology-based learning environments can help students feel more confident and less anxious about writing and translating.

The results indicate that QuillBot facilitated (1) the alleviation of vocabulary-related challenges, (2) the enhancement of grammatical precision, and (3) the augmentation of students' motivation to participate in translation practice. Among these, motivation seems to be a major factor in the results, since more motivated students tended to practice more often and perform better.

The results also show that QuillBot helps students improve their language skills by giving them tools like paraphrasing, grammar checking, and vocabulary building. These features align with the ideas behind AI-supported learning, where students actively build knowledge by exploring and getting feedback. Similar results have been found in recent studies, which suggest that AI applications could serve as scaffolding tools to help learners acquire both micro-skills (e.g., grammar and vocabulary) and macro-skills (e.g., coherence and cohesion in writing).

Also, the cyclical improvement observed in this study is a sign of the effectiveness of integrating AI tools into an iterative learning process. The improvement from Cycle I to Cycle II implies that continuous exposure to AI-assisted translation practice leads to

improvement. Past research has also found that repeated use of digital tools helps improve knowledge retention and skill development.

Despite these positive findings, several limitations should be acknowledged. First, the study was limited to one class and a small sample size, which limits the generalizability of the results. Second, the intervention was conducted in a short period of time, making it difficult to determine long-term effects. Third, the lack of a control group means that the improvements cannot be attributed to the use of QuillBot alone, without taking into account other possible factors. There is also the possibility of lecturer bias in marking, as the same lecturer was responsible for implementing the intervention and assessing student performance.

However, even though the results are promising, it is important to remember that AI tools like QuillBot should be used to help people learn, not to replace teachers. Prior research has warned that excessive dependence on machine translation could hinder students' critical thinking if not appropriately directed. So, the lecturer's role is still very important in helping, keeping an eye on, and putting these kinds of technologies in the right context in the classroom.

This study indicates that AI tools such as QuillBot can be successfully incorporated into translation education. Lecturers are encouraged to use these tools as extra learning aids instead of replacing regular teaching. QuillBot can be used, for instance, to help with writing, editing, and learning new words. Nevertheless, it is also important to teach students how to use AI critically so they understand how the translation process works, rather than just relying on automated results.

This study backs up other research by showing that AI-powered tools like QuillBot are very helpful for students' translation skills, motivation, and overall language development. The big jump in students' scores over time is proof that using AI in language learning can lead to better and more meaningful learning outcomes. So, it is highly recommended to use AI-based apps in translation teaching, especially in higher education settings where students are expected to write well.

4. Conclusion

This study emphasizes that the incorporation of artificial intelligence (AI)-driven tools, especially QuillBot, significantly contributes to the enhancement of students' translation competence. QuillBot is more than just a translation tool; it also makes the learning environment more interactive and focused on practice. This lets students actively engage with language, learn about contextual meanings, and gain more confidence in translating texts. The results show that using technology to support learning can make traditional translation methods more engaging and effective.

This study adds to the field of English Language Teaching by showing how important it is to use AI-powered apps in translation lessons. For teachers, using digital tools like QuillBot can be a new way to teach that boosts students' motivation, independence, and language skills. This study supports the use of technology-enhanced learning methods in higher education, especially in language-related programs, to improve teaching and learning.

Nonetheless, this study possesses multiple limitations. The study was conducted in a specific context, specifically among students enrolled in the English Language Education Study Program at Universitas Muslim Nusantara Al-Washliyah, which may restrict the applicability of the findings to other educational environments. Moreover, the emphasis on a singular application indicates that the findings do not reflect the efficacy of alternative AI-driven translation tools. The research's duration, confined to a few instructional cycles, may not comprehensively reflect long-term learning outcomes.

For future research, it is advisable to investigate the application of diverse AI-driven translation and writing tools across various educational contexts and levels to yield comprehensive insights. Subsequent research may examine the enduring effects of AI integration on students' translation precision, analytical reasoning, and autonomous learning capabilities. Furthermore, comparative analyses between AI-assisted learning and conventional translation methods would be instrumental in assessing the relative efficacy of each approach. Including qualitative perspectives in the research, such as students' perceptions and challenges, would also enrich the understanding of AI use in language learning.

Finally, this study contributes to the wider community by demonstrating how digital technology can be effectively utilized to support language learning in the modern era. It provides evidence that AI-based applications like QuillBot can serve as accessible tools for improving translation skills, not only for students but also for educators and independent learners. As technology continues to evolve, the integration of AI in education is expected to become increasingly essential in preparing learners to meet the demands of global communication.

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