The Students' Perception on the Use of QuillBot in Improving Writing

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Abstract

Writing is not an easy task. Students often have difficulties in writing articles or essays. Many students experience difficulties in grammar and in choosing the correct words to express meaning. Today artificial intelligence-based tools are available to be used to help students in writing. One of them is QuillBot. That digital tool is popular among students nowadays. This research investigates EFL students' perception in the use of QuillBot to improve their writing. It adopts a mixed-method research design. The respondents of this study were 30 students of an English Education Study Program at a university in Semarang in the 5th semester and 7th semester. The quantitative data collected by giving questionnaire to the respondents while the qualitative data collected through doing semi-structured interviews with five students. The quantitative data was analyzed quantitatively using SPSS, while the qualitative data was analyzed by qualitative thematic analysis. The results of this research from the quantitative data shows that most of students gave positive responses that QuillBot greatly helps them in improving writing skill. Although, some students also use other AI and not make QuillBot as the first choice when it comes to writing, they still use QuillBot but not frequently. Moreover, the interviews confirm the quantitative data that the digital tool is indeed beneficial to use by students. The benefits of using QuillBot are improve grammar skill, enhance vocabulary, improve organizing text skill, more time efficient and give emotional support such as make them more confident in writing. Those aspects are matter to assist students master writing skill.

Keywords: *artificial intelligence; EFL students; QuillBot; writing skill*

INTRODUCTION

Writing is a skill that is considered quite difficult to master by students, because in writing, there are many things that must be considered, starting from choosing words, using appropriate grammar, composing sentences, and ensuring that the writing is not a product of plagiarism. These aspects make writing is difficult for students, even EFL students often find difficulties to write. Therefore, for most English learners, writing is the last skill to master compared to other skills (Fussalam et al., 2019). To master writing skill, they must practice a lot.

There are many aspects that must be contemplated in writing. Not only the language or how to write but also the contents or what to write (Aizawa et al., 2023). Some problems that may be faced by students in writing are words that can be ambiguous or have similar meanings, so they make students confused about which word is correct to be used in writing. Moreover, the use of punctuation is often underestimated by students. Even though punctuation is strongly important

in influencing the tone of writing and the reader's point of view of a writing (Egamnazarova, 2023).

Developing content is also difficult. Content should not only consist of detail information about the topic but also straight to the point. A discussion that is too broad will be difficult for readers to understand, and a discussion that is too narrow will also make readers confused because of the lack of information about the topic being discussed. Therefore, the writers must be able to determine limitations regarding the content they are presenting in writing (Wang & Zhu, 2020). These language and content problems in writing can be addressed by regular practices.

In this era, there are a lot of artificial-intelligence-based tools that can help students complete their assignments, especially writing. For examples ChatGpt, Perplexity, Grammarly, and QuillBot. These AI really help students in learning. Especially for EFL students, they really need the presence of AI in their English learning to find more accurate answers or create more organized and interactive writing (Zhang et al., 2023). QuillBot is an artificial intelligence (AI) that has many useful features. For some students, it is a common thing. They have been very familiar with it. They use it to help them complete assignments. With the features provided by the AI, assignments are no longer difficult for students. According to Mohammad et al. (2024) this tool has become an artificial intelligence that is popular nowadays. It is easy to use and free, so it is popular among students. The features of this tool are a grammar checker, summarizer, paraphraser, plagiarism checker, and translator. For some other students, QuillBot is a new technology (Kharis et al., 2022). They probably recognized QuillBot when they were in a university because they had not previously received lessons on complex writing. So, when writing something, they may not think much about the proper grammar and the language content. So, they are not used to using this kind of AI.

Raad et al. (2023) suggests that every feature of QuillBot has different functions. The first one is grammar checker. It helps students to identify whether sentences or writing is appropriate or not. A sentence that is messy can become a good and precise sentence with the help of QuillBot (Chui, 2022). The second, summarizer can help students summarize or review a journal. According to Lotfigolian et al. (2023) it will give a bottom to choose the length of the summary, it can be short, medium, or long. So, students do not need to read every page of a journal because QuillBot can help them to summarize the contents of the journal so that it is easier to read and understand. The third, paraphraser feature in QuillBot provided according to students needs, the sentences can be paraphrased into standard sentences, fluency, natural, formal, academic, simple, creative, and can be customized as well (Mohammad et al., 2023). The fourth, plagiarism checker will show whether a writing is plagiarized or not and will show in what percentage the writing is plagiarized along with the source or citation (Dewi et al., 2023). So, this feature is considered quite accurate. Unlike other features which are free, this feature is paid. The last one is translator. According to Raheem et al. (2023) this feature help students to translate from any languages to any languages with maximum 5000 characters in one time translate and can automatically detect the source language or original language, the result shows the translation smoother.

With the features mentioned above, QuillBot can greatly help students improve their reading and writing skills in English. Students can be assisted with translator and paraphraser features to improve vocabulary, and summarizer features to enhance students' reading skills. Then students can also be helped with a grammar checker and plagiarism checker to improve their writing skills. These features provide better sentence choices for students to use as a tool to improve their reading and writing skills (Amyatun & Kholis, 2023). This is what makes this AI exists more than other artificial intelligence. Apart from the many sophisticated features in it, the reason for using this tool is the level of accuracy of QuillBot itself. When using artificial

intelligence, of course, we wonder whether this AI is accurate or not. This tool is quite accurate because the results are great.

Several previous studies have been conducted to analyze the use of QuillBot. The first research conducted by Kurniati and Fithriani (2022) on twenty post-graduate students of magister level majoring in English education at state university in North Sumatra shows that the use of QuillBot could create high-quality writing for students and really helped to improve students' writing skill. Based on the students' perceptions, it has three benefits: enhancing students' positive attitudes towards writing, providing a variety of user-friendly writing features, and aiding students' language development. This AI is an effective digital tool to improve post-graduate students' academic writing skill. The research question of the study was how post-graduate students view QuillBot as a digital tool for English academic writing. The research used qualitative study as a method and used questionnaires and semi-structured interviews as the data collection.

The second research was conducted by Baron et al., (2023). It found that some students are already aware that they may rely on the QuillBot programme to check their work for grammatical errors and to make the process of checking grammar easier and more practical. The research investigated 35 students majoring in the English Department with research questions on how students perceive the use of QuillBot and how to improve students' grammar skills by using the QuillBot application to check their grammar writing. The research used a quantitative method and survey as a research design and the data was collected through a questionnaire.

The third research done by Nurmayanti and Suryadi (2023), shows that QuillBot reuses sections of grammar and other sources to successfully prevent plagiarism and to paraphrase without changing its meaning. The participant of the research was 30 active students at University of Riau. The research question was how to assess students' ability to use QuillBot to write creative and error-free scientific articles in English. The research used the quantitative method, and the data was collected through questionnaire via Google Forms.

The fourth research by Latifah et al. (2024) shows findings that although users like QuillBot's time-saving advantages, there are worries about over-reliance and the possibility that it could prevent the development of creativity. It improves writing quality and productivity by identifying mistakes, condensing sentences, and increasing vocabulary. The research question was how to explore the use of QuillBot in academic writing. There was no participant because this was a systematic literature review that was conducted through reviewing previous research. The research used a systematic literature review as the methodology. The data was collected through evaluation and identification, and several previous studies were interpreted that were relevant to the topic of the research.

Previous research shows that this tool helps students increase their creativity and makes their writing more interesting and interactive. However, in any case, it may make some students rely on it. According to Mohammad et al. (2024) the advantages and disadvantages of using QuillBot depend on the user, whether they use the AI properly or not. The four previous research focus on the use of QuillBot, whether it helps students improve their writing skills or not, and how the students' perception of the use of QuillBot. Apart from that, this research also examines the features of the tool, whereas previous research only examined one feature of it. Previous research focused on improving writing skills in academic writing, whereas this research does not focus on one type of writing but rather on improving students' writing abilities in general.

There are technological developments, especially in the field of artificial intelligence, that can be used in education or learning, especially in English learning. Writing requires a depth of rigor. This makes it easier for students to use existing technology to support their learning (Rafiola

et al., 2020). This study investigates the students' perception of QuillBot as a tool to help them improve their writing skills with the features provided by the artificial intelligence. This research is important to enrich the literature in the use of QuillBot for students' writing ability and knowledge. If Baron et al. (2023) investigated English education department students' perceptions of checking grammar writing, this research is to analyze students' perception of the use of QuillBot in improving writing.

METHOD
Research design
This research adopts a mixed-method research design. The qualitative method is a research method that focuses on describing the data that has been obtained in sentences (Aspers & Corte, 2019). Conversely, quantitative methods utilize numbers and statistics to quantify the data collected (Ahmad et al., 2019). The researcher chose to use a mixed method because this is the most appropriate method for analysing research in accordance with the research objective, which is to describe the students' perception of QuillBot's use in improving their writing skills.

Respondents
Respondents are selected using a purposive sampling method. According to Etikan (2016), this is a method of selecting samples based on certain characteristics of a population that are relevant to the research. The characteristics of respondents are familiar with QuillBot and often use it, not just once or twice but many times. They are students who have taken more complex writing courses, so they need AI assistance to check grammar or plagiarism. Based on these two criteria, 30 students in English education study program at a university in Semarang were selected. However, there are two types of respondents in this research. The first one is respondents who have familiar to QuillBot, and the other one is respondents who have not know or unfamiliar to Quillbot. Researcher will introduce QuillBot to respondents who are unfamiliar to the AI, so they can fit the criteria of the respondents in this research.

The questionnaire was distributed to 30 students at a university in Semarang majoring in English Education study program in the 5th semester and 7th semester. They have participated in this data collection.

Table 1. Respondents by semester

5th Semester	7th Semester
12 (40%)	18 (60%)

Table 2. Respondents by sex

Male	Female
2 (7%)	28 (93%)

The respondents of this research consist of 12 (40%) students from the 5th semester and 18 (60%) students from the 7th semester and consist of 2 (6%) male and 28 (94%) female. The respondents chosen have been comply the criteria of the research.

Instruments
The instruments that used for this research are questionnaires as quantitative research and semi-structured interviews to collect qualitative data. The type of questionnaires used was closed-ended Likert scale questionnaire. There were 15 questions related to the topic, and the answer choices were agree, strongly agree, disagree, and strongly disagree. In creating the questionnaire, the

researcher adopted and modified 10 questions from the questionnaire of Kurniati and Fithriani (2022), and added five questions more. There are several aspects included in it, they are, the use of vocabulary, enhancing grammar, attitude towards writing, user friendly writing features, and students aiding in writing. The questionnaire shared to 30 students. This type of questionnaire is chosen because it is easier to analyze because the respondents' answers are structured, more time-efficient because they only need to choose the answers that have been provided, and it allows for standardization in data collection because respondents get the same questions and the same answer choices (Pozzo & Borgobello, 2019).

However, this instrument also has shortcomings. The shortcomings as do not delve into more detail from the respondents' point of view, lack of freedom to choose answers, and lack of flexibility because respondents cannot give broader or more complex answers (Stausberg, 2021). However, this deficiency can be overcome by conducting semi-structured interviews. In relation to Ruslin et al. (2022) semi-structured interview is an instrument of data collection method that involves interviewing respondents with questions that have been provided, but the questions could build up as the interview was going. Even though the questions and answers in the interview can be broader, there were limitations in the interview, so it consistently stays on the topic. The questions given are five. The interviews were recorded to facilitate transcription and data analysis. The interview was done through interviewing 5 students.

Data analysis

After the data are obtained from the questionnaire and interviews, the data from the questionnaire analyzed quantitatively using SPSS, and the data from the interviews analyzed thematically. Thematic analysis is a systematic method for identifying, organizing, and analyzing data points in a dataset, enabling researchers to observe and understand the points and the collective experiences. Thematic analysis is done through several steps. They are transcribing audio recordings to text, the researcher chooses audio recording over video recording because the data of the interviewee must be anonymous, so it is better to just record the audio of the interview. The next steps are finding theme or coding patterns, evaluate the theme and classify the patterns code according to relevant questions and answers, perfecting the analysis (Braun & Clarke, 2012). Therefore, it is important to identify the correlation between the topics and the questions that is being explored.

Result

Analysis of the quantitative data

The research was aim to find out the students' perception of QuillBot as a tool to help them improve their writing skills with the features provided by the AI. From the results that have been analyzed, it shows that QuillBot is a digital tool that is easily accessible and helps them improve their writing skills. However, there were some students who disagree with the statements in the questionnaire. Some of them were not too familiar with this AI and often use other AI assistance to help them with their writing assignments or to improve their writing skills. For more detail information, pay close attention to the table 3. Students' perception of QuillBot.

Table 3. Students' perception of QuillBot

No.	Statement	Strongly Disagree	Disagree	Agree	Strongly Agree
1	QuillBot is an easily accessible digital tool	6.7%	0%	36.7%	56.7%
2	QuillBot's features greatly assist me in writing	6.7%	0%	53.3%	40%
3	The QuillBot application is effective because it includes several features that can help me improve the quality of my writing	6.7%	0%	53.3%	40%
4	Using the QuillBot application to write academic essays has improved my grammar skills	10%	20%	53.3%	16.7%
5	QuillBot helps me to correct grammar accurately and quickly	6.7%	16.7%	36.7%	40%
6	Unconsciously, my vocabulary particularly the terms used in writing have increased	10%	20%	46.7%	23.3%
7	The QuillBot application encourages me to write and reduces my writing anxiety	6.7%	16.7%	46.7%	30%
8	Using the QuillBot application boosts my confidence towards my writing	6.7%	13.3%	60%	20%
9	I prefer QuillBot over other apps	13.3%	23.3%	40%	23.3%
10	I often use QuillBot in writing	20%	26.7%	36.7%	16.7%
11	By using the QuillBot application, my writing skills in organizing text have improved	6.7%	20%	50%	23.3%
12	I can write efficiently and my writing get better results when I use the QuillBot app	6.7%	13.3%	50%	30%
13	QuillBot makes my writing more attractive and improve my writing quality	6.7%	10%	53.3%	30%
14	QuillBot helps saving time in writing	10%	3.3%	56.7%	30%
15	The results displayed by QuilllBot are accurate	6.7%	26.7%	43.3%	23.3%

Table 2 presents the statement of the questionnaire and responses in the form of percentage. There are 15 statements in the questionnaire that was adopted from Kurniati and Fithriani (2022) to measure students' perception of the use of QuillBot. The result shows various percentage in every statement. It represents that every student has different perceptions on QuillBot. They gave the highest percentage of negative responses to the statement "I often use QuillBot in writing", the percentage reached 46.7% and divided to 20% strongly disagree and 26.7% disagree. That means there are 14 students who rarely use QuillBot to help in writing, while 16 others often use the help of the AI to write. The statement "the result displayed by QuillBot is accurate" also shows a fairly high negative disagree response, reaching 26.7%, or 8 students disagree with the statement. Ten statements display a percentage of negative strongly disagree and disagree responses exceeding 20%, but none of them surpass 50%, indicating that a greater number of students gave positive responses than the negative ones.

In the statement "QuillBot is an easily accessible digital tool, QuillBot's features can greatly assist students in writing, and the QuillBot application is effective because it includes several features that can help students improve the quality of their writing" students gave positive responses agree and strongly agree reaching 93.3%. This is the highest percentage of positive responses compared to other statements. While the least percentage of positive responses is in the statement "I often use QuillBot in writing", the percentage of strongly agree and agree only reached 53.4%.

They gave the highest positive response agree in the statement "Using the QuillBot application boosts my confidence towards my writing", the percentage reach 60%. And the highest percentage of strongly agree responses is in the statement "QuillBot helps saving time in writing", the percentage reached 56.7%. Then the least strongly agree response is in the statement "I often use QuillBot in writing", the percentage only reached 16.7% or only 5 students gave a strongly agree response to this statement. There are 12 statements whose percentage reaches above 70%, and three of them reach up to 93.3%, which means that almost all students agree with the statements in the questionnaire. For more detail explanation about Table 2 are provided below.

The first statement shows that 56.7% students gave positive response, they strongly agree that QuillBot is an easily accessible digital tool. 36.7% students agree with the first statement, and 6.7% students gave negative response strongly disagree. The second statement is QuillBot's features greatly assist me in writing, 53.3% students agree with this statement, 40% strongly agree, and 6.7% of other students strongly disagree with this statement. The third statement give the same percentage as the second statement. 53.3% students agree that the QuillBot application is effective because it includes several features that can help them improve the quality of their writing, 40% students strongly agree with the statement, and 6.7% students strongly disagree with the statement.

For the fourth statement, 53.3% students gave positive response agree to the statement using QuillBot application to write academic essays has improved my grammar skill, the other 16.7% students gave positive response strongly agree to the statement. 20% students gave negative response disagree with the statement, and 10% strongly disagree. The fifth statement is QuillBot helps me to correct grammar accurately and quickly. 40% students strongly agree with the statement and 36.7% agree, then 16.7% students disagree and 6.7% strongly disagree with the statement. The sixth statement is, unconsciously, my vocabulary particularly the terms used in writing have increased. 46.7% gave positive response agree to the statement and 23.3% strongly agree. 20% students disagree to the statement and 10% strongly disagree to the statement.

The seventh statement shows that the QuillBot application encourages them to write and reduces their writing anxiety, 46.7% students agree and 30% students strongly agree with the statement. Although, 16.7% students disagree and 6.7% students strongly disagree with the statement. From the eighth statement, can be seen that 60% students agree that using the QuillBot application boosts their confidence towards their writing, and 20% students strongly agree to the statement. The other students also gave negative response, 13.3% disagree and 6.7% strongly disagree to the statement. Almost of students prefer to use QuillBot over other apps. 40% students agree with the ninth statement, and 23.3% students also gave positive response strongly agree. While 23.3% disagree and 13.3% strongly disagree to the statement.

36.7% students agree with the statement they often use QuillBot in writing, and the 16.7% students also give positive response strongly agree. 26.7% students disagree with the tenth statement and 20% students strongly disagree. The eleventh statement is by using QuillBot application, my writing skills in organizing text have improved. 50% students agree and 23.3% students strongly agree to the statement. 20% students disagree and 6.7% students strongly disagree to the statement. 50% students gave positive response agree to the statement I can write efficiently and my writing get better results when I use the QuillBot app. 30% other students also give positive response strongly agree to the statement. 13.3% disagree and 6.7% strongly disagree to the twelfth statement.

The thirteenth statement is QuillBot makes my writing more attractive and improve my writing quality. 53.3% students agree and 30% strongly agree to the statement. 10% disagree and 6.7% strongly disagree to the statement. 56.7% students agree that QuillBot helps saving time in writing and 30% students strongly agree with the statement. 3.3% students disagree and 10%

students strongly disagree to the fourteenth statement. The last statement is the results displayed by QuillBot are accurate. 43.3% students gave positive response agree and 23.3% students strongly agree to the statement. 26.6% students gave negative response disagree and 6.7% students strongly disagree to the statement.

From the result shows by the table of the questionnaire, almost of all students agree that QuillBot has greatly help them in improving writing. It is accessible, helps them increase vocabulary, help them enhance grammar skill, can reduce writing anxiety, can boost their writing confidence, display accurate results, and helps them in improving writing. Nevertheless, some students gave negative responses, they disagree to the statement displayed in the questionnaire. They might use QuillBot to help them in writing, but it is not their first choice. They also use another digital tool to perfect their writing and to improve their writing skills.

Analysis of the qualitative data

The researcher also conducted interviews with several students to confirm or disconfirm the results of the quantitative data. The researcher interviewed 3 students from the 5th semester and 2 students from the 7th semester. The researcher gave each student 5 questions. For the first question, the researcher asked them whether they have ever used QuillBot or not and how often do they use it. The interviewees answered that they have ever used QuillBot and often use it. One of them also gave rating of how often she uses it.

R3 *"I have ever used QuillBot, if I could rate it from 1-5 of how often I use it, it would probably be around 3. Because I only use it when I have assignments, such as essay assignments and something like that to make it easier for me to do my assignments."*

The answer of respondent 3 is relevant to a statement of the questionnaire "I often use QuillBot in writing" with percentage 53,4% or equivalent to 16 students, 11 students agree with the statement and 5 students strongly agree with the statement. The second question is about the reason they choose to use QuillBot over other apps. They gave responses that QuillBot is easily accessible, easy to understand, practical, has many features, and free. A student also mentioned that her lecturer suggested her to use QuillBot and she thinks it is more reliable to use than other applications or websites. This question is relevant to statement "I prefer use QuillBot over other apps" that reach 63,3% of positive response, 12 students agree and 7 students strongly agree to the statement. Respondent 4 also mention that the features of QuillBot are easy to access. This is relevant to statement "QuillBot is an easily accessible digital tool" that reach 93,3% of positive response. 11 students agree and 17 students strongly agree to the statement, even the number of strongly agree response is higher than the number of agree response. Only 2 students that strongly disagree to the statement, which means almost of all students are agree to the statement.

The third question is what feature do they use the most and what they usually use the feature for. For this question, every student gave different answers. The answers are:

R1 *"I use the grammar checker feature most often, because my grammar skills are quite bad, so I use grammar checker most often. Usually, I use this feature when working on writing assignments to correct sentences."*

This answer is relevant to statement "Using the QuillBot application to write academic essays has improved my grammar skills" and reach 70% of positive response from the respondent. 16 students agree and 5 students agree to the statement. It means QuillBot has proven help students in improving grammar skills.

R2 *"Most often use the paraphraser feature to paraphrase sentences or paragraphs."*

R3 *"I like the paraphraser feature the most, because with this feature, not the whole sentences are paraphrased directly, but I can replace the words in it, from one word I can click it and there will be a choice of which word I want to use, it is very helpful."*

R4 *"I usually use paraphraser, grammar checker, and summarizer. I use the paraphraser feature to change new sentences and also get synonyms from the vocabulary. The grammar checker feature to fix grammatical sentences."*

The answer of Respondent 3 and Respondent 4 are in accordance to statement "Unconsciously, my vocabulary particularly the terms used in writing have increased" and reach 70% of positive response from the respondents. 14 students agree and 7 students strongly agree to the statement, it means QuillBot greatly help them in increasing vocabulary.

R5 *"The features I use the most are the paraphraser feature and summarizer feature. I use these features to do assignments such as essay or making sentences."*

From the answers above, it can be concluded that the features the students use the most are paraphraser, grammar checker, and summarizer. These features indeed the main features that can help them in writing and can greatly improving their writing skill. The next question is what benefits do they get from using QuillBot. They mentioned several benefits they get from using the tool.

R1 *"It is a lot, such as being faster when doing assignments and easier to find synonyms."*

R2 *"It has become easier for me to paraphrase paragraphs and reduce plagiarism."*

R3 *"It mproves my vocabulary, because in the paraphraser feature there is a feature to replace words according to my needs, there are synonyms for these words, this is quite good."*

R4 *"The main benefits that I get from using QuillBot are, it is more time efficient and I can find out many synonyms for words that I didn't know before."*

R5 *"It is more practical in working on assignments that I sometimes cannot do and the results are better."*

The answer of R1 and R4 are in accordance to statement "QuillBot helps saving time in writing" and reach 86,7% of positive response. 17 students agree and 9 students strongly agree to the statement which means they agree that QuillBot helps saving time in writing. Then the statement of R3 and R4 about QuillBot improves their vocabulary are relevant to the statement "Unconsciously, my vocabulary particularly the terms used in writing have increased" that reach 70% of positive response, 14 students agree and 7 students strongly agree to the statement. And the statement of R5 about the results provided by the AI is in accordance to statement "I can write efficiently and my writing get better results when I use the QuillBot app" that reach 80% of positive response, 15 students agree and 9 students strongly agree to the statement. It means QuillBot indeed provided the better results.

Then the last question is how does QuillBot help them to improve their writing skill. They gave different responses to this question according to their perceptions.

R1 *"It can help when I'm confused with the same word that I always use, it helps to find synonyms for that word, so I can use the new word so my sentences are not monotonous."*

R2 *"By providing several options when paraphrasing so I can choose the most appropriate one according to my needs to make my writing better."*

R3 *"Because QuillBot has many features, the paraphraser feature can help to develop sentences which means my writing skills also improve. Not only the paraphraser but there is also a summarizer feature and there are other features that are very helpful."*

R4 *"Since I often use paraphraser and grammar checker, I think those features really help me to improve my writing skills. Because with the help of Quillbot, there are many new ideas and synonyms, and it helps to avoid plagiarism in my writing."*

R5 *"It is very helpful in improving my writing skills. Because QuillBot produces accurate and easy-to-understand sentences."*

The answers from the respondents are in accordance to the statement "The QuillBot application is effective bacuse it includes several features that can help me improve the quality of my writing" that reach 93,3% of positive response. 16 students agree and 12 students strongly agree to the statement. Only 2 students that strongly agree to the statement. It means almost of all the students agree that QuillBot helps them in improving writing. From the interviews that have been conducted, QuillBot is indeed very influential in helping students in doing assignments, especially writing. The features provided by QuillBot have their own functions that can be adjusted to the needs of each student. It can help students improve their writing skills.

Discussion

To conduct this research, the researcher adopted questionnaire from Kurniati and Fithriani (2022), because the topic is relevant with the current research and the statements in the questionnaire suit the current research instrument. However, there are still differences between the two research. The respondents of this research were thirty students majoring English Education Study Program at a university in Semarang. Used both quantitative and qualitative as a research method, with questionnaire and semi-structured interview as the data collection. Whereas the respondents of the research conducted by Kurniati and Fithriani (2022) were twenty post-graduate students of magister level majoring in English Education at state university in North Sumatra. The method was qualitative method, used questionnaire and semi-structured interview as the data collection. Because of the differences in respondents from those two researches, they are absolutely show different results. The result of the previous study was the use of quillbot can creating high-quality writing for students and really helps to improve their writing skill. Based on the students' perceptions, quillbot has three benefits, they are enhancing students' positive attitudes towards writing, providing a variety of user-friendly writing features, and aiding students' language development. Quillbot is an effective digital tool to improve post graduate students' academic writing skill. And the result of this research will be discussed below.

In user friendly writing features aspect, this research shows positive response percentage 93,3% and negative response 0%. It means none of the respondents disagree nor strongly disagree to the statements on that aspect. Whereas, in the previous research found that 85% to 90% students gave positive response on the aspect and 10% to 15% other students gave negative response. In enhancing grammar aspect, 70% to 76,7% students in this research gave positive response and 23,4% to 30% students gave negative response. In the previous research, 80% students gave positive response and 20% students gave negative response on that aspect. This research shows that 70% students gave positive response on the use of vocabulary aspect and 30% students gave negative response. Meanwhile, the previous research showed that 95% students gave positive response and 5% students gave negative response on that aspect.

In attitudes toward writing aspect, 53,4% to 80% students gave positive response and 23,3% to 46,7% other students gave negative response in this research. Whereas, in previous research 85% to 90% students gave positive response and 10% to 15% students gave negative response on that aspect. The last aspect is students aiding in writing. This research shows that

66,6% to 86,7% students gave positive response and 13,3% to 26,7% students gave negative response on this aspect. Meanwhile, in the previous research, 95% students gave positive response and 5% students gave negative response on that aspect.

From the analysis above, different respondents affect the different results. The previous research found that the use of QuillBot have three benefits, they are enhancing students' positive attitudes toward writing, providing a variety of user-friendly writing features, and aiding students language development. Whereas, this research shows that the benefits of using QuillBot are improving grammar skill, enhancing vocabulary, improving organizing text skill, more time efficient and give emotional support such as make students more confident in writing.

CONCLUSION

Writing is one of the assignments that must be done by students, especially students majoring in the English Education Study Program. They often get assignments related to writing, such as writing essays and articles. This thing, absolutely, not immediately mastered by students. To create good writing according to writing rules requires qualified skills, they need to learn and practice to be able to write in a good way. Even though they have practiced a lot, they usually still find difficulties when writing. From the results of the analysis that has been done, the most common difficulties faced by students are choosing the right words and constructing sentences or grammar. These things sometimes cannot be done manually or done by students themselves. They need help to choose the vocabulary so the words they use in writing are not monotonous and need help to check the grammar as well.

Therefore, with the sophistication of technology nowadays, students can easily use the help of an artificial intelligence to complete their assignments. A digital tool that is easily accessible, has many useful features, and is free is QuillBot. This AI always be the favourite of the students to help them write. And it has been proven that it helps to improve students' writing skills. Not only help in improving the skills such as grammar, enhance vocabulary, and organizing text, but it also helps in improving emotional skills such as reducing writing anxiety and boosting confidence in writing. These matters are certainly very influential in mastering writing skills. However, this research still has many shortcomings. The researcher suggests to the next researchers to examine more specific features of the QuillBot and analyze in more detail to get more accurate results.

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