

ASSISTANCE IN THE APPLICATION OF THE *ARTIFICIAL INTELLIGENCE PARAPHRASING TOOL "QUILLBOT"* IN ARTICLE WRITING

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Abstract: Writing is a fundamental skill for writers, researchers, lecturers, and students, especially in academic contexts where clarity, structure, and proper referencing are essential. Beyond composing coherent sentences, academic writing demands the ability to integrate references ethically and effectively. One key technique is paraphrasing—rephrasing others' ideas in one's own words while preserving the original meaning. This requires linguistic precision and conceptual understanding, yet many educators still struggle with it. Recognizing this challenge, the Community Service (PKM) team initiated a program titled *Assistance in the Application of Artificial Intelligence Paraphrasing Tool Technology "Quillbot"*. The initiative aimed to introduce and train educators in using Quillbot, an AI-powered tool designed to support ethical and plagiarism-free paraphrasing in scientific writing. Delivered through a participatory approach, the training combined theoretical insights with hands-on practice. The results were impactful: 70% of participants had never used Quillbot before, highlighting the program's success in expanding technological literacy. All participants found the tool helpful in improving writing efficiency and language quality. Many felt newly motivated to write, citing increased confidence and productivity. Beyond technical skills, the program fostered ethical awareness in writing practices. Overall, this initiative significantly contributed to promoting responsible and effective use of AI in education

Keywords: *Artificial Intelligence In Education; Paraphrasing; Academic Writing Skills; Quillbot*

Proficiency in academic writing requires writers to be able to browse through a variety of sources, find relevant references, and evaluate various ideas and options to build their own justifications (Amanda et al. 2023). The three important writing conventions are summarizing, paraphrasing, and elaborating (Al-Khasawneh dan Maher, 2010). One of the parts of academic writing that many students struggle with is redrafting, i.e., paraphrasing (Syahnaz and Fithriani 2023). The process of rewriting a sentence or paragraph according to its style without changing its content is called paraphrasing. Word-for-word, paraphrased using what appear to be synonyms, but some have different meanings (Fitria 2022). Writing something in the author's own words to express the original idea of a part of a book or other learning resource is called paraphrasing. Paraphrasing is an attempt to rephrase ideas that have been spoken by others. The demand

for paraphrasing solutions to prevent plagiarism automatically is always increasing. An app called a paraphrasing tool allows users to change words in text without changing the meaning of the original word. *QuillBot* is an accessible paraphrasing tool that utilizes cutting-edge AI to transform any piece of content (Nurmayanti and Suryadi, 2023).

A paraphrasing tool is a tool that seeks to paraphrase an article while maintaining the original meaning of the text. This tool is created to replace other versions of content for every word, phrase, sentence, and even full paragraph without changing the general meaning of the text (Fitria 2022). Students working on their final project or thesis often do paraphrasing exercises. This thesis requires that all content be free from plagiarism. Online paraphrasing is one of the options to paraphrase for money or for free.

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One of the techniques that students must master in order to be able to cite the work of others in their writing for academic reasons is paraphrasing. By using paraphrasing techniques, students can make their work more unique and avoid plagiarism. It is emphasized to students that they must overcome their own challenges. The development of several tools to help people paraphrase is related to technological developments, and the need for free online tools may arise due to the difficulty of paraphrasing. A sentence or a paraphrase can be rewritten in a variety of ways. Writers must follow many of these stages to paraphrase a phrase or paragraph correctly (Ramadhani, 2019).

Proficiency in paraphrasing is essential for academic tasks, including writing essays, revising texts, and summarizing them. Reframing ideas from other sources with their own words and styles is called paraphrasing. Thus, it retains important ideas from the original text. However, he did not use the same terminology or writing style as the original text. If paraphrasing without proper citations, it can also be considered plagiarism. When we take someone else's

ideas and modify them to suit our needs, we need to give proper credit to the original author of the work. It preserves the concept and meaning of the original text while providing relevant details about it. One can avoid plagiarism by having paraphrasing skills (Nurmayanti and Suryadi 2023).

Summarizing and paraphrasing are two strategies to avoid plagiarism. In the context of writing, paraphrasing is a very important skill. It is a type of cognitive capacity that requires strong writing and reading skills as well as high-level thinking. Compared to the mother tongue, paraphrasing is often considered more challenging in a second language or a foreign language. This is especially true for language learners who are new to the academic environment (Rafiq et al. 2023). One of the most widely used free paraphrasing programs is *QuillBot*. Products from *QuillBot* suggest the possibility of paraphrasing using artificial intelligence (Syahnaz and Fithriani 2023). The AI methodology combines deep learning with several natural language processing techniques. It creates new sentences by automatically removing, adding, or changing words. *QuillBot* offers a solution by assisting with the paraphrasing process when instructors and students are less motivated to do it manually. The tool is easy to use. When we write or paste text into *QuillBot* and then click on the "Paraphrase" button, the text is rewritten (Fitria 2021).

Scholarly article writers have access to a variety of tools that can keep them inspired, speed up the writing process, and help them produce work that will impress potential journal editors. With *QuillBot*, an easy-to-use tool that of course leverages cutting-edge capabilities, paraphrasing any text is a breeze. The main goal is to rearrange the phrase while retaining its original meaning by changing the structural elements and adding

synonyms if necessary (Nurmayanti and Suryadi 2023).

METHOD

This community service activity is divided into 3 stages they were the theoretical stage, where the speaker explains the main points of discussion in the form of understanding the concept of paraphrasing and *Quillbot*. The practice stage is the stage of teachers practicing the *Quillbot* application in writing articles. The steps in this stage are in the form of remarks from the principal or representative, introduction of service team members, delivery of materials, application use practices, questions and answers, discussions, and filling out a questionnaire for Community Service activities. At the end of the activity, do not forget to do documentation as proof of the continuation of community service activities.

RESULT

On October 2, 2025, the Community Service Program team from Lancang Kuning University carried out community service activities at the school at a partner school located in Siak Regency, Riau Province. This activity is part of institutional efforts to support the improvement of technological literacy in the secondary education environment, especially in the use of artificial *intelligence* in academic writing in the form of articles and books. This program carries the theme "Assistance in the Application of *Artificial Intelligence Paraphrasing Tool 'Quillbot'* Technology in Article Writing," which aims to introduce and assist educators and students in the use of AI-based paraphrasing tools to improve the quality of scientific writing. This activity was chaired by Dr. Indah Muzdalifah, M.Pd, with members of the implementation team consisting of Dina Fitriani, S.Pd., M.M., and Firmansyah, S.Pd., M.M., who collaboratively provided training, technical assistance, and evaluation of the implementation of the use of *Quillbot* in the

context of writing scientific articles in the school environment.



Figure 1. Presentation of PKM activities

The use of AI not only increases efficiency but also helps in maintaining scientific integrity through features that support plagiarism avoidance and reinforcement of reference-based arguments. This is an important breakthrough in the world of education, where the demand for scientific publications is increasing. Thus, AI technology has become a strategic partner in supporting academic productivity and encouraging the birth of quality and impactful written works.

The implementation of the training in the context of Community Service activities with the theme "Assistance in the Application of *Artificial Intelligence Paraphrasing Tool 'Quillbot'* Technology in Article Writing" received a positive response from educators at partner schools. The teachers who attended showed enthusiasm and seriousness in participating in each training session given by the team from Lancang Kuning University. Although not all teachers can participate directly on the day of the activity, this is due to the limited time that coincides with the preparation of the Siak Regency Anniversary celebration. However, the active participation of the teachers present reflects their commitment to increasing digital literacy capacity and academic writing skills through the use of artificial intelligence technology. The visual documentation included in this report shows

the involvement and seriousness of the participants during the activity, which is an indicator of the initial success of this mentoring program.



Figure 2. Participants are watching the presentation

In the implementation of the Community Service activity entitled *Assistance in the Application of Artificial Intelligence Paraphrasing Tool Technology "Quillbot" in Article Writing*, the interaction between participants and the implementation team is one of the indicators of the success of the activity. One of the key moments recorded during the training was when a participant, who was a teacher from a partner school, asked the team critical questions related to the working mechanism and effectiveness of the use of artificial intelligence technology in *the Quillbot application*. The question showed a high interest and curiosity from participants in the use of technology in supporting the academic writing process.

The question asked relates to how *Quillbot* can distinguish between paraphrasing that is academic in nature and paraphrasing that tends to change the original meaning of the text. The implementation team explained that *Quillbot* uses an AI-based language model that has been trained with various corpora of texts to recognize sentence structure, synonyms, and meaning context. Thus, this tool can generate paraphrasing that still maintains the essence of the original sentence, but with a different and more varied language style. This explanation was delivered with a communicative approach and

accompanied by a direct demonstration so that participants could understand practically.



Figure 3. One of the participants asked

DISCUSSION

To support the improvement of digital literacy and academic writing skills among the community, community service activities have been carried out in the form of *Training on the Use of Artificial Intelligence Quillbot*. This activity aims to introduce and train participants in utilizing AI technology, especially the *Quillbot* application, as a tool in the paraphrasing process, sentence structure preparation, and plagiarism avoidance. The purpose of this activity is to introduce the *Quillbot* application to the wider community. Improve participants' ability to write scientific articles effectively. As well as providing technological solutions to shorten writing time and improve grammar quality. This activity was attended by 10 participants from various educational backgrounds. The training method was carried out interactively through a direct demonstration of the use of *Quillbot*, group discussions, and the practice of paraphrasing academic citations. The results of the evaluation based on the questionnaire, the following is a summarized of: participants' responses to the training based on the questionnaire distributed in community service activities in the training

on the use of *Artificial Intelligence Quillbot*.

Table 1. Results of the activity questionnaire

Statement	Responds			
	4	3	2	1
I just heard of <i>the Quillbot app</i>	3	7	0	0
I think this app, <i>Quillbot</i> , is great	8	2	0	0
Using <i>the Quillbot</i> app can help me paraphrase quotes	10	0	0	0
<i>Quillbot</i> is a form of technology that facilitates human work, especially paraphrasing	9	1	0	0
Through this <i>Quillbot</i> application, it makes me motivated to write articles	7	3	0	0
The use of this <i>Quillbot</i> application can shorten the time to write articles	9	1	0	0
The use of this <i>Quillbot</i> app is very effective and beneficial	10	0	0	0
The <i>Quillbot app</i> provides benefits in the preparation of sentence structures	9	1	0	0
<i>Quillbot app provides</i> the benefit of correct grammar preparation	9	1	0	0
The <i>Quillbot app</i> is very helpful in avoiding high levels of plagiarism	7	3	0	0

As many as 70% of the participants in this service activity admitted that they were getting to know the *Quillbot* application for the first time. These findings show that the training carried out not only provides technical skills, but also succeeds in opening up new insights related to the use of artificial intelligence (AI) technology in the world of education, especially in writing scientific papers. The fact that the majority of participants had never used *Quillbot* before indicates that there is a gap in information and access to academic support technology among educators, especially in the area of partner schools.

Through this activity, participants were not only introduced to the basic

functions of *Quillbot* as a paraphrasing tool but also invited to understand how AI technology can be used wisely to improve the quality of writing, speed up the writing process, and maintain academic integrity through plagiarism avoidance. Thus, this training plays an important role in building digital literacy and writing ethics among teachers, as well as encouraging the transformation of writing culture that is more adaptive to technological developments.

The success of this training in broadening the participants' horizons is proof that technology-based educational approaches have great potential to increase the capacity of human resources in the field of education. It is hoped that the positive impact of this activity can continue through real application in teachers' writing activities, as well as become an inspiration for the development of similar programs in the future.

All participants of the service activity stated that the use of the *Quillbot* application was very helpful in the process of paraphrasing and writing scientific articles. This statement reflects the success of the mentoring program in answering the real needs of teachers for effective and efficient tools in compiling papers. *Quillbot*, as one of the artificial intelligence technologies specifically designed to support paraphrasing, has been proven to be able to speed up the writing process while improving the quality of the language used in articles.

Through this training, participants not only gained a technical understanding of how *Quillbot works*, but also experienced first-hand its benefits in composing sentences that are clearer, concise, and in accordance with academic rules. The use of *Quillbot* also helps participants in avoiding plagiarism more wisely, as they can reconvey other people's ideas in their own language style without losing their original meaning.

Positive statements from all

participants showed that AI technology, such as *Quillbot*, has great potential to be integrated in the world of education, especially in supporting the productivity of scientific writing among teachers. This activity not only provides new skills but also builds participants' confidence in producing quality and ethical writing.

The majority of participants felt motivated to write after getting to know *Quillbot*, and acknowledged its effectiveness in speeding up the writing process and improving the quality of the language. This activity has a positive impact in encouraging the use of AI technology wisely and productively. Participants not only gain technical skills, but also an awareness of the importance of writing ethics and the avoidance of plagiarism.

CONCLUSION

The community service activity entitled *Assistance in the Application of Artificial Intelligence Paraphrasing Tool Technology "Quillbot"* has had a significant positive impact on improving digital literacy and academic writing skills in partner schools. The finding that 70% of participants were new to the *Quillbot* application showed that this training succeeded in expanding participants' knowledge of the use of AI technology in the world of education, as well as filling the information gap and providing access to scientific writing tools.

All participants stated that *Quillbot* is very helpful in the process of paraphrasing and writing articles, both in terms of time efficiency and improving language quality. This training not only provides a technical understanding of the use of *Quillbot* but also builds awareness of the importance of writing ethics and plagiarism avoidance. This is an important foundation in forming a more adaptive, productive, and responsible writing culture in the school environment.

The majority of participants felt motivated to write after attending the training, indicating that AI technology can be a catalyst in driving academic productivity. Thus, this

activity not only succeeded in transferring skills but also inspired a transformation of writing mindsets and practices among educators.

It is hoped that the success of this activity can be a model for the implementation of similar programs in other educational institutions, as well as encourage the wise integration of AI technology in supporting the development of superior and competitive human resources in the digital era.

Based on the results of the implementation of the activities and the positive responses from the participants, several suggestions can be used as a reference for the development of similar programs in the future:

1. Expanding Training Reach Considering that 70% of participants are new to the *Quillbot* application for the first time, it is recommended that similar training be extended to other schools that have similar characteristics. This aims to bridge the information gap and provide access to academic support technology among educators.
2. The integration of Technology in the *Quillbot* School Curriculum has proven to be effective in supporting the scientific writing process. Therefore, it is recommended that partner schools consider integrating the use of these apps in learning activities, particularly in subjects that encourage writing skills and digital literacy.
3. Advanced Training and Periodic Mentoring To ensure the sustainable use of AI technology, it is necessary to organize advanced training and periodic mentoring. This will help teachers develop more in-depth writing skills and maintain the quality of the written work produced.
4. Strengthening Academic Writing Ethics, the use of *Quillbot* should be accompanied by a strong understanding of writing ethics and the avoidance of plagiarism. Therefore, it is recommended

that future training also emphasize the moral and academic aspects of the use of AI technology.

5. Development of Modules and Practical Guides To make it easier for teachers to access and use Quillbot independently, it is recommended that the implementation team develop training modules and practical guides that can be used as a reference in writing activities in schools.
6. Collaboration with Higher Education Institutions It is recommended that this service activity be used as a collaborative model between universities and partner schools to increase the capacity of digital literacy and scientific writing at the secondary education level.

By implementing these suggestions, it is hoped that the use of artificial intelligence technology in the world of education can continue to develop wisely, productively, and sustainably, and make a real contribution to improving the quality of human resources in the academic field.

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