

TRAINING ON THE USE OF CHATGPT IN WRITING SCIENTIFIC PAPERS FOR ELEMENTARY SCHOOL TEACHERS IN BANDA ACEH CITY

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Abstrak

Pemanfaatan teknologi dalam pendidikan di desa masih tertinggal dibandingkan di kota. Salah satu faktor utamanya adalah rendahnya minat guru di kota untuk mengikuti perkembangan zaman, terutama teknologi AI, dalam mempermudah penulisan artikel ilmiah. Tujuan pelatihan adalah untuk memberdayakan masyarakat, khususnya guru, untuk lebih memahami esensi penulisan artikel ilmiah berbasis teknologi AI. Metode pelaksanaannya adalah dengan menyelenggarakan pelatihan minat tentang tips dan trik penulisan artikel ilmiah sebagai syarat untuk lulus untuk jabatan guru. Hasil pelatihan menunjukkan bahwa diperlukan teknik penulisan artikel ilmiah bagi guru dengan melakukan pelatihan penulisan artikel ilmiah berbasis teknologi AI. Pelatihan ini diharapkan dapat mengeksplorasi pentingnya menulis artikel ilmiah dan memiliki keterampilan menulis artikel ilmiah sehingga dapat mempublikasikan berbagai karya ilmiah menggunakan teknologi AI. Layanan ini berimplikasi untuk mengembangkan kemampuan dan keprofesionalan guru di masa depan agar tidak gagap dengan teknologi.

Kata Kunci: ChatGpt, Bahasa Tulis, Karya Ilmiah

Abstract

The use of technology in education in villages is still lagging compared to in cities. One of the main factors is the low interest of teachers in the town to keep up with the times, especially AI technologists, in making it easier to write scientific articles. The purpose of training is to empower the community, especially teachers, to understand better the essence of writing scientific articles based on AI technology. The implementation method is to organize interest training on tips and tricks for writing scientific articles as a requirement to graduate for teacher positions. The training results showed that techniques are needed to write scientific articles for teachers by carrying out training in writing scientific articles based on AI technology. This training is expected to explore the importance of writing scientific articles and have the skills to write scientific articles so that they can publish various scientific papers using AI technology. This service has implications for developing the abilities and professionals of teachers in the future so that they do not stutter with technology.

Keywords: ChatGPT, Writing Language, Scientific Papers

INTRODUCTION

Teachers' ability to write scientific papers is one of the indicators of professionalism and competence in the world of education. According to Fakhri et al. (2024), this ability is not only important for teachers'

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self-development but also contributes to improving the quality of education in Indonesia. In this context, writing scientific papers is a means for teachers to convey innovative ideas, research results, and best practices in teaching to peers and the wider community. Teachers who are active in writing scientific papers tend to have a better understanding of research and curriculum development methodologies (Kumalasari et al., 2024).

In addition, writing scientific papers also serves as a self-evaluation tool for teachers. Through this process, teachers can reflect on their teaching practices and identify areas that need improvement. This is in line with the opinion of Mawardi et al. (2019), who stated that writing scientific papers can increase teachers' awareness of the importance of research in educational practice. Thus, teachers who are trained in writing scientific papers will be better able to contribute to the development of science and education.

However, Teachers challenges in writing scientific papers are often faced by teachers related to technical skills and understanding of the writing structure. Sulaiman et al. (2024) revealed that many teachers find difficult to compose logical and systematic arguments. Therefore, special training in scientific writing is indispensable to improve these skills. Effective training can help teachers understand how to draft research proposals, write scientific articles, and publish them in accredited journals.

As a concrete step, several educational institutions have implemented training programs to improve the ability to write scientific papers among teachers. One example is the training held by Camellia et al. (2021) which succeeded in increasing the number of scientific publications by teachers in schools. This kind of program not only improves writing skills, but also builds a network of collaboration between teachers, thus facilitating the exchange of ideas and best practices in education.

The inability of teachers to utilize AI technology in writing scientific papers can have a significant negative impact. One of the main consequences is the low quality of the scientific works produced¹. According to data from Salvagno et al. (2023), teachers who are not skilled in using technology tend to produce poorly structured writing that does not meet academic standards. This has the potential to reduce the credibility and influence of the scientific papers they write

In addition, the inability to use AI technology can also slow down the writing process. Teachers who are not familiar with AI-based tools will spend more time compiling and revising their scientific papers. Fakhri et al. (2024) noted that wasted time in the writing process can disrupt the balance between teaching and research tasks, which ultimately has an impact on the quality of teaching.

Another negative impact is the lack of innovation in learning approaches. Teachers who do not utilize AI technology have the potential to miss out on the opportunity to integrate the latest methods and techniques in their teaching. This can result in stagnation in the development of curriculum and teaching methods, which in turn reduces students' interest and motivation in learning (Kawijaya, 2023).

Further, the inability to use AI technology can lead to a gap between teachers who have access to technology and skills and those who don't. Sulaiman et al. (2024) emphasized that this gap can exacerbate inequalities in education, where only certain teachers can utilize technology to improve the quality of teaching and writing scientific papers. Therefore, educational institutions need to provide adequate training and resources so that all teachers can access and utilize AI technology.

Overall, the negative impact of teachers' inability to use AI technology in writing scientific papers is huge. Therefore, proper training and access to technology must be a priority in efforts to improve teachers' abilities in this digital era. The use of AI technology in writing scientific papers has brought a number of significant positive impacts to teachers and the world of education in general. One of the main benefits is the increased efficiency in the writing process. With AI-based tools, such as word processing apps equipped with advanced features, teachers can compile and edit scientific papers faster and more accurately. Fakhri et al. (2024) noted that the use of this technology can reduce the time it takes to complete writing, so that teachers can focus more on research and teaching.

In addition to efficiency, AI technology can also improve the quality of writing. AI-based tools often come with grammar and writing style checking features that can help teachers avoid common mistakes. According to Kumalasari et al. (2024), the use of this tool has been proven to improve the quality of scientific work produced by students and teachers. Thus, published scientific papers will better meet academic standards and have a greater chance of being accepted by leading journals.

Another positive impact is the ability to facilitate collaboration between authors. In the digital era, AI technology allows teachers to collaborate in real-time in compiling scientific papers. This is especially important in the context of collaborative research, where ideas can be exchanged directly and efficiently. Sulaeman et al. (2024) show that this kind of collaboration not only improves the quality of writing, but also expands the professional network among teachers. The use of AI technology can also enrich the learning process for students. When teachers use AI tools to compose scientific papers, they can show students how technology can be applied in research and writing. This will help students understand the importance of digital literacy and research skills that are relevant to today's world of work (Kawijaya, 2023). Thus, students will be better prepared to face future challenges.

With the various positive impacts offered, the use of AI technology in writing scientific papers is becoming increasingly important. Therefore, training and introduction to these technologies must be an integral part of teachers' professional development, so that they can harness the full potential of these tools in improving the quality of education. In the context of writing scientific papers, AI technology can be considered a quick solution that offers various conveniences for writers. One of the key features of AI-based tools is their ability to automatically generate initial drafts based on input provided by users. This is very helpful for teachers who often face time constraints in compiling scientific papers. According to data from Mawardi et al. (2019), the use of AI in writing can speed up the drafting process, so teachers can more quickly complete their research assignments.

In addition, AI can also help in data collection and analysis. With advanced data analysis capabilities, AI-based tools can assist teachers in identifying patterns and trends relevant to their research. Fakhri et al. (2024) noted that the use of this technology allows teachers to produce more accurate and relevant findings, which in turn can improve the quality of the scientific work produced. AI also plays an important role in improving writing skills by providing direct feedback. Many AI-based writing apps are equipped with features that can provide suggestions for improvement in real-time. This allows teachers to make revisions and improvements to their writing directly, thereby reducing the possibility of common errors in writing scientific papers (Kumalasari et al., 2024). By utilizing AI technology, teachers can also more easily conduct literature research. AI tools can help in finding relevant sources and compiling bibliographies automatically, speeding up the writing process. According to Kawijaya (2023), this convenience is very important for teachers who are often limited by time and resources in conducting research.

Overall, AI offers a quick and efficient solution in writing scientific papers. By utilizing this technology, teachers can not only improve their productivity, but also the quality of the scientific work produced. Therefore, training in the use of AI tools in writing scientific papers must be a priority in the professional development of teachers in this digital era.

IMPLEMENTATION METHOD

This training was held to provide an opportunity for teachers to learn how to use ChatGPT to improve their writing skills. The method in the event is realized by the following process:

- 1) The initiation stage of team formation, then the formulation of activities. The result of the formulation of the goals is to build and improve teachers' skills in writing using the ChatGPT application.
- 2) The stages of preparation that have been decided in advance are in the form of training.
- 3) The stages of the implementation of activities are realized with workshops through google meet including opening, delivery of material, practice using ChatGPT, questions and answers and evaluations.

RESULTS AND DISCUSSION

This training activity began with an introduction session by a community service team consisting of two members. The training participants consisted of ten teachers from schools in

Aceh. The training material began with an explanation of the concept of scientific articles and their writing structure which lasted for 30 minutes. In the next session, participants were introduced to various artificial intelligence (AI) technologies that can support the process of writing scientific articles using ChatGPT. The selection of this material is based on the assumption that teachers do not have a deep understanding of AI technology. This is in line with the findings of Nugroho and Mareza (2023), which shows the teacher's limited initial understanding of scientific articles. After the material presentation session, the activity continued with a tutorial on the use of AI technology, tips for writing effective scientific articles, and an introduction to various journal platforms as a medium for publishing scientific papers.

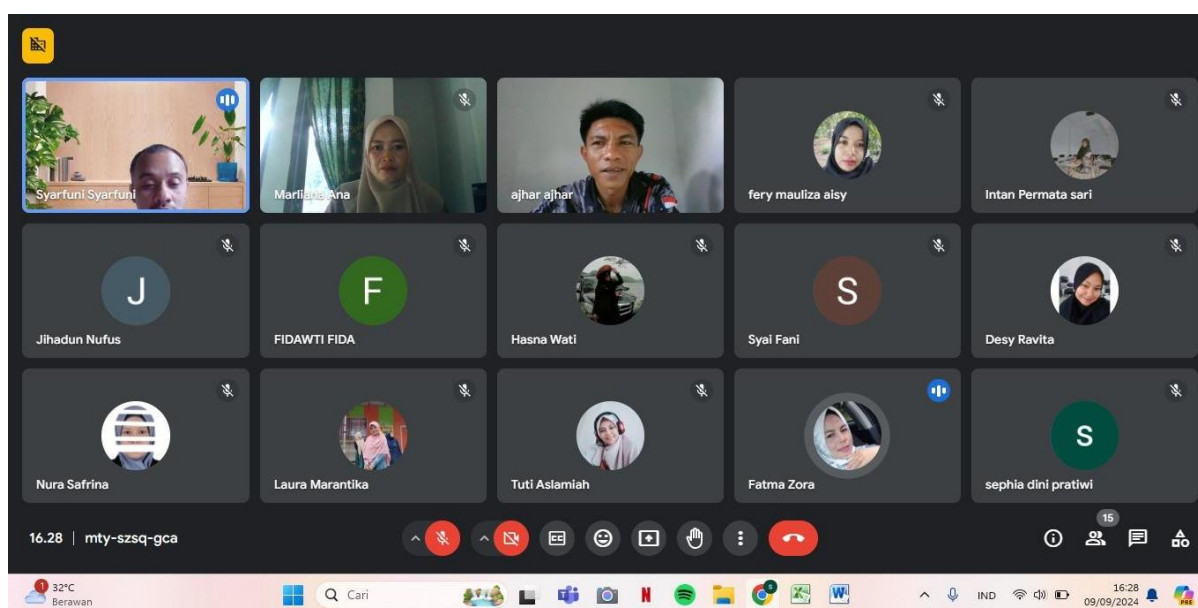


Figure 1: the atmosphere of the participants at the beginning of the opening of the training)

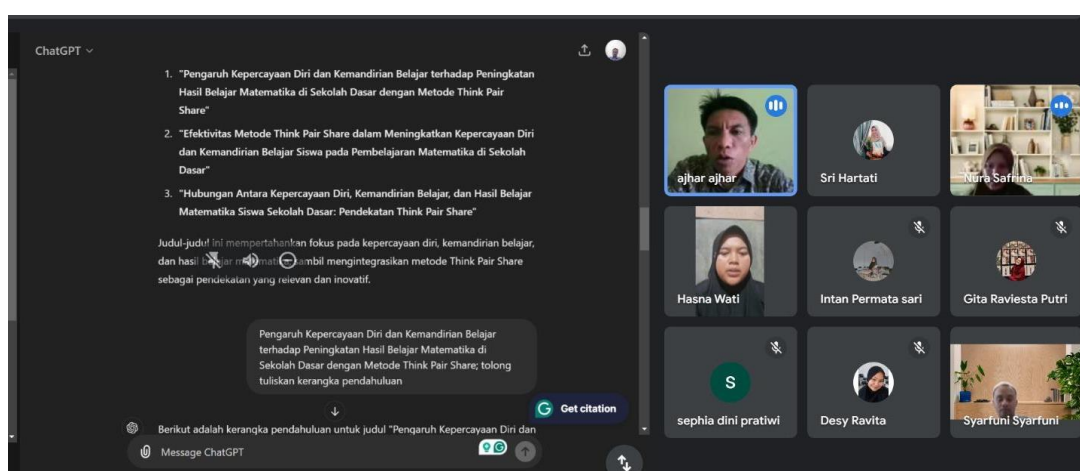


Figure 1. Atmosphere of Training Activities

Evaluation of the final results can conclude that 90% of teachers have understood the skills and knowledge of scientific article writing techniques using ChatGPT technology for the field of

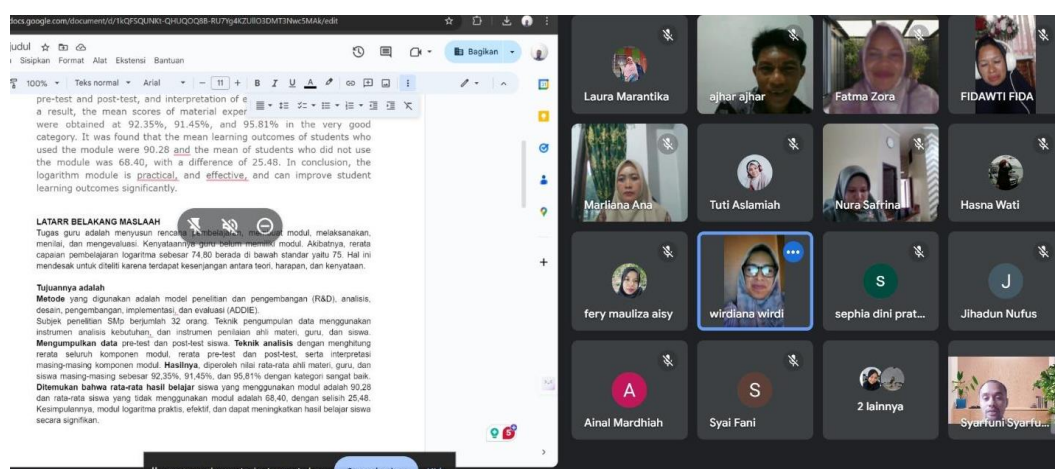
education. Service activities for writing training and professional work development in the form of training in writing scientific articles based on AI technology in the field of education for elementary school teachers in Banda Aceh City in an effort to improve teacher professionalism can run smoothly. Scientific paper writing training is urgently needed for teachers to improve teacher professionalism (Yacob & Mustika, 2020). Many of the participants did not understand various kinds of AI technology to write scientific papers as an effort to develop their profession and the importance of improving their professionalism as teachers. Teachers are fully aware that scientific work is important to them as a form of implementation of ideal and professional teaching. The progress of technological development is also undeniably more advanced. Basically, the preparation of scientific articles that will be presented in scientific journals is relatively the same as scientific papers that will be presented in a seminar forum. The important thing that needs to be considered is the characteristics and surroundings of the journal to be addressed. The existing educational journals cannot be all equalized. There are educational journals that concentrate on aspects of learning alone, evaluation, research, management, and fields of study such as mechanical engineering, history, and English.

Implications for Society

The teachers welcome and participate in the training in writing scientific papers and can disseminate the results of this training to other teachers so that the number of teachers has increased in writing scientific papers and can be used for the increase in the class of teachers in their respective schools.

Training in the use of tools such as ChatGPT in writing scientific papers has important implications for teachers. First, it can speed up the writing process by providing relevant initial ideas, structures, and references. Teachers can use ChatGPT to draft initial drafts, develop arguments, or craft research questions. This is especially beneficial when teachers are faced with a limited amount of time to complete scientific work. They looked enthusiastic to see the results they had practiced as seen in Figure 1 below:

Second, the use of ChatGPT can help teachers hone their digital literacy skills. In the ever-evolving digital age, these skills are essential for integrating technology into the learning and research process. Teachers who are skilled in using ChatGPT can be more effective in supporting their students in understanding how to utilize technology for academic purposes.



However, this training also poses challenges. Teachers need to understand the limitations of ChatGPT, such as the potential for bias in the data and information provided, as well as the importance of verifying and validating all data generated. Additionally, it is important to consider ethical aspects, such as avoiding overreliance on AI and ensuring that scientific work remains original and compliant with academic standards. Overall, training in the use of ChatGPT can improve the productivity and quality of teachers' scientific work, as long as it is used wisely and responsibly.

Conclusion

The training program aimed at empowering teachers in village areas to utilize AI technology for writing scientific articles has proven effective. It highlights the necessity for such techniques to facilitate the writing process, helping teachers meet the requirements for professional advancement. Through this training, teachers not only grasp the significance of writing scientific articles but also acquire the skills needed to produce and publish scientific papers using AI technology. Consequently, this initiative has the potential to enhance the competencies and professionalism of teachers, ensuring they remain up-to-date with technological advancements and can effectively contribute to the academic community

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