Jurnal Abdimas (Journal of Community Service): Sasambo
http://journal-center.litpam.com/index.php/Sasambo_Abdimas

Februari 2026 Vol. 8, No. 1
e-ISSN: 2686-519X
pp. 99-107

Training on the Utilization of ChatGPT to Support Academic Writing of PTI Students

***Baiq Rina Amalia Safitri, Wirawan Putrayadi, M. Fuaddunazmi**
Information Technology Education, Faculty of Engineering and Applied Sciences, Universitas Pendidikan Mandalika. Jl. Pemuda No. 59A, Mataram, Indonesia. Postal code: 83125
*Corresponding Author e-mail: bqrinaamaliasafitri@undikma.ac.id

Accepted: November 2025; Revised: December 2025; Published: February 2026

Abstract

This study focuses on the utilization of ChatGPT to support academic writing among students of the Information Technology Education (ITE) program at Universitas Pendidikan Mandalika (UNDIKMA). A training program was conducted from May 15 to May 29, 2024, with 23 second-semester students participating. The program aimed to equip students with the skills to effectively use ChatGPT for generating ideas, drafting outlines, summarizing information, and writing academic texts. Results from the training indicated that all participants successfully created ChatGPT accounts and demonstrated active engagement throughout the sessions. The survey results, with an average of 62.82%, showed that while students gained a strong technical understanding of ChatGPT, their ability to use it for academic writing tasks was still in the early stages, requiring further practice and mentorship. The study found that while ChatGPT can significantly enhance academic writing skills by providing structural guidance and generating ideas, students still need ongoing support to fully integrate AI technology into their academic workflows. These findings emphasize the need for structured training and further integration of ChatGPT in higher education to foster critical thinking, writing, and digital literacy skills.

Keywords: ChatGPT, academic writing, artificial intelligence, higher education, training, digital literacy

***How to** Cite:* Safitri, B. R. A., Putrayadi, W. ., & Fuaddunazmi, M. (2026). Training on the Utilization of ChatGPT to Support Academic Writing of PTI Students. *Sasambo: Jurnal Abdimas (Journal of Community Service)*, 99-107. https://doi.org/10.36312/pqtgg196

https://doi.org/10.36312/pqtgg196

INTRODUCTION

The rapid development of artificial intelligence (AI) technology in recent years has brought significant transformations across various sectors, including education. AI is no longer limited to industrial or commercial applications but has increasingly been integrated into educational practices as part of the digital transformation of learning. One widely adopted form of AI in education is the chatbot, a computer-based system designed to simulate human-like conversations using natural language processing to provide information, guidance, and learning support (Sugiono, 2021).

One of the most prominent AI-based chatbots currently gaining attention in higher education is Chat Generative Pre-trained Transformer (ChatGPT). ChatGPT is designed to assist users in a wide range of intellectual tasks, such as answering questions, summarizing information, generating text, and developing writing ideas in a structured manner (Faiz & Kurniawaty, 2023). These capabilities position ChatGPT as a promising technological tool to support academic learning, particularly in enhancing students' academic writing skills, which remain a persistent challenge in higher education institutions.

Academic writing is a fundamental competence that university students must master, as it plays a crucial role not only in completing coursework but also in fostering critical thinking, analytical reasoning, and systematic knowledge construction. However, numerous studies and field observations indicate that many students continue to experience difficulties in academic writing. Common problems include challenges in generating ideas, organizing coherent sentences, identifying relevant topics, producing summaries, and developing arguments logically and systematically.

Similar challenges were identified among students of the Information Technology Education (Pendidikan Teknologi Informasi/PTI) program at Universitas Pendidikan Mandalika (UNDIKMA). Preliminary observations and student feedback revealed that many second-semester students struggled to complete academic assignments requiring writing skills. These difficulties were not solely attributed to limited language proficiency but were also influenced by insufficient exposure to innovative learning media and instructional strategies. Conventional teaching approaches, which tend to be teacher-centered and less interactive, may reduce student motivation and fail to adequately stimulate creativity and higher-order thinking skills.

At the same time, higher education faces increasing demands to adapt to global challenges that emphasize digital literacy and technological competence. Twenty-first-century education requires students not only to acquire disciplinary knowledge but also to develop critical, creative, collaborative, and communicative skills. This expectation aligns with the Sustainable Development Goals (SDGs), particularly SDG 4 on Quality Education, which highlights the importance of improving learning quality through technology integration, literacy enhancement, and the development of twenty-first-century skills.

The utilization of AI technologies, including ChatGPT, offers a potential solution to address these educational challenges. Several studies have demonstrated that ChatGPT can support students in completing academic tasks, understanding complex concepts, and improving learning efficiency and motivation (Setiawan & Luthfiyani, 2023; Annas et al., 2024). In the context of academic writing, ChatGPT can assist students by providing writing examples, generating outlines, offering language suggestions, and stimulating initial ideas that students can further refine and develop independently.

Despite its potential benefits, the use of ChatGPT in education also presents notable limitations and challenges. Previous studies have highlighted that ChatGPT may struggle to fully comprehend local or contextual nuances, may generate inaccurate or unverifiable information, and could lead to overreliance if used without proper guidance (Fahada et al., 2023; Suharmawan, 2023). Furthermore, the application of ChatGPT in academic writing raises ethical concerns related to originality, academic integrity, and responsible use of AI-generated content (Faiz & Kurniawaty, 2023).

Therefore, the integration of ChatGPT into academic learning should not occur in an unstructured or unguided manner. Instead, it requires systematic training and strong digital literacy support to ensure that students can use the technology critically, ethically, and responsibly. Students must be equipped with the skills to formulate effective prompts, evaluate AI-generated outputs, and position ChatGPT as a cognitive support tool rather than a substitute for independent thinking and writing processes.

To date, the use of ChatGPT in higher education has largely been limited to individual experimentation or examined primarily as an object of academic research. Several community service initiatives and training programs have reported positive outcomes, showing that ChatGPT can enhance learner engagement and interactive learning experiences (Michael et al., 2023). However, there remains a limited number of

structured training programs specifically designed to address students' real-world challenges in academic writing through guided and sustained interventions. Moreover, few initiatives explicitly link ChatGPT training with broader goals of improving educational quality and contributing to SDG 4.

In response to these gaps, a community service program in the form of structured training on the utilization of ChatGPT was developed for PTI students at UNDIKMA. This training program was designed not merely to introduce AI technology but to provide students with practical competencies in using ChatGPT to support academic writing tasks. Through guided practice, students were trained to use ChatGPT for generating ideas, developing writing outlines, summarizing information, and drafting academic texts in a more organized and effective manner.

This training initiative serves as a strategic effort to address the concrete academic challenges faced by PTI students while simultaneously promoting innovation in higher education learning practices. By combining technical instruction with ethical and critical perspectives on AI use, the program aims to strengthen students' digital literacy and academic responsibility. Ultimately, this community service activity is expected to contribute to the improvement of learning quality in higher education, enhance students' twenty-first-century skills, and support the achievement of Sustainable Development Goals, particularly SDG 4 on quality education.

METHODS

This community service activity employed a structured training approach aimed at enhancing students' ability to utilize ChatGPT to support academic writing tasks. The program was conducted at Universitas Pendidikan Mandalika (UNDIKMA) and involved second-semester students of the Information Technology Education (Pendidikan Teknologi Informasi/PTI) study program. A total of 23 students participated in the training. The PTI study program served as the community partner, providing logistical support, training facilities, participant coordination, and assistance during the implementation and evaluation stages. The students acted not only as training participants but also as active practitioners and respondents in the evaluation process.

The technology transferred through this community service program was the application of artificial intelligence, specifically ChatGPT, as an academic support tool. The training focused on developing students' competencies in creating and accessing ChatGPT accounts, understanding the basic features of the platform, and applying prompt engineering techniques to generate effective instructions. Students were guided to use ChatGPT to formulate writing ideas, construct academic outlines, summarize information, improve sentence structure, and develop draft assignments in a critical, ethical, and responsible manner.

The training materials were organized into two main components. The first component focused on the technical introduction to ChatGPT, including step-by-step guidance on installing the application, creating user accounts, and navigating the interface. The second component emphasized the practical use of ChatGPT for academic writing purposes. In this stage, students were trained to request topic suggestions, design structured writing frameworks, identify potential academic references, and generate factual examples that could support their writing tasks. Throughout the training, emphasis was placed on evaluating and verifying AI-generated content to avoid inaccuracies and ethical issues.

The implementation of the training was conducted over three sessions. The first session concentrated on theoretical explanations and demonstrations of ChatGPT usage

by the facilitator. The second session involved guided hands-on practice, during which students directly applied the demonstrated techniques using their own devices under close supervision. The third session was dedicated to presenting the results of students' practice activities and conducting reflective discussions on the benefits, limitations, and ethical considerations of using ChatGPT in academic writing.

The instructional method applied in this program was Direct Instruction, which emphasizes systematic skill acquisition through clear explanations, demonstrations, guided practice, and independent practice stages. This method was selected to ensure that students could follow the learning process in a structured and progressive manner, particularly given their limited prior experience with AI-based writing tools.

To evaluate the effectiveness of the training, a student perception questionnaire was administered at the end of the program. The questionnaire used a four-point Likert scale ranging from strongly disagree (1) to strongly agree (4). The instrument measured three main aspects: students' understanding of ChatGPT, their ability to construct effective prompts, and their competence in utilizing ChatGPT to support academic writing tasks. The collected data were analyzed using descriptive quantitative techniques by calculating percentage scores, which were subsequently interpreted based on predefined qualitative categories. The quantitative findings were then described qualitatively to provide a comprehensive understanding of students' responses and the overall impact of the training program.

RESULTS AND DISCUSSION

The training on utilizing ChatGPT to support academic writing was conducted at the Universitas Pendidikan Mandalika (UNDIKMA) for students of the Information Technology Education (ITE) program, semester 2, from May 15 to May 29, 2024. The training involved 23 participants and took place over three sessions. The activity was facilitated by faculty members from the Faculty of Science, Engineering, and Applied Technology at UNDIKMA, with support from the ITE program as a service partner.

Overall, the activity proceeded smoothly and according to plan. All participants successfully created ChatGPT accounts, which was a prerequisite for progressing to the next stages of the training. This success indicates that, technically, students were able to follow basic instructions for using the artificial intelligence (AI) application, even though most had never used it in an academic context before.

During the sessions, students demonstrated considerable enthusiasm. This was evident from their active questioning, hands-on participation in each step demonstrated by the facilitator, and discussions about the function and potential use of ChatGPT in completing academic tasks. This positive response indicates that students had a strong interest in utilizing AI technology as part of the learning process, especially when introduced in a practical and relevant context to their academic needs.

In the second part of the training, which focused on using ChatGPT for academic writing, participants were trained step-by-step, starting from choosing a topic, creating an outline, finding supporting references, to developing relevant examples. Students practiced each step using their own devices. The results from the practice sessions showed that most participants were able to follow the usage flow of ChatGPT as per the guidelines provided. Students were able to ask ChatGPT to generate topic ideas, create a structure for writing, and provide examples that could be used as starting points for their academic tasks.

However, the practice also revealed variations in the participants' abilities. Some students still faced difficulties in formulating specific and targeted instructions

(prompts), which caused the output from ChatGPT not to fully meet their academic needs. This finding indicates that the ability to use ChatGPT not only depends on mastering the technical aspects of the application but also on critical thinking skills and the ability to clearly articulate informational needs.

To evaluate the impact of the training, a perception survey was conducted after the training sessions were completed. The survey assessed three main aspects: students' understanding of ChatGPT, their ability to create instructions, and their ability to use ChatGPT to support academic writing.

All participants successfully created ChatGPT accounts, as documented in Image 3. Image 3 shows the documentation of students during the process of creating their ChatGPT accounts, which was a prerequisite for advancing to the next stages of the training. This success indicates that students were able to follow basic instructions, even though most had never used ChatGPT in an academic context before.

Image 3: Documentation During the Training on Creating a ChatGPT Account

Table 1: Analysis of Students' Perception of ChatGPT Utilization

No	Indicator	Percentage (%)	Category
1	Students know the ChatGPT website	60.78	Poor
2	Students know how to access ChatGPT	62.50	Good
3	Students understand ChatGPT's operational techniques	63.89	Good
4	Students are skilled in using ChatGPT	61.94	Poor
5	Students are able to create good instructions (prompts)	66.67	Good
6	Students can use ChatGPT to write academic tasks	61.11	Poor
Average		62.82	Good

Based on Table 1, the analysis of the survey shows that students' perceptions of ChatGPT utilization fall into the "Good" category, with an average score of 62.82%. However, the results for each indicator show variations in students' mastery of using ChatGPT. Indicators related to basic technical understanding and creating instructions

fall into the "Good" category, while indicators related to initial skills in using ChatGPT and using it for writing tasks remain in the "Poor" category.

Table 2: Analysis Based on Evaluation Aspects

Evaluation Aspect	Indicator	Average (%)	Category
Introduction to ChatGPT	1–4	62.28	Good
Skill in Creating Prompts	5	66.67	Good
Utilizing ChatGPT for Academic Tasks	6	61.11	Poor

The data in Table 2 shows that the aspect of skill in creating instructions (prompts) received the highest score with the "Good" category. This indicates that the training effectively improved students' understanding of how to formulate clear and directed instructions to ChatGPT. In contrast, the aspect of using ChatGPT for academic writing remained in the "Poor" category, showing that students still need further practice to integrate AI outputs into a systematic academic writing process.

Table 3: Comparison of Student Conditions Before and After Training (Descriptive)

Aspect	Before Training	After Training
Access to ChatGPT	Most students did not have accounts	All participants have ChatGPT accounts
Understanding ChatGPT's function	General knowledge, not yet practical	Understanding ChatGPT for academic tasks
Creating instructions	Instructions were general and less directed	Instructions became more specific and goal-oriented
Academic writing	Difficulty in formulating ideas and structuring writing	Able to create outlines and initial ideas for writing
Attitude toward AI	Passive and hesitant to use AI	More open but beginning to understand ethical aspects

The findings in Table 3 show positive changes in students' readiness and understanding after participating in the training. Students not only improved in terms of access and technical knowledge but also began showing initial capabilities in using ChatGPT as a tool for thinking and writing. However, this ability is still at an early stage and requires ongoing mentoring to ensure that the use of ChatGPT progresses beyond exploration into becoming a well-rounded academic skill.

The results of this training show that ChatGPT has significant potential as a tool to support academic writing tasks. The success of all participants in creating accounts and accessing ChatGPT indicates that initial technical barriers to utilizing AI technology can be overcome through structured support. This finding aligns with Sugiono (2021), who stated that AI-based chatbots can be integrated into learning when users are provided with adequate basic understanding and technical support.

Students' enthusiasm during the training indicates that AI technologies, particularly ChatGPT, can enhance students' interest and motivation to learn. This supports the findings of Setiawan and Luthfiyani (2023), who noted that the use of ChatGPT in education can become a learning innovation in the era of Education 4.0 due to its interactive nature and responsiveness to users' needs. In this service activity, ChatGPT was not only positioned as a technological tool but also as a facilitator in students' thinking process to complete academic tasks.

However, the survey results showed that while there was an improvement in technical understanding, it did not automatically lead to optimal academic writing skills. Some indicators still fell under the "Poor" category, suggesting that students need more time and additional practice to master effective use of ChatGPT. Faiz and Kurniawaty (2023) emphasized that ChatGPT cannot replace human thinking and writing capabilities; it merely serves as an assistive tool that still requires academic control from the user.

The low scores in initial skills with ChatGPT can also be attributed to the low level of digital literacy among students before the training. Most students were only generally aware of ChatGPT but had never used it directly in academic contexts. This aligns with the findings of Suharmawan (2023) and Fahada et al. (2023), which stated that limited initial understanding of users is one of the main challenges in utilizing ChatGPT in education.

In terms of methodology, the use of Direct Instruction proved effective in gradually introducing new skills. Students could follow the learning flow starting from explanations, demonstrations, to hands-on practice. However, for more complex skills such as academic writing, this approach needs to be supplemented with ongoing mentoring and reflective practice. This suggests that a single cycle of training is insufficient to fully develop AI-based writing skills.

Additionally, discussions on the ethics of using ChatGPT were an important aspect of this training. Students were guided to understand that ChatGPT outputs should not be used directly without further verification and processing. This approach is crucial to prevent dependency and breaches of academic ethics, as Faiz and Kurniawaty (2023) warned about the moral challenges in using ChatGPT in education.

Overall, the results of this activity show that ChatGPT training has a positive impact on students' readiness to utilize AI technology in supporting academic tasks. While the evaluation results were in the "Good" category, they also indicate the need for stronger and more sustainable training programs. Integrating ChatGPT into regular learning, supported by continued faculty guidance and enhanced digital literacy, is expected to significantly improve the quality of students' academic writing.

From a broader perspective, this activity contributes to enhancing the quality of learning in higher education and supports the achievement of the Sustainable Development Goals (SDGs), especially SDG 4 on quality education. By equipping students with the ability to critically, ethically, and productively use AI technology, higher education institutions can play an active role in preparing human resources that are adaptable to technological advancements and the challenges of the 21st century.

CONCLUSION

The training program on utilizing ChatGPT for academic writing at Universitas Pendidikan Mandalika (UNDIKMA) proved to be an effective initiative in supporting students' academic skills development. All participants successfully created and accessed ChatGPT accounts, indicating their ability to overcome initial technical barriers. The training sessions were well-received, with students actively engaging in hands-on practice and demonstrating strong enthusiasm for using AI technology to enhance their academic writing. The results of the perception survey revealed a positive overall response, with an average score of 62.82%, categorizing the outcome as "Good." However, despite the positive reception, there was significant variation in students' proficiency with the tool. While students showed improvement in basic technical understanding and creating instructions for ChatGPT, their ability to fully integrate the

tool into their academic writing tasks remained underdeveloped. This indicates the need for continuous practice and mentoring to help students master the integration of ChatGPT into their writing processes effectively. Additionally, there is a need for ongoing support to help students use AI tools critically and ethically, ensuring responsible usage in academic settings. Overall, this initiative highlights the potential of ChatGPT in higher education and underscores the importance of structured training to foster digital literacy and improve academic writing.

RECOMMENDATIONS

Based on the findings of the ChatGPT training program, several recommendations can be made to further enhance the integration of AI tools in academic learning:

1. Continuous Training and Mentoring: Given that students still require further practice to effectively integrate ChatGPT into their academic writing, it is recommended to offer ongoing training sessions. These sessions should focus on refining students' abilities to use AI tools for more advanced writing tasks, such as synthesizing information, critical analysis, and developing coherent arguments.
2. Incorporating Ethical Guidelines: It is essential to incorporate a strong emphasis on the ethical use of AI tools like ChatGPT. Students should be trained to critically assess AI-generated content and verify its accuracy. Additionally, clear guidelines should be provided on maintaining academic integrity, avoiding plagiarism, and using AI-generated content responsibly.
3. Integration into Curriculum: To maximize the benefits of ChatGPT, it should be integrated into the broader curriculum as a supplementary tool for enhancing students' research and writing skills. Structured assignments that encourage the use of AI tools could be designed to promote creativity, critical thinking, and problem-solving in academic writing.
4. Collaboration with Faculty: Faculty members should actively support students in using ChatGPT for academic tasks. Regular workshops and consultations with faculty can help guide students in leveraging AI tools effectively within the scope of their coursework and academic goals.
5. Expanding Access to AI Tools: To ensure all students have the opportunity to benefit from AI-assisted learning, efforts should be made to provide equitable access to technology, especially in institutions where digital literacy levels may vary. This could involve offering resources like workshops, tutorials, and support in navigating AI tools.

REFERENCES

Annas, A. N., Wijayanto, G., Cahyono, D., Safar, M., & Ilham. (2024). Pelatihan Teknis Penggunaan Aplikasi Artificial Intelligences (AI) ChatGPT dan Bard AI Sebagai Alat Bantu Bagi Mahasiswa Dalam Mengerjakan Tugas Perkuliahan. *Journal of Human and Education*, 332-340.

Asmah, S. N., & Setyowati, D. (2022). Analisis Respon Siswa Terhadap Pembelajaran Daring Pada Pembelajaran Matematika SD Negeri 29 Sanggau. *JIKAP PGSD: Jurnal Ilmiah Ilmu Kependidikan*, 368-374.

Fahada, N., Tampubolon, J., & Chairunnisa. (2023). Pemanfaatan Penggunaan ChatGPT Dalam Meningkatkan Kemampuan Pengajaran Bahasa Inggris. *Jurnal Pendidikan Dan Pengabdian Masyarakat*, 65-71.

Faiz, A., & Kurniawaty, I. (2023). Tantangan Penggunaan ChatGPT dalam Pendidikan Ditinjau dari Sudut Pandang Moral. *Jurnal Ilmu Pendidikan*, 456-463.

Michael, Pribadi, M. R., & Agus W, A. D. (2023). Pengoptimalan Penggunaan dan Fungsi ChatGPT Pada Anak Muda Gereja St. Petrus Palembang. *Welfare: Jurnal Pengabdian Masyarakat*, 469-474.

Nurhaerani. (2015). Pengaruh Model Direct Instruction Berbasis Multimedia PhET Terhadap Motivasi Belajar dan Pemahaman Konsep Fisika Siswa. Mataram: IKIP Mataram.

Sakti, D. (2012). Pengaruh Model Pembelajaran Langsung (Direct Instruction) Melalui Media Animasi Berbasis Macromedia Flash Terhadap Minat Belajar dan Pemahaman Konsep Fisika Siswa di SMA Plus Negeri 7 Kota Bengkulu. *Jurnal Exacta*.

Setiawan, A., & Luthfiyani, U. K. (2023). Penggunaan ChatGPT Untuk Pendidikan di Era Education 4.0: Usulan Inovasi Meningkatkan Keterampilan Menulis. *JURNAL PETISI (Pendidikan Teknologi Informasi)*, 49-58.

Sugiono, S. (2021). Pemanfaatan Chatbot Pada Masa Pandemi Covid-19: Kajian Fenomena Society 5.0. *Jurnal PIKOM (Penelitian Komunikasi dan Pembangunan)*, 133-148.

Suharmawan, W. (2023). Pemanfaatan ChatGPT Dalam Dunia Pendidikan. *Education Journal: Journal of Education Research and Development*, 158-166.

Trianto. (2012). Mendesain Model Pembelajaran Inovatif-Progresif. Indonesia: Kencana Prenada Media.

Zahriani. (2014). Kontektualisasi Direct Instruction Dalam Pembelajaran Sains. *Lantanida*, 95-106.