

**WORKSHOP ON OPTIMIZING THE USE OF ARTIFICIAL INTELLIGENCE (AI)
TO INCREASE LECTURERS ACADEMIC PUBLICATIONS
IN REPUTABLE INTERNATIONAL JOURNALS**

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Abstract: The development of artificial intelligence (AI) technology has had a significant impact on various fields, including learning and research in the academic world. One potential utilization of AI is in supporting the process of writing, editing, and publishing scientific articles in reputable international journals. This article aims to present various AI strategies and applications that can be optimized by academics to improve the quality of learning and productivity of international publications. The method used is a literature study of various scientific articles, industry reports, and trials of several AI platforms commonly used in academia. The stages of activity implementation began with the preparation, implementation and evaluation stages. The results of the activity show that AI has a significant role starting from the reference search stage, literature analysis, manuscript preparation, checking grammar and writing style, to the submission process and selection of suitable journals. AI integration is proven to increase time efficiency, improve manuscript quality, and increase the chances of being accepted by reputable journals. This study recommends the need for training and ethical policies in the use of AI in the academic environment so that its utilization remains in a responsible academic corridor.

Keywords: Artificial Intelligence, Learning Process, Academic Publication, International Journal

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Introduction

In recent years, artificial intelligence (AI) has grown rapidly and has been adopted in various sectors, including utilization in learning and research in higher education. Academics face the challenge of increasingly high quality standards for reputable international journals and pressure to increase publication productivity (Rabbianty et al., 2023). AI comes as a potential solution that can help researchers in various aspects, from the writing process to journal selection. Various AI platforms such as Grammarly, ChatGPT, Elicit, ResearchRabbit, and AI-based journal finder offer various features that can be utilized to support academic publications (Kim et al., 2024; Nguyen et al., 2024).

However, the use of AI in the academic world still requires in-depth understanding and ethical guidance so as not to violate scientific principles. Although the development of artificial intelligence (AI) technology has offered various conveniences in the academic writing process, many lecturers still experience obstacles in adopting and utilizing AI tools optimally. One of the main weaknesses is the low level of digital literacy among lecturers, especially related to understanding the features and functions of various AI applications for academic writing (Ateriya et al., 2025). In addition, some lecturers are still skeptical of the accuracy of the results produced by AI, making them reluctant to fully utilize the technology in the process of preparing scientific articles. Another factor is the limited access to premium versions of AI tools, which often offer more complete and accurate features but require a high subscription fee (Kumalasari et al., 2024; Muaddyl Akhyar et al., 2023). On the other hand, the lack of training and technical assistance also causes many lecturers to be unfamiliar with the integration techniques of various AI tools in writing articles that are in accordance with the standards of reputable international journals (Yahya et al., 2024). As a result, the potential of AI as a tool to improve the quality and efficiency of scientific article writing has not been fully utilized optimally by academics in Indonesia.

This article aims to explore and formulate strategies for learning and optimizing AI in increasing academic publications in reputable international journals, as well as discussing the challenges of lecturers in implementing it and ethics in its use.

Metode

This activity was carried out using a participatory workshop method designed to provide participants with an understanding of the utilization of artificial intelligence (AI) in research and learning, especially the process of writing and publishing scientific articles in reputable international journals. This participatory method was chosen so that participants not only gain theoretical knowledge, but also have practical skills in utilizing AI to improve the quality and chances of article publication in reputable international journals. The problem-solving framework can be seen in Figure 1.

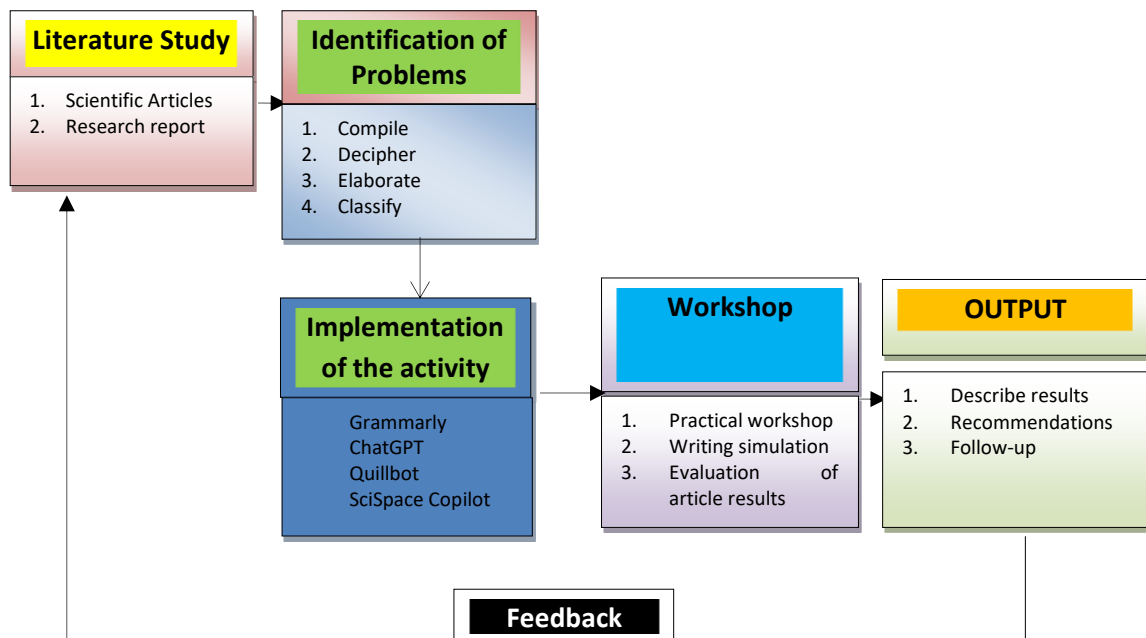


Chart 1. Problem solving framework

The stages of implementing this workshop activity include:

1. Activity Preparation

This stage includes the preparation of activity proposals, making training materials, coordination with resource persons, and data collection of participants who come from lecturers of various study programs. In addition, selection and curation of AI tools that will be used in the workshop, including Grammarly, Quillbot, ChatGPT, Paperpal, and Elicit.

2. Workshop Implementation

The workshop activities were divided into two main sessions, namely:

a. Material Presentation Session

The speakers presented material on publication strategies in reputable international journals and the role of AI in supporting academic writing, including paraphrasing, grammar checking, proofreading, similarity checking, and automatic references.

b. Practice and Simulation Session

Participants directly practiced the use of various AI tools to edit, paraphrase, and draft scientific articles. Simulations were conducted in groups with assistance from the implementation team.

3. Evaluation and Discussion

After the workshop, an evaluation was conducted in the form of FGD (Focus Group Discussion) to measure the increase in participants' understanding of optimizing the use of AI in academic writing. In addition, an open discussion session was held

to accommodate participants' input and experience in using the AI tools that had been introduced.

4. Documentation and Reporting

All activities were documented in the form of photos, videos, and attendance lists. The results of the activities were then compiled in the form of community service reports and scientific articles as a form of dissemination of the results of the activities.

Results and Discussion

This international community service activity was carried out on December 28, 2024 in the Seminar Room of Politeknik Indonusa Surakarta which was packaged through a workshop with the theme “Optimizing the use of artificial intelligence to increase academic publications in reputable international journals”. Attended by participants consisting of 35 lecturers from various study programs. This activity aims to increase the understanding and skills of lecturers in utilizing artificial intelligence (AI) applications to support publications in reputable international journals. The first resource person was Assoc. Prof. Ts. Dr. Mohd Nizam Bin Husen from MIIT (Malaysian Institute of Information Technology) Universiti Kuala Lumpur Malaysia, delivered material on the use of AI tools. The second speaker was Wachid Yahya, M.Pd as a lecturer from the Automotive Engineering Technology Study Program at Politeknik Indonusa Surakarta who delivered material on the use of AI to support research and learning in the Outcome-Based Education (OBE) Curriculum at Politeknik Indonusa Surakarta.

The first material was delivered by Wachid Yahya who discussed the Introduction of the OBE Curriculum and its Challenges, the Role of AI in research and learning in Higher Education, Simulation of the Use of AI for the Preparation of Learning Outcomes (CPL), Course Learning Outcomes, and Semester Learning Plan, AI Applications for Automatic Assessment and Preparation of Learning Outcome Based Questions and Discussion and Workshop on the Application of AI in OBE Learning. The results of the activity show that the utilization of AI applications in supporting the implementation of the OBE Curriculum is very potential to be applied in the university environment. The improvement of participants' understanding results shows that participants are able to understand the basic concepts of AI and how to integrate it into the process of preparing learning tools.



Figure 1. Presentation of material by Wachid Yahya

Based on discussions during the activity, some of the direct benefits felt by the participants include AI applications can help suggest descriptions of Course Learning Outcomes and appropriate learning methods based on the established SLOs, AI can produce higher-order thinking skills (HOTS) based evaluation questions that are integrated with learning outcomes, Some AI applications offer data analysis features for student learning outcomes that can be used to quantitatively measure the achievement of Course Learning Outcomes.

However, several obstacles were also found in the implementation process, including; Limited digital literacy of participants so that although most participants were enthusiastic, some participants still needed intensive assistance to understand more complex AI features. Limited AI applications available in Bahasa Indonesia, where most AI applications are based on English, which is a challenge in the context of education in Indonesia.

In the second part, Assoc. Prof. Nizam delivered workshop materials with points, namely; Strategy for Determining Topics and Targets for Reputable International Journals, Introduction to AI Tools for Academic Writing such as Grammarly, Quillbot, ChatGPT, and Paperpal. Optimization of AI in Paraphrasing, Proofreading, and Similarity Checking, AI for Literature Review and Automatic Reference, Simulation of Article Draft Preparation Using AI, Interactive Discussion and Article Review.



Figure 2. Presentation of material by Assoc. Prof. Ts. Dr. Mohd Nizam Bin Husen

The results of this activity show that the use of artificial intelligence has a positive impact on the effectiveness and quality of the process of writing scientific articles for international publications. Participant responses not only understood the theory, but were also able to apply AI tools in academic writing practices. The benefits felt by participants include; Speeding up the process of editing academic papers, especially in aspects of grammar, academic phrasing, and paraphrasing to avoid plagiarism. Improving the quality of abstracts and the suitability of academic English style according to reputable journal standards. Facilitate the search for references and the latest literature through academic database-based AI. Helping novice authors who still have difficulties in adapting articles to international standards.

However, there are some important notes from the implementation of this activity, namely excessive dependence on AI needs to be avoided, because AI is a tool, not a substitute for academic expertise. Some participants experienced difficulties in effectively integrating the results of various AI applications into whole articles. Limited access to premium AI tools is a challenge in itself, considering that some excellent features are only available in the paid version.



Figure 3. Resource persons and workshop participants

These results are in line with previous research by (Lee et al., 2023) which states that the integration of AI technology in higher education can improve the quality of the learning process and the effectiveness of measuring learning outcomes. In addition, the implementation of AI is considered capable of supporting the acceleration of digitization of education and can contribute meaningfully to education. Specifically related to utilization for academic writing and publications, the results of this activity are in line with a study conducted by Tang et al., (2024) on the need for active participation from researchers in discussions around standardizing generative AI statements in academic research writing. The use of AI in academic writing is proven to improve the quality of manuscripts and the chances of articles being accepted in reputable journals. As a follow-up, it is recommended that similar trainings be held regularly with advanced materials, such as techniques for submitting articles to reputable journals, AI-based reference management, and bibliometric analysis. In addition, the development of workshops based on case studies of cross-disciplinary article writing can be an effective means to expand the scope and benefits of the activities.

Conclusion

Conclusion The workshop on optimizing the use of artificial intelligence (AI) to increase lecturers' academic publications in reputable international journals has been well implemented and received positive responses from all participants. Based on the evaluation results, this activity succeeded in increasing participants' knowledge and skills in utilizing various AI applications to support the process of writing scientific articles, ranging from paraphrasing, grammar checking, and proofreading, to searching for academic references. Increased understanding through participatory discussions showed that this training was effective in increasing participants' skills in using AI to support academic writing in accordance with the standards of reputable international journals. In addition, the hands-on session provided applicative experience for participants, which is expected to be implemented in future academic publication activities.

This activity also identified that further assistance is still needed regarding the optimal use of AI as well as access to premium features of some AI tools. Therefore, similar training is recommended to be carried out on an ongoing basis with more specific material, such as article submission strategies, the use of AI in bibliometrics, and article manuscript review to increase the number of scientific publications of lecturers at the international level.

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Finally, the author hopes that this article can make a positive contribution to the development

of strategies to increase lecturers' academic publications in reputable international journals, especially through the optimization of artificial intelligence technology.

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