

Utilizing AI (Artificial Intelligence) Platforms as Learning Media for MIPA Students at Palangka Raya University

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Abstract. This research analyzes the use of AI (Artificial Intelligence) platform as a learning media for Mathematics and Natural Sciences Education students at Palangka Raya University. As technology develops, AI is often used in higher education as a system that mimics human intelligence. Various AI platforms have diverse functions that support student learning activities. The research method used descriptive qualitative with data collection through questionnaires on Google Form. The results show that students actively use AI, with ChatGPT being the most frequently used. AI makes it easier for students to obtain information quickly, makes the learning process more effective, and learning more interesting. However, there are risks of AI dependency and data inaccuracy. This research also describes the utilization of AI to contribute to improving the quality of learning for MIPA Education students at Palangka Raya University.

Keywords: Artificial Intellegence, Students, Learning Media

INTRODUCTION

In today's digital era, information and communication technologies have become increasingly advanced, developing at a rapid pace. This technological advancement has brought significant changes, including in the field of education [1][2]. One of the technologies that is now widely applied is Artificial Intelligence (AI). AI is an advanced system designed to replicate human intelligence as accurately as possible [3][4]. According to Astini (2022), AI possesses characteristics similar to human intelligence, such as language, visual, and audio capabilities [5]. In addition, Alatas (2019) states that AI can assist in solving problems and making decisions [6]. In the field of education, AI can function as a tool that supports the learning process and facilitates faster access to information. One of AI's main advantages is its ability to serve as a learning medium that helps students understand material more deeply and efficiently [7]. Soeprajitno (2019) highlights that AI enables the development of learning solutions tailored to individual needs [8]. A survey conducted by UNESCO showed that 11 out of 51 countries surveyed have developed and implemented AI

curricula [9]. The application of AI technology is also no longer unfamiliar among university students, particularly those in the Mathematics and Natural Sciences Education (MIPA) program at Universitas Palangka Raya (UPR). Many MIPA Education students at UPR utilize various types of AI platforms with different functions and uses in their learning activities. Therefore, this study aims to describe the use of AI platforms as learning media in the learning process of MIPA Education students at UPR.

METHOD

This research employed a qualitative descriptive approach, with the research subjects being students from the Faculty of Mathematics and Natural Sciences Education (MIPA) at the University of Palangka Raya (UPR), specifically those from the 2022 and 2023 cohorts. The participants came from four study programs: Chemistry Education, Biology Education, Physics Education, and Mathematics Education.

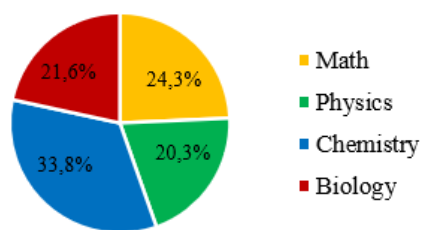


Figure 1 Percentage of respondents based on study programs in the MIPA Education Faculty at UPR

This approach was chosen because it can describe the utilization of AI as a learning medium based on the experiences of UPR MIPA education students. Data was collected through an online questionnaire distributed through Google Forms.



Figure 2 Questionnaire Barcode
(https://bit.ly/PenggunaanAI_Sebagai_MediaPembelajaran)

Google Forms was chosen for its accessibility and efficiency in collecting and organizing questionnaire responses into spreadsheets. This allowed for easier data analysis and result presentation through tables or graphs, while also saving time. The research procedure consisted of three main stages: preparation, data collection, and data processing.

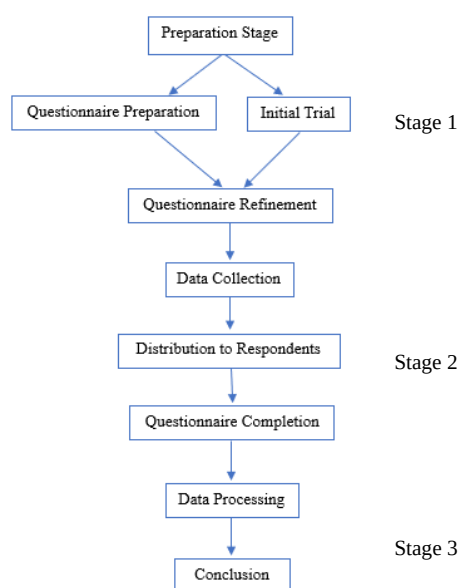


Figure 1 Research Procedure

In the preparation stage, the questionnaire was drafted and then piloted to ensure the functionality and relevance of each question. After the trial, revisions were made to finalize the questionnaire before continuing to data collection. The finalized questionnaire was then distributed online to the respondents, who were students majoring in MIPA education at UPR, and they were asked to complete it. After collecting the responses, qualitative analysis was carried out to identify how AI platforms are used as learning media.

RESULTS

Use of AI by MIPA Education Students at UPR

The research results show that students in the MIPA Education program at UPR actively utilize various AI platforms as learning media, with a significant usage rate of 42.5%. This indicates that students frequently or regularly use AI in their learning activities.

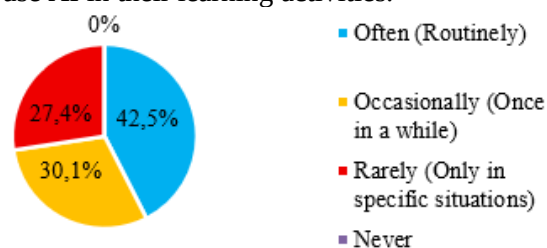


Figure 2 Percentage of AI usage by MIPA Education students at UPR

Table 1 Percentage of AI platform usage

AI Tool	Percentage (%)
Preplexity	1%
Promind AI	2%
Claude	5%
Writenfull	7%
Gamma APP	3%
GPT Zero	4%
Braintext AI	6%
Shortly AI	8%
Grammarly	15%
Slidego	20%
Google AI	40%
Gemini	50%
ChatGPT	58%

Based on the percentages in the table, the three most frequently used AI platforms by MIPA Education students at UPR are Google AI, Gemini, and ChatGPT. Students often use ChatGPT to help answer questions, search for references or information, write assignments, engage in discussions or Q&A, share stories or

personal thoughts, and even learn new things [10]. Besides ChatGPT, some students also use other AI platforms such as Grammarly, Braintext AI, Slidego, Gamma APP, Claude, Preplexity, GPT Zero, Bard, and Gemini to assist in solving learning problems or checking grammar [11][12][13]. These AI tools provide suggestions and real-time feedback, enabling students to learn anytime and anywhere while offering recommendations tailored to their needs [10].

Table 2 Distribution of AI platform usage purposes by MIPA Education students at UPR

Purpose of AI Use	Description	Percentage (%)
Reference or information search	Students use AI to obtain fast and accurate information	65,8%
Assistance in assignment preparation	AI is used to help complete academic tasks such as papers or reports	41,1%
Practice questions	AI is used to complete or understand assigned questions	0%
Learning new things	Students use AI to expand knowledge or learn new materials	6,8%
Discussion, Q&A, or venting	AI is used for interactive discussions or Q&A related to learning	5,5%

Most students (65.8%) use AI platforms as references or for information searching, while 41.1% use them to assist in preparing assignments. Although the implementation of AI as a learning medium at UPR's MIPA Education program has had a positive impact, student satisfaction with AI tends to be moderate, with a satisfaction rate of approximately 60%.

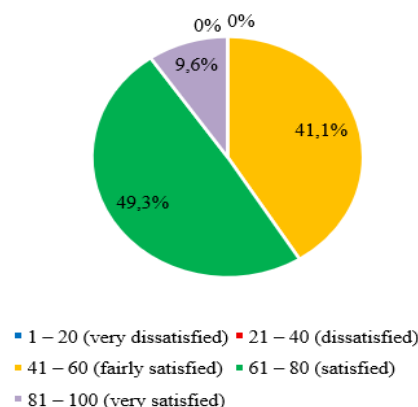


Figure 5 Percentage of student satisfaction in using AI

Despite many advantages, there are some challenges. Overdependence on this technology is a major threat to students. In the long term, students' analytical thinking, creativity, and independence may be underdeveloped if they prefer to rely on AI rather than think critically or find answers on their own [14]. Additionally, some educators remain reluctant to use AI in teaching or encourage students to use it, fearing students might merely copy information without understanding the concepts [15]. However, among students, the use of AI is already quite familiar.

AI offers many benefits, but sometimes the information provided does not meet expectations, especially when students need more up-to-date data or when AI gives inaccurate or invalid answers. Therefore, AI platforms still require further development to achieve significant improvements in their usage. Moreover, it is expected that students use AI technology wisely and remain critical of the data they obtain.

CONCLUSION

In the MIPA Education Department at Universitas Palangka Raya, the use of AI as a learning medium has become increasingly familiar among students. The AI usage rate of 42.5% indicates that students actively and frequently incorporate AI into their learning processes. With the help of AI platforms, learning becomes more engaging, and information is more easily accessible.

However, students must remain cautious by not relying blindly on AI-generated information. They should verify and critically examine sources before using the data. It is also

essential for students to maintain their critical and creative thinking skills even when utilizing AI technology.

Furthermore, a broader sample scope is needed for future studies to identify the various factors that may influence the use of AI platforms in education and to support further research in this area.

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