# Analysis of the Influence of Meta AI Usage on the Learning Interests of Informatics Education Students

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#### **Abstract**

This study analyzes the influence of Meta AI usage on the learning interest of Informatics Education students in the digital era. The main issues addressed are the suboptimal integration of Meta AI in learning processes and students' readiness to adapt to new technologies. Using a mixed-method approach, data were collected through questionnaires and with second and fourth-semester students. The results indicate that Meta AI significantly enhances learning interest, facilitates information access, and boosts students' motivation and curiosity. However, challenges regarding technology dependence and privacy issues remain. This research provides recommendations for developing adaptive and effective Meta AI-based learning strategies in higher education.

Keywords: Meta AI, Learning Interest, Informatics Education, Influence, Analysis

## INTRODUCTION

The development in the field of computer technology and telecommunications has been very rapid to the point of touching aspects of human daily life. Without us realizing it, various technological products have become basic necessities for people in Indonesia. The use of television, telephone, fax, mobile phones, and now computers are no longer considered something foreign or new, especially in big cities. All groups, from parents to children, are involved in following the rapid progress of this era. (Diantama, 2023; Effiyati Prihatini, 2017)

The development of artificial intelligence (AI) technology has brought significant changes in various aspects of life, including in the field of education. The use of AI in the learning process is believed to be able to increase students' interest in learning through a more personal, interactive, and adaptive approach to individual learning needs. Meta AI as one of the innovations in AI technology offers great potential to support the learning process, especially for informatics education students who are highly dependent on digital technology. Several studies have shown that the integration of AI in learning can increase student motivation and engagement, thus having a positive impact on their interest in learning.

For example, research by Meiriza et al. (2024) found a positive and significant relationship between the use of AI and the learning interest of generation Z students at Medan State University, indicating that the

higher the use of AI, the higher the students' learning interest. In addition, AI can also provide fast feedback and help students understand complex material, thereby strengthening their academic competence. However, there are also challenges related to excessive dependence on AI which can reduce students' critical thinking and independent analysis skills. Therefore, the use of AI must be balanced with the right approach in order to maximize its benefits in increasing learning interest without reducing students' critical thinking skills.

Artificial intelligence (AI) has been widely used in education to improve the personalization, efficiency, and accessibility of learning (Abdurrahman et al., 2025). By creating flexible, interactive, and personalized learning experiences, AI plays a vital role in enhancing students' learning motivation. Through immediate feedback and access to relevant information, this technology helps students overcome learning anxiety. (Acosta-Enriquez et al., 2024)

This problem is thought to arise due to the less-than-optimal integration of Meta AI in the learning process that is in accordance with the characteristics of Informatics Education students. In addition, factors of technological readiness and students' ability to adapt to new technologies are also the main causes of low interest in learning even though Meta AI has been implemented. Therefore, this study attempts

to analyze the effect of the use of Meta AI on the learning interest of Informatics Education students with a quantitative approach. The action plan taken is to conduct a survey and statistical analysis to measure the relationship between the use of Meta AI and learning interest, as well as provide data-based recommendations for the development of more effective learning methods. This approach is supported by the theory of learning motivation which states that interactive and relevant technology can increase learning interest (Mahmudah et al., 2019).

Meta AI is an artificial intelligence technology that is able to adjust content and learning methods according to the needs and characteristics of users in real-time. Measurement of Meta AI usage in this study includes frequency of use, level of interactivity, and ease of access by students.

Interest is one of the psychological elements that can motivate someone to achieve a goal. When someone is interested in something, they tend to focus or feel more happiness in it. Conversely, if something does not provide a sense of happiness, the person will lose interest in it. Therefore, how much attention or happiness a person has towards something is influenced by the level of interest they have. Thus, interest in learning can be understood as a person's tendency to feel happiness naturally without any coercion, which in turn can result in changes in knowledge, skills, and behavior. (Effiyati Prihatini, 2017).

The development of AI has received a lot of attention from academics in recent decades (Rathore, 2023), especially in the field of education (Daun & Brings, 2023). Various studies explain that AI has an important role in learning and can even affect students' academics.

The presence of AI brings two opposing sides. On the one hand, AI is useful in increasing personalization in learning, facilitating adaptive learning, and providing rich and interactive learning resources (El Naggar et al., 2024). Previous studies have shown that the use of AI has a positive influence on student performance in terms of Science, Technology, Engineering, Mathematics (STEM) skills.

This research is expected to provide a significant empirical contribution to the understanding of the influence of AI technology

in higher education, especially in the Informatics Education study program, as well as become the basis for developing more effective and adaptive learning strategies in the digital era.

#### **METHOD**

Based on the type of data taken and collected, the research is a mixture of quantitative and qualitative (mixed method). However, this study tends more towards qualitative research, while this research only involves quantitative research as supporting data, namely questionnaires.

Questionnaires are data collection techniques carried out by giving a set of written questions or statements to respondents to answer (Harga et al., n.d.) The questionnaire will be designed to collect information about finding the extent of the influence of Meta AI use on the learning interests of Informatics Education study program students. The population used is Informatics Education students in Semester 2 and Semester 4. While the sample is 20 students from semesters 2 and 4 with random sampling.

## RESULTS AND DISCUSSION

Based on the results of the analysis involving quantitative data using a questionnaire, the following results can be drawn:

1. Analysis of the use of Meta AI in learning. In the process of using Meta AI, 35% of students stated that they very often use Meta AI in the learning process in class and outside the classroom, for example in the process of working on assignments.



Figure 1. Analysis of the use of Meta AI in learning.

2. Meta AI makes it easier for us to do assignments Meta AI really helps students in finding a source of information/references,

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and most of them often use Meta AI in finding references.

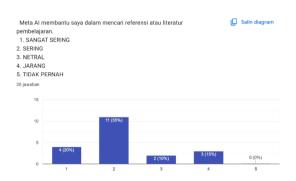


Figure 2. Meta AI makes it easier for us to do assignments. Meta AI really helps students in finding a source of information/reference.

3. Utilization of Meta AI In the assistance of Meta AI 40%, students often feel that study time is more efficient and easier with the help of Meta AI.



Figure 3. Utilization of Meta AI in assistance

4. Learning using Meta AI makes students more motivated in their learning. In this case, students said that 55% often felt motivated to learn after using Meta AI.



Figure 4. Meta AI helps with tasks

5. Analysis of deeper curiosity towards learning materials. In this case, 35% of Informatics Education students very often and 30% often

use Meta AI to dig deeper into the material they want to learn.



- Benefits of using Meta AI with the help of Meta AI, Informatics Education students stated that they used or searched for additional references from the subjects or materials taught 45% more often by utilizing Meta AI.
- 7. Analysis of knowledge about Meta AI. In this case, Informatics Education students realize that they very often know the function of using Meta AI.



8. Ease of using Meta AI. In this case, 35% of Informatics Education students often use Meta AI as a source to add information about the material during lectures.



Based on the discussion above, it can be concluded that the questionnaire analysis shows that Meta AI makes learning easier, especially in finding references and doing assignments. Students feel that learning is more efficient, easy

to understand, and motivated after using Meta AI. They also tend to use AI to dig deeper into the material and find additional references. Informatics Education students are aware of the function of Meta AI and consider it easy to use as a source of lecture information.

## **CONCLUSION**

Based on the research results, the use of Meta AI in the learning process for informatics education students has been proven to have a significant influence on increasing interest in learning. The application of Meta AI enables personalization of learning, provides real-time feedback, and supports interaction collaboration through digital platforms that are relevant to the needs of today's mass students. In addition, Meta AI facilitates students in understanding complex materials, and provides the resources needed efficiently. This has an impact on increasing student involvement. intrinsic motivation, and self-confidence in following the learning process.

However, the use of Meta AI also poses challenges, such as the potential for a decline in critical thinking skills due to dependence on technology, as well as ethical issues related to student data privacy. Therefore, it is important for lecturers, technology service providers, and students to maximize the benefits of Meta AI while maintaining a balance between the use of technology and the development of critical independent thinking skills. (1) development can be focused on the integration of adaptive and interactive Meta AI to support various student learning styles, (2) further research is recommended to evaluate the longterm impact of Meta AI use on critical thinking skills and digital ethics, and (3) it is important to design policies that prioritize data protection and privacy in the implementation of Meta AI in higher education environments.

#### SUGGESTION

As a writer, I will focus on three main things to improve this article. First, I will clarify the methodology, explain the details of data collection and analysis, and ensure the validity of the questionnaire and statistical methods used. Second, I will optimize the data visualization,

ensuring all graphs and tables are clear and consistent.

Finally, I will deepen the discussion of the results by linking them to the theory of learning interest, comparing them with previous research, and providing practical suggestions and concrete solutions to overcome the challenges.

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