

Perception of Artificial Intelligence on the Understanding of Aswaja Courses in IAINU Kebumen Students

Anggi Eka Saputri¹, Nurul Desmawati², Maula A'dilah³, Siti Nur Hawa⁴, Indah Asfrianingsih⁵, Umi Khumairoh⁶, Imam Pratama⁷, Siti Fatimah⁸, Agus Salim Chamidi⁹, Fikria Najitama¹⁰, Ahmad Murtajib¹¹, Nadia Raifah Nawa Kartika¹²

¹Islamic Education Department, Faculty of Tarbiyah, Nahdlatul Ulama Islamic Religious Institute Kebumen, Jl. Tentara Pelajar No 55 B Kebumen 54312, Indonesia. Tel. +62-287-385902, Fax. +62-287-385902.

Corresponding author

¹anggiekas11@gmail.com

Abstract: The widespread use of artificial intelligence (AI) tools to support learning has become a pros and cons among academics. Ease of accessing learning materials, including all the information students need to do assignments. This article discusses the influence of artificial intelligence on students' understanding of the Aswaja course. Artificial intelligence (AI) systems can integrate students' progress, spot their weak spots, offer resources and personalized learning suggestions. One of them is helping students to find material or study materials for the Aswaja course. Artificial intelligence (AI) can also help lecturers design lessons and analyze student performance data to engineer new learning interventions and lesson plans. The method used in this research is a quantitative method. The subjects in this research were students at the Nahdlatul Ulama Islamic Institute, Kebumen. Data collection was used using a questionnaire created using Google Forms and distributed online. However, with all the conveniences offered, of course there are concerns about the potential of artificial intelligence to make students independent. Therefore, we need to continue to make placements in using artificial intelligence. AI is used to help us increase our knowledge and make it easier to access learning, not to be used as a dependency in doing all the assignments and exams.

Keywords: Artificial Intelligence, Technology, College

Introduction

In recent decades, technological advances have brought significant changes in various aspects of life, including in the world of education. One of the most striking innovations is artificial intelligence (AI), which has changed the way we interact with information and with each other. AI, which is designed to mimic human cognitive abilities, not only serves as a tool, but also as a paradigm changer in the teaching and learning process. This development presents new challenges for educators and students, where the demand to integrate technology in learning is even more urgent. With AI's ability to personalize learning experiences, provide quick feedback, and automate

administrative tasks, there are great hopes that this technology can improve the quality of education.

However, behind this potential, there are various concerns about the negative impact that it may cause, such as bias in the system, dependence on technology, and unrealistic expectations. Therefore, it is important to understand how artificial intelligence can be effectively utilized in education, while considering the challenges that exist. With the right approach, AI can be a tool that not only improves learning outcomes, but also shapes students' character to face an increasingly complex world. The use of artificial intelligence can also improve the accessibility of education. AI can be used to provide distance education (elearning) with good quality and allow

wider access to education for students in remote areas or those with physical limitations (Yulianto & Suryadi, 2020). In terms of learning management, artificial intelligence can also assist educators in managing student data, scheduling lessons, and providing recommendations related to improving student performance. AI can automate administrative tasks so that educators can focus on other important aspects of the learning process (Astuti, 2021).

AI's approach in education can also be helpful in detecting and preventing plagiarism. AI can check the similarity between student work and other resources available online, thereby improving academic integrity in the world of education (Alifiani & Rahman, 2019). In the context of curriculum development, artificial intelligence can help in designing a curriculum that is more relevant and responsive to the times. By using data generated by AI, the curriculum can be adjusted to future needs and demands (Pratiwi, 2020). However, while artificial intelligence has great potential, challenges also arise in its application. One of the main challenges is the privacy and security of student data. It is important to maintain the confidentiality of students' personal data so that it is not misused or exploited (Purba & Azizah, 2021). Artificial intelligence has a significant impact in the field of education. With personalized learning, interactive learning experiences, accurate evaluations, and efficient management, education can be more effective and inclusive. However, keep in mind that the use of AI in education also needs to consider ethics, privacy, and student data security to ensure optimal benefits (Wiratama, 2021). This has led to an increasing public need for higher education institutions that can be accessed by all levels of society, in line with the development and emergence of various community needs (Rifky, Yani, & Cahyani, 2023). Therefore, as intellectuals, we should be sensitive and also not anti-the development of information technology because all of this is an inevitability that cannot be avoided, therefore in this modern era we should recognize and study it so that we are not left behind, especially in higher education. The purpose of this article is to discuss all of this so that the world of

education, especially higher education, can take lessons from the development of information technology.

Materials and Methods

This study uses a quantitative approach, which aims to measure and analyze the relationship between variables statistically. This approach allows researchers to collect numerical data that can be analyzed to arrive at valid conclusions. The type of research taken is descriptive, which focuses on describing the characteristics of the phenomenon being studied. In this case, this study aims to determine the perception of artificial intelligence towards the Aswaja course in students of the Nahdlatul Ulama Islamic Religious Institute of Kebumen. This descriptive research will provide a clear and systematic picture of the frequency and nature of the observed symptoms. Data collection was carried out through a questionnaire containing a list of questions. This questionnaire was distributed to 81 respondents at the Nahdlatul Ulama Islamic Religious Institute of Kebumen. Using questionnaires, researchers can collect direct information from respondents regarding their experiences and views on the use of artificial intelligence.

This study uses independent variables and bound variables, the free variable is artificial intelligence and the bound variable is student understanding and based on the theoretical review, there are certain indicators for each variable that will be used as the basis for compiling research questions. This indicator helps researchers in measuring students' understanding of Aswaja courses. Research questions can be formulated based on predetermined indicators. This question will guide the research in collecting and analyzing data effectively.

The research method used in this study provides a clear framework to understand the perspective of artificial intelligence on the understanding of Aswaja's eyes. Through a quantitative approach and systematic data collection, this research is expected to provide in-depth insights into the dynamics of the use of

artificial intelligence among students. Based on the theoretical review that has been explained earlier, there are indicators of each free and bound variable that can be detailed into research questions as follows:

Procedures

Sub-procedures-1

Table 1. Operational Research Concept

Variable	Statement	No Item	Scale
Variable(X) Artificial Intelligence	Students believe that AI can provide a deep contextual understanding of Aswaja values.	1	Likert
Variable(Y) Student Understanding	Students feel that AI can motivate them in learning Aswaja	2	Likert
	Students often use AI to learn Aswaja.	3	Likert
	Students often engage in direct question-and-answer sessions using AI applications in Aswaja learning.	4	Likert
	With the ease provided by AI, students feel dependent on it for learning Aswaja.	5	Likert
	According to students, AI can help in learning Aswaja courses.	6	Likert
	The majority of students use AI technology like ChatGPT in Aswaja learning.	7	Likert
	AI technology can make it easier for students to access Aswaja learning resources.	8	Likert
	Students feel that AI has a significant impact on their understanding of the basic concepts of Aswaja.	9	Likert
	Students often use AI to write Aswaja papers.	10	Likert

Sub-procedures-2

Data was measured using a Likert scale. The Likert scale is a measurement method used to obtain quantitative data on the attitudes, opinions, or perceptions of an individual or group. In a Likert scale, respondents are asked to complete a questionnaire containing a series of questions and indicate their level of agreement. The questions or statements used in this research are typically referred to as research variables. The Likert scale in this research uses the following words: Strongly Agree (SS), Agree (S), Disagree (TS), and Strongly Disagree (STS).

Data analysis

The data analysis technique used in this research is descriptive analysis. Descriptive analysis is a research method that involves collecting data as it is, then organizing, processing, and analyzing the data to provide an overview of the existing problem. In descriptive analysis, data is usually presented in the form of ordinary tables or frequency tables, graphs, bar charts, line charts, pie charts, measures of central tendency, measures of data dispersion, and so on.

Results and Discussion

Result-1

Research findings indicate that students agree that AI helps them understand the material. This aligns with research conducted by Muhammad Amirul Muchminiin et al. in 2024, which found that AI has a positive impact on student learning interest, including deeper and more interactive understanding of Aswaja material.

Respondent Characteristics Overview

This research sampled respondents from semesters 1, 3, and 5 who had taken the Aswaja course.

Table 1. Respondent Frequency

Characteristics	Sample size	N= 81(%)
Semesters 1	16	19,8%
Semesters 3	47	58%
Semesters 5	18	22,2%

Table 1. shows that there were 81 respondents in the study. The frequency of respondents from semester 1 was 16 students (19.8%), from semester 3 was 47 students (58%), and from semester 5 was 18 students (22.2%).

Result-2

(Table 2.

No.	Statement	N (S)	N (S)	N (S)	N (S)	Rerata (%)	Category
1	Students believe that AI can provide a deep contextual Aswaja values.	18,5 %	75,3 %	6,2 %	-	5,090%	Agree
2	Students feel that AI can motivate them in learning Aswaja.	17,5 %	60 %	17,5 %	5%	2,148%	Agree
3	Students often use AI to learn Aswaja.	12,3 %	34,6 %	48,1 %	4,9 %	4,370%	Disagree
4	Students often applications in Aswaja learning.	53,1 %	27,1 %	13,5 %	6,1 %	5,266%	Strongly Agree
5	With the ease provided by AI, students feel dependent on it for learning Aswaja.	13,6 %	54,3 %	32,1 %	-	4,709%	Agree
6	According to students, AI can help in learning Aswaja courses.	18,5 %	75,3 %	6,2 %	-	5,090%	Agree

7	The majority of students use AI technology like ChatGPT in Aswaja learning.	70%	15,7%	9,5%	4,8%	5,566%	Strongly Agree
8	AI technology can make it easier for students to access Aswaja learning resources.	13,6%	43,2%	39,5%	3,7%	4,527%	Agree
9	Aswaja Students feel that AI has a significant impact on their understanding of the basic concepts of Aswaja.	8,8%	70%	20%	1,2%	4,770%	Agree
10	Aswaja Students often use AI to write Aswaja papers.	42%	43,2%	9,9%	4,9%	5,213%	Agree
	Rerata Akhir (%)	56%	65%	2%	5%		

Discussion

Table 2 shows that the average IAINU Kebumen student, with a score range of 5,090%, indicates agreement that AI can provide a deep contextual understanding of Aswaja values. This is broken down into 18,5% strongly agree, 75,3% agree, and 6.2% disagree. The majority of students agree that AI can motivate them in learning Aswaja, with a score range of 2,148%. This includes 17,5% strongly agree, 60% agree, 17,5% disagree, and 5% strongly disagree. Most students disagree that AI is frequently used for Aswaja learning, with a score range of 4,370%. This includes 12,3% strongly agree, 34,6% agree, 48,1% disagree, and 4,9% strongly disagree. Students often engage in direct question-and-answer sessions using AI applications in Aswaja learning, with a score range of 5,266%. This includes 53,1% strongly agree, 27.1% agree, 13.5% disagree, and 6.1% strongly disagree. With the ease provided by AI, students feel dependent on it for learning, with a score range of 4,709%. This includes 13,6% strongly agree,

54,3% agree, and 32,1% disagree. According to students, AI can help in learning Aswaja courses, with a score range of 5.090%. This includes 18,5% strongly agree, 75,3% agree, and 6,2% disagree. The majority of students use AI technology like ChatGPT in Aswaja learning, with a score range of 5,566%. This includes 70% strongly agree, 15,7% agree, 9,5% disagree, and 4,8% strongly disagree. AI technology can make it easier for students to access Aswaja learning resources, with a score range of 4,527%. This includes 13,6% strongly agree, 43,2% agree, 39,5% disagree, and 3,7% strongly disagree. Students feel that AI has a significant impact on their understanding of the basic concepts of Aswaja, with a score range of 4,770%. This includes 8,8% strongly agree, 70% agree, 20% disagree, and 1,2% strongly disagree. Students often use AI to write Aswaja papers, with a score range of 5,213%. This includes 42% strongly agree, 43,2% agree, 9,9% disagree, and 4,9% strongly disagree.

Conclusions

This research demonstrates that the use of artificial intelligence (AI) has a positive impact on the understanding of Aswaja courses among students at IAINU Kebumen. The majority of respondents agree that AI can provide a deeper understanding of Aswaja values and motivate them in the learning process. While there are concerns about dependence on technology, the results show that AI can be used as a tool that enriches the learning experience without diminishing student independence. It is important for educational institutions to utilize AI wisely, while considering ethical and data security aspects, to improve the quality of education and accessibility for all students. With the right approach, AI can be an effective partner in facilitating learning and character development for students in this digital age.

Overall, this research provides initial evidence that AI has the potential to enhance the learning interest of Aswaja among IAINU KEBUMEN students. The effective utilization of AI in the teaching and learning process can be a solution to improve the quality of education in Indonesia.

References

- Alam, A. (2021). Possibilities and Apprehensions in the Landscape of Artificial Intelligence in Education. *2021 International Conference on Computational Intelligence and Computing Applications (ICCICA)*, 1–8.
- Alifiani, R., & Rahman, R. (2019). Penerapan Kecerdasan Buatan untuk Mendeteksi Plagiat dalam Tugas Akademik. *Jurnal Teknologi Informasi Dan Ilmu Komputer*, 6(2), 152-160.
- Astuti, S. (2021). Pemanfaatan Teknologi Kecerdasan Buatan dalam Manajemen Pembelajaran. *Jurnal Pendidikan Dan Teknologi Informasi*, 8(1), 37–45.
- Chen, L., Chen, P., & Lin, Z. (2020). Artificial Intelligence in Education: A Review. *IEEE Access*, 8, 75264–75278
- Chung, S., Zhan, Y., Noe, R. A., & Jiang, K. (2022). Is it Time to Update and Expand Training Motivation Theory? A meta-analytic Review of Training Motivation Research in The 21st Century. *Journal of Applied Psychology*, 107(7), 1150–1179.
- Muchminiin, M. A., Kevin, M., Rahmadhani, A., Muqorobin, S., Mustaghfirullah, F., & Luthfi, O. S. (2024). Pengaruh Penggunaan Artificial Intelligence (AI) Terhadap Minat Belajar Mahasiswa Teknik Informatika Angkatan 2022. *Jurnal Teknik Mesin, Industri, Elektro, dan Ilmu Komputer*, 2(Pengaruh Penggunaan Artificial Intelligence (AI) Terhadap Minat Belajar Mahasiswa Teknik Informatika Angkatan 2022), 56–62. <https://doi.org/10.61132/mars.v2i4.235>
- Naila, I., Atmoko, A., Sukma Indra Dewi, R., Kusumajanti, W., Guru Sekolah Dasar, P., Keguruan dan Ilmu Pengetahuan, F., Muhammadiyah Surabaya, U., Doktor Pendidikan Dasar, P., & Pascasarjana, S. (2023). Pengaruh Artificial Intelligence Tools terhadap Motivasi Belajar Siswa Ditinjau dari Teori Rogers The Influence of Artificial Intelligence Tools on Student Motivation Given Rogers' Theory. <http://journalfai.unisla.ac.id/index.php/at-thulab/index>
- Purba, F. N., & Azizah, R. A. (2021). Implikasi Kecerdasan Buatan dalam Privasi dan Keamanan Data Siswa. *Jurnal Informatika Mulawarman*, 16(1), 32–40.
- Rifky, S. (2024). Dampak Penggunaan Artificial Intelligence Bagi Pendidikan Tinggi. *Indonesian Journal of Multidisciplinary on Social and Technology*, 2(1), 37–42. <https://doi.org/10.31004/ijmst.v2i1.287>
- Rifky, S., Yani, A., & Cahyani, D. (2023). Implementasi Manajemen PTKIS Berbasis Pondok Pesantren (Studi di STISHK Kuningan). *Jurnal Manajemen Pendidikan Dasar, Menengah Dan Tinggi [JMP-DMT]*, 4(4), 406-411.
- Saleh, G., & Pitriani, R. (2018). Pengaruh Media Sosial Instagram dan WhatsApp Terhadap Pembentukan Budaya "Alone Together." *Jurnal Komunikasi*, 10(Pengaruh Media Sosial Instagram dan WhatsApp Terhadap Pembentukan Budaya "Alone Together"), 103–114.
- Setiawi, A. P., Patty, E. N. S., & Making, S. R. M. (2024). Dampak Artificial Intelligence dalam Pembelajaran

- Sekolah Menengah Atas. *Indo-MathEdu Intellectuals Journal*, 5(1), 680–684.
<https://doi.org/10.54373/imeij.v5i1.826>
- Wiratama, I. K. (2021). Pemanfaatan Kecerdasan Buatan dalam Pendidikan: Tantangan dan Etika. *Jurnal Teknologi Pendidikan*, 24(1), 15–25.
- Yulianto, A. B., & Suryadi, D. (2020). Pemanfaatan Kecerdasan Buatan dalam Sistem Pembelajaran Jarak Jauh. *Jurnal Teknologi Pendidikan*, 22(2), 125-134.