

Implementation of Islamic Education Learning with Artificial Intelligence (CHATGPT)

Ziyadul Muttaqin

UIN K.H. Abdurrahman Wahid Pekalongan

E-mail: ziyadul.muttaqin@mhs.uingusdur.ac.id

Abstract

ChatGPT is an artificial intelligence application that has experienced rapid development in recent years. ChatGPT is a chatbot developed by OpenAI and uses advanced natural language processing technology. This study aims to analyze the implementation of Islamic Education learning using ChatGPT. This study used the literature study method by looking for related research in books, journals, and other scientific works. The study results show that implementing Islamic education using ChatGPT provides benefits in increased accessibility, personalized learning experiences, and adaptive instructions. The use of ChatGPT by teachers can be used in planning activities, evaluating learning, and increasing creativity in learning. Whereas for students, ChatGPT sparks creativity, completing assignments in finding ideas, language, and library resources. Even though it has advantages in speed of access and language, the use of chatGBT has challenges related to the authenticity and accuracy of the information that users need to validate, especially in matters of religion. Academics need to pay attention to ethical and moral values that uphold academic values in using ChatGPT. The potential for using ChatGPT to improve Islamic education learning requires further research to optimize its integration in the educational context.

Keywords: *ChatGPT, Artificial Intelligence, Islamic Education.*

Introduction

Islamic education has an important role in shaping the character and religious values of the Muslim generation. In the digital era and increasingly developing technology, using artificial intelligence (AI) in the educational context is an interesting topic (Mambu et al., 2023:2689). One form of AI that can be used is ChatGPT, which is an AI language model developed by OpenAI. In Islamic education, implementing using ChatGPT can provide new benefits and opportunities (Fauzi et al., 2023:14886; Manik et al., 2023:2297). ChatGPT can provide human-like interactions as a virtual assistant for studying and discussing Islamic education learning. By using ChatGPT, students can get answers to their questions about religion quickly, whenever and wherever they are.

The use of ChatGPT in learning process of Islamic Education can potentially support teachers in delivering material interestingly and interactively (Nailus & Cahyo Hasanudin, 2023:593). By leveraging ChatGPT, teachers can create a more personalized learning experience where students can actively interact with this AI model. ChatGPT's ability to provide instant feedback allows additional explanations or corrections to be provided easily. Implementing ChatGPT in learning Islamic Education opens opportunities for students to learn in an interesting and in-depth way and gain a more comprehensive understanding of concepts in Islamic Education.

This article aims to analyze the application of Islamic Education learning using ChatGPT. The main focus of this research is to present and describe the potential and benefits of using ChatGPT as a tool for teachers and students in the learning process. Also, this article will review some of the challenges to be considered when implementing artificial intelligence in learning Islamic Education, such as the accuracy of the resulting responses and the importance of maintaining the religious values being taught. ChatGPT in Islamic education is expected to provide valuable insights for educators, researchers, and practitioners in Islamic Education, so they can optimize the potential of artificial intelligence in increasing the effectiveness and efficiency of religious learning for Muslim students.

Methods

In this research, the method used was library research. Nazir in Sari (2020:43) explained that library research allows researcher to search literature by reading, recording, and processing research data. Mirshad in Sari(Sari, 2020:44) explained that the steps for analyzing this research data were: a) Finding data sources relevant to the research topic in the form of scientific journals, books, seminar papers, and other scientific works (Munandar, 2022:10-11). b) Process data by involving thorough reading and understanding of existing material. c) Perform critical analysis with a deep understanding of the data that has been processed. d) Summarize the research results based on data analysis and interpretation. The researcher summarizes the main findings, relates them to the research objectives, and presents clear and credible conclusions.

Results

ChatGPT stands for "Chat-based GPT," a version of the generative pre-trained transformer (GPT) language model designed for conversational or chat communication tasks. OpenAI developed this model and used a deep learning approach to generate responsive and context-appropriate text in conversations. GPT (Generative Pre-trained Transformer) is a language model developed by OpenAI. GPT uses a transformer architecture, a powerful neural network that

processes text and understands the relationship between words in a given context. The GPT model is trained on large volumes of text data from multiple sources and develops an understanding of the text's grammar, structure, and content (Hosni et al., 2023:iii-v).

ChatGPT, made by OpenAI, has become a leading technological innovation that positively impacts various fields, including education (Lo, 2023; Mhlanga, 2023). In the context of learning Islamic education, AI has great potential to increase the effectiveness and efficiency of the learning process. For teachers and students, ChatGPT can provide significant benefits if used optimally. For teachers, ChatGPT can be a tool to help convey learning material interestingly and interactively. This language model can provide feedback quickly and accurately, assisting teachers in providing additional explanations or corrections when needed. In addition, ChatGPT can assist teachers in compiling more creative learning content according to student needs.

Meanwhile, for students, ChatGPT can be an interactive learning partner. Students can interact with this AI model actively, ask questions, and get informative answers. This can increase students' learning motivation and help them understand the material more deeply. The use of ChatGPT in learning Islamic education can help students explain religious concepts. Students can interact with ChatGPT to get explanations about Islamic teachings, stories in the Qur'an, explanations about ethics, and other religious principles. This allows students to explore learning material independently and gain a better understanding.

However, the application of ChatGPT in an educational context must be accompanied by serious ethical and responsible considerations (Mhlanga, 2023). Teachers and education administrators are expected to ensure that ChatGPT is used responsibly and with ethical values. This includes efforts to protect students' privacy and anticipating the possibility of bias or discrimination in using this technology. By optimally and responsibly utilizing ChatGPT's potential, the world of education can experience better inclusive development for all students.

Discussion

ChatGPT implementation in Islamic education learning provides significant benefits for teachers and students. Using ChatGPT, teachers can broaden their horizons and improve their teaching methods with more interactive and easily accessible resources. ChatGPT technology in Islamic education can provide teachers and students with an interesting and interactive learning experience.

1. Use of ChatGPT as a Learning Tool by Teachers

The implementation of ChatGPT by teachers as a form of transformation of PAI teaching can be done in two ways: essay planning and learning

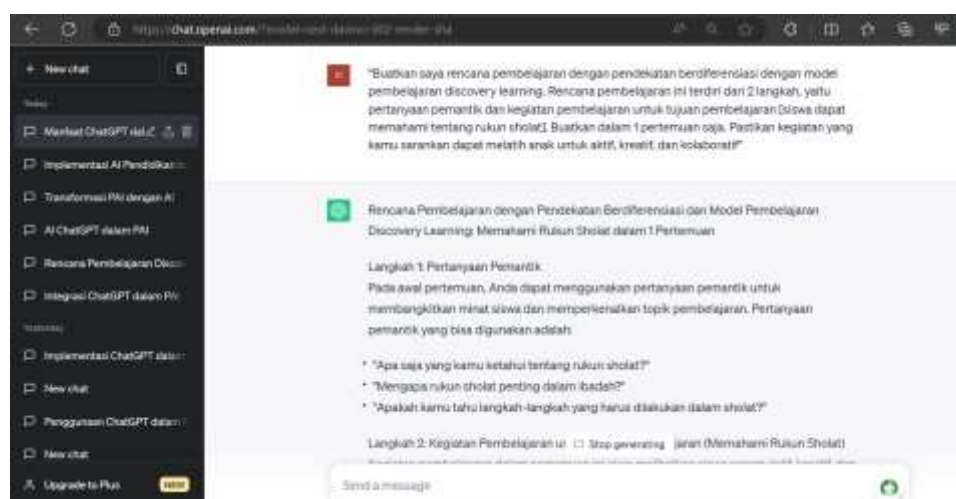
evaluation (Sedianus & Tjendanawangi Saputra, 2023). Using ChatGPT to create lesson plan can be conducted by preparing a plan, setting goals, analyzing the curriculum, identifying learning materials and resources, and developing lesson plans. Meanwhile, learning evaluation using ChatGPT technology can increase the effectiveness and quality of learning. By using the evaluation results wisely, the education system can continue to grow and meet the learning needs of students.

ChatGPT can function as a responsive chatbot that can assist teachers in developing learning tools. The advantage of using ChatGPT in making administration, such as RPP, is time efficiency and ease of access (Fitria, 2023:55). Teachers can save time compiling lesson plans because ChatGPT can respond quickly to text requests. Whereas, using ChatGPT can used anytime and anywhere via an internet-connected device. So, using ChatGPT make the teacher easier to access the tool.

The researcher tries to use the following prompt to make a lesson plan as part of the teacher's administrative tasks as follows:

"Make me a lesson plan with a differentiated approach to the discovery learning model. This lesson plan consists of 2 steps: starting questions and learning activities for learning purposes [students can understand the pillars of prayer]. Make it in 1 meeting only. Ensure the suggested activities can train children to be active, creative, and collaborative."

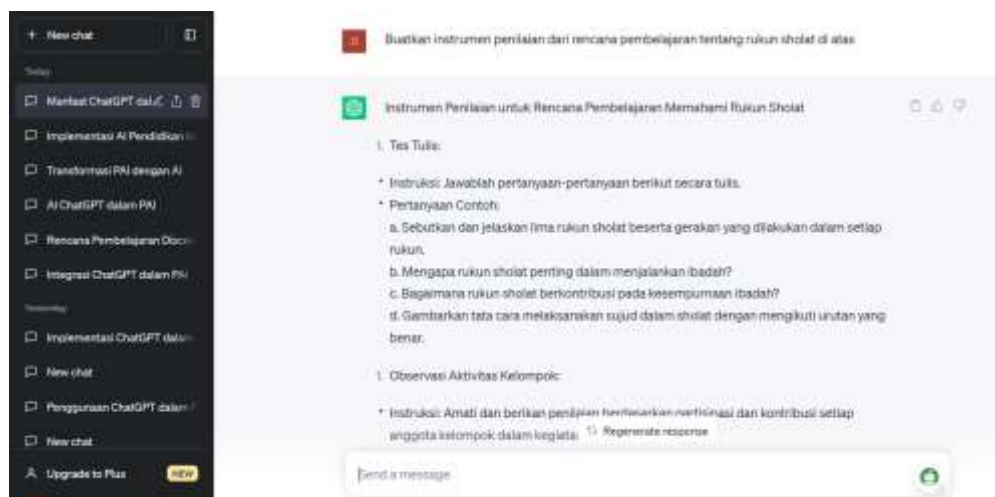
So ChatGPT immediately gives a quick answer in less than 2 minutes.



Furthermore, the researcher carried out a prompt command by continuing the previous command sentence to carry out a learning evaluation:

"Make an assessment instrument from the lesson plan about the pillars of prayer above."

Then ChatGPT automatically generates an answer by continuing the previous command's pattern. The following is a learning evaluation provided by ChatGPT in response to the *prompt question* above.



2. Use of ChatGPT as a Learning Tool by Students

Besides using ChatGPT for planning and evaluation administrative purposes, ChatGPT can increase student interest in learning. ChatGPT, a language model created by OpenAI, can contribute in various ways to increase student productivity (Alafnan et al., 2023). The role of ChatGPT in improving student output standards can be explained as follows:

1. Provide useful resources and information.

According to Kasneci et al. (2023), ChatGPT can provide useful information and resources for students to acquire the knowledge needed to complete their assignments and projects. For example, students can ask ChatGPT questions about a particular subject, and the language model will respond with knowledge gleaned from the Internet. In addition, ChatGPT can recommend books and articles relevant to the topics being discussed by students.

2. Helps in improving language skills

ChatGPT can help students hone their language skills by serving as a language model (Nailus & Cahyo Hasanudin, 2023). Students can use ChatGPT to improve their grammar, increase their vocabulary and develop their writing style. Before submitting assignments to lecturers, students can use ChatGPT to improve (Sholihatin et al., 2023).

3. Encourage student collaboration

By using ChatGPT, students can increase engagement and collaboration between students (Cotton et al., 2023). Through ChatGPT, students can interact with each other, exchange ideas and projects, as well as provide and receive assistance. Additionally, ChatGPT can facilitate conversations between students and instructors to help them better understand the course material.

4. Increase effectiveness and efficiency with time.

ChatGPT can improve students' time management skills in terms of productivity. Students can use ChatGPT to create class schedules, schedule assignment times, and create assignments more quickly and efficiently (Keiper, 2023). Students can manage their time more effectively this way and ensure they do not forget any important deadlines or assignments.

5. Give encouragement and support.

ChatGPT can serve as a source of encouragement and inspiration for students. Students can use ChatGPT to discuss their stress and problems or seek guidance on managing their time and assignments (Haleem et al., 2022). ChatGPT can help students overcome challenges and achieve their academic goals more effectively in this way.

ChatGPT is an important artificial intelligence for students because it can help achieve academic goals and increase productivity. ChatGPT provides information, resources, language skills development, collaboration, time efficiency, and support. However, ChatGPT cannot replace human-to-human communication and limited to internet resources. Students must connect with teachers, peers, and other resources for a well-rounded learning experience. The use of ChatGPT is only a facility for additional studies in order to achieve academic success. The results obtained from the ChatGPT interaction can improve accessibility, flexibility, and the quality of Islamic learning. However, the teacher's role in providing guidance, assessment, and moral values remains important to form competent and ethical students.

3. Challenges of Using ChatGPT in Islamic Education Learning

The use of ChatGPT in Islamic Education learning has challenges. ChatGPT has many positive benefits in education, but ChatGPT is a tool with drawbacks and challenges in Islamic education. The challenges of using ChatGPT in Islamic education are as follows:

a. ChatGPT information accuracy

As a language model trained by OpenAI, ChatGPT generates responses based on information available on the Internet. Therefore, the accuracy of religious information from ChatGPT depends on the source and the novelty of the training data used (Sallam, 2023). ChatGPT is a data-driven algorithm and has no judgment or knowledge of its own. Although this model is trained on a wide range of data, including religious texts, there is no guarantee that any answers or information provided will be completely accurate or consistent with a particular religious belief.

In addition, ChatGPT cannot distinguish between the truth or authority of the information provided. Although the ChatGPT provide general information about religion or related topics, it should be use verified and credible sources when seeking religious information. Credible information about religion can obtained by accessing trusted Islamic sites or being cared for by credible scholars/institutions.

b. Academic ethics and morals in the use of ChatGPT

Academic ethics and morals are very important in the use of ChatGPT, especially in educational contexts (Jafar Maulana & Darmawan, 2023:58). Some research results show that the role of educators needs to instill moral knowing abilities which are carried out through habituation and building an academic culture based on academic ethical and moral values. Students must prioritize critical and creative thinking and collaborate in developing knowledge properly by prioritizing academic ethics in making assignments, papers, or scientific papers.

Conclusion

In the context of learning Islamic education, ChatGPT offers some significant benefits. ChatGPT can increase the accessibility and flexibility of learning by providing better access to relevant resources and information. In addition, ChatGPT can facilitate personal interactions between students and AI chatbots, increasing student engagement and helping them understand Islamic education concepts better. Implementing Islamic education learning using ChatGPT in supporting teacher activities can be done in planning and evaluating learning and other learning activities. Whereas for students using ChatGPT in learning provides various benefits and conveniences. These benefits are triggering creativity and completing tasks in finding ideas, language, and library resources. Also, the students can develop their language and communication skills through interactions. However, the use of ChatGPT in Islamic education learning faced with challenges. Including the accuracy of religious information from ChatGPT depends on the source used. There is no guarantee that any answers or information provided will be completely accurate or consistent with certain religious beliefs

that require a filter. In addition, academic ethics and morals are very important in using ChatGPT so there is no manipulation of technology and even dependence on technology without having critical reasoning power.

References

- AlAfnan, M. A., Samira Dishari, Marina Jovic, & Koba Lomidze. (2023). ChatGPT as an Educational Tool: Opportunities, Challenges, and Recommendations for Communication, Business Writing, and Composition Courses. *Journal of Artificial Intelligence and Technology*. <https://doi.org/10.37965/jait.2023.0184>
- Cotton, D. R. E., Cotton, P. A., & Shipway, J. R. (2023). Chatting and cheating: Ensuring academic integrity in the era of ChatGPT. *Innovations in Education and Teaching International*, 1–12. <https://doi.org/10.1080/14703297.2023.2190148>
- Fauzi, Tuhuteru, L., Sampe, F., Ausat, A. M. A., & Hatta, H. R. (2023). Analysing the Role of ChatGPT in Improving Student Productivity in Higher Education. *Journal on Education*, 05(04), 14886–14891. <https://doi.org/https://doi.org/10.31004/joe.v5i4.2563>
- Fitria, T. N. (2023). Artificial intelligence (AI) technology in OpenAI ChatGPT application: A review of ChatGPT in writing English essay. *Journal of English Language Teaching*, 12(1). <https://doi.org/https://doi.org/10.15294/elt.v12i1.64069>
- Hosni, A., Ariffin, M. F. M., & Ishak, H. (2023). Isu Dan Cabaran ChatGPT Terhadap Pengajian Islam. *Al-Turath Journal of Al-Quran and Al-Sunnah*, 8(1).
- Jafar Maulana, M., & Darmawan, C. (2023). *Penggunaan Chatgpt Dalam Pendidikan Berdasarkan Perspektif Etika Akademik*. 10(01), 58–66.
- Kasneci, E., Sessler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., Gasser, U., Groh, G., Günemann, S., Hüllermeier, E., Krusche, S., Kutyniok, G., Michaeli, T., Nerdel, C., Pfeffer, J., Poquet, O., Sailer, M., Schmidt, A., Seidel, T., ... Kasneci, G. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and Individual Differences*, 103, 102274. <https://doi.org/10.1016/j.lindif.2023.102274>
- Keiper, M. C. (2023). ChatGPT in practice: Increasing event planning efficiency through artificial intelligence. *Journal of Hospitality, Leisure, Sport & Tourism Education*, 33, 100454. <https://doi.org/10.1016/j.jhlste.2023.100454>
- Lo, C. K. (2023). What Is the Impact of ChatGPT on Education? A Rapid Review of the Literature. In *Education Sciences* (Vol. 13, Issue 4). MDPI. <https://doi.org/10.3390/educsci13040410>
- Mambu, J. G. Z., Pitra, D. H., Rizki, A., Ilmi, M., Nugroho, W., Leuwol, N. V, Muh, A., & Saputra, A. (2023). Pemanfaatan Teknologi Artificial Intelligence

- (AI) Dalam Menghadapi Tantangan Mengajar Guru di Era Digital. *Journal on Education*, 06(01), 2689–2698.
- Manik, E., Yanti Marbun, Rebika Afrina Br Simanjuntak, & Ratio Julianci Simarmata. (2023). Video Youtube dalam Proses Pembelajaran dengan chatGPT. *Jurnal Pendidikan Dan Konseling*, 5(2), 2297–2303. <https://doi.org/https://doi.org/10.31004/jpdk.v5i2.13476>
- Mhlanga, D. (2023). *Open AI in Education, the Responsible and Ethical Use of ChatGPT Towards Lifelong Learning*. <https://doi.org/http://dx.doi.org/10.2139/ssrn.4354422>
- Munandar, A. (2022). *Metodologi Penelitian Kuantitatif dan Kualitatif* (Arif Munandar, Ed.). CV. Media Sains Indonesia.
- Nailus, S., & Cahyo Hasanudin. (2023, June 27). Implementasi ChatGPT sebagai Inovasi Media Pembelajaran Bahasa Indonesia di Era Society 5.0. *Jurnalistik Sebagai Sumber Data Untuk Karya Ilmiah*. <https://prosiding.ikipgribojonegoro.ac.id/index.php/SND/article/view/1724>
- Sallam, M. (2023). ChatGPT Utility in Healthcare Education, Research, and Practice: Systematic Review on the Promising Perspectives and Valid Concerns. *Healthcare*, 11(6), 887. <https://doi.org/10.3390/healthcare11060887>
- Sari, M. (2020). Penelitian Kepustakaan (Library Research) dalam Penelitian Pendidikan IPA. *Natural Science*, 6(1), 41–53.
- Sedianus, & Tjendanawangi Saputra. (2023). Peran Artificial Intelligence ChatGPT dalam Perencanaan Pembelajaran di Era Revolusi Industri 4.0. *MASOKAN: Jurnal Ilmu Sosial Dan Pendidikan*, 3(1), 1–8. <https://doi.org/https://doi.org/10.34307/misp.v3i1.100>
- Sholihatin, E., Saka, D. P. A., Desta, R. A., Ardana, A. P. S., Yusaga, C. I., Fajar, R. I., & Virgano, B. A. (2023). Pemanfaatan Teknologi Chat GPT dalam Pembelajaran Bahasa Indonesia di Era Digital pada Mahasiswa Universitas Pembangunan Nasional Veteran Jawa Timur. *JURNAL TUAH Pendidikan Dan Pengajaran Bahasa*, 5(1), 1–10. <https://jtuaah.ejournal.unri.ac.id/index.php/JTUAH/>