

Utilization of Artificial Intelligence (AI) Perplexity as a Digital Literacy Tool for Islamic Religious Education Students

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Abstract:

Technology, particularly artificial intelligence (AI), is rapidly advancing and transforming nearly all aspects of life, including education. In the context of Islamic Religious Education, technology can strengthen understanding of religious teachings as well as shape students' character and moral values. Digital literacy is becoming increasingly important, especially for IRE students, not just the ability to use technological devices, but also the critical capacity to understand and evaluate digital information. One way to enhance digital literacy in IRE is by utilizing AI technologies, such as Perplexity AI, which can assist students in accessing, analyzing, and interpreting religious information accurately and critically. Surveys show that 43% of students are already using AI. This study aims to explore how AI can improve digital literacy for IRE students at the University of Muhammadiyah Surakarta. This research uses a phenomenological approach with a qualitative method to analyze the impact of AI in IRE learning. The findings indicate that AI, particularly Perplexity, accelerates the search for literature and provides broader access to information. However, there are challenges related to dependence on technology, which could weaken students' non-digital literacy skills. Despite this, the potential of AI in enriching the digital literacy of IRE students is significant.

Keywords: Utilization, Artificial Intelligence, Perplexity

Introduction

Technology is developing rapidly. All aspects of human activity are almost inseparable from technology. The more rapid the development of technology, the more innovations will emerge from the field of technology. Many technologies have been discovered, one of which is the emergence of artificial intelligence or AI. Islamic Religious Education is an integral part in forming students' character and moral values, developing a deep understanding of religious teachings, and strengthening religious identity. In this digital era, where information and communication technology increasingly dominates, it is important for Islamic Religious Education students to master digital literacy to strengthen their skills in accessing, assessing and using information effectively. At this point, Artificial Intelligence (AI) emerges as a potential tool to support and improve students' digital literacy, especially in the context of Islamic Religious Education.

The use of artificial intelligence in education can already be seen in several countries. In Australia it has been developed Intelligence Tutoring System (ITS) which allows the problem of ratio quotas for the number of educators and students to be resolved. In Japan, there has been an artificial intelligence robot that was included in the national university exams in Japan and achieved decent scores to be accepted at 404 (out of 744) private campuses in Japan. Apart from that, artificial

intelligence plays a role as an information provider such as Google and the like. Artificial intelligence has even been applied to the work of facilitators and classroom management. Websites like Perplexity, Chat-GPT and the like have proven this. This technology applies a computer algorithm process with several advantages. Firstly, artificial intelligence has extraordinary thinking speed, especially with the increasing speed of computers and rapidly developing digital devices, the thinking speed of artificial intelligence is also increasing. Second, it has high accuracy and precision due to the mechanistic and completely measurable process in the device. Third, minimizing errors by not experiencing fatigue, sleepiness, or being distracted as humans often experience (human error). These advantages make artificial intelligence quite promising for carrying out various types of tasks for wide use, including in the world of education.

In relation to digital literacy, understanding and utilizing AI technology is an urgent need, especially among Islamic Religious Education students. Understanding digital literacy is not just the ability to use hardware or software, but also involves the critical ability to understand, evaluate and integrate information found through digital media. One method that can be adopted to increase the digital literacy of Islamic Religious Education students is the use of artificial intelligence technology, namely perplexity. The presence of AI has changed many areas of human life, especially in the world of education. The survey results stated that as many as 43% of students had used AI tools. In previous research, no data security threats were found in the use of AI. Islamic religious education, digital literacy, and artificial intelligence (AI) technology have a close relationship. Islamic religious education can utilize digital literacy and AI technology to improve the quality of learning. Digital literacy can help students access relevant information and learning resources easily and quickly. Apart from that, AI technology can be used to increase the effectiveness of learning, such as with chatbots that can help students understand lesson material. In the context of Islamic religious education, digital literacy and AI technology can also help students understand religious teachings better, such as with digital applications that provide information about Islamic religious teachings. Therefore, Islamic religious education, digital literacy and AI technology can complement and support each other in improving the quality of learning.

Students are required to be able to understand all the subjects taken during lectures. Learning material is one of the supporting factors in understanding lecture material. Students can obtain learning materials through lecturers or the library. But not all students get adequate facilities. The world of education is the bearer of the learning process by carrying out the learning process through strengthening stimulants regarding strengthening more updated literacy and not only focusing on developing competencies from the old literacy that is already possessed. When Artificial Intelligence (AI) was still not widely known, many students had problems understanding certain material. This is also due to time constraints and their lack of freedom to explore the material. Because without the help of AI, students have to deepen the material by visiting the library, contacting lecturers, and so on to look for reference sources for their understanding. Meanwhile, activities like that cannot be done freely and can only be done at certain times. This is what also triggers the use of AI technology to support students in their studies. With AI, especially Perplexity, students can use it freely and without time limits. Students can use perplexity to answer their curiosity regarding material that they did not have time to ask the lecturer in class and regarding something they did not have time to look for in the library or in books, so this is where perplexity plays a role in helping students in carrying out digital literacy. Islamic Religious Education students are faced with the challenge of

understanding, interpreting and applying religious teachings in a modern context that continues to develop. Digital literacy is an important key to helping students access and filter information correctly, especially in Islamic religious content which is often complex and sometimes controversial. The use of Artificial Intelligence Perplexity can be a bridge to guide students through the digital literacy process by understanding the specific Islamic religious context.

In efforts to integrate AI and digital literacy in Islamic religious education, fundamental questions arise such as how the use of Artificial Intelligence Perplexity can help Islamic Religious Education students at Muhammadiyah University of Surakarta in developing their digital literacy, How AI can be a means of accessing, analyzing and interpreting religious information Islam correctly and critically. This research aims to explore the potential for using Artificial Intelligence Perplexity as a means of increasing the digital literacy of Islamic Religious Education students. Specifically, this research will analyze the use of AI technology in guiding Islamic Religious Education students at Muhammadiyah University of Surakarta to recognize, understand and interpret Islamic religious information through wise digital literacy. This research is expected to make a significant contribution to the development of Islamic religious education in the digital era. The research results can become the basis for educational institutions to integrate AI technology in the curriculum, so that students can optimize their digital literacy to understand and apply Islamic teachings in increasingly complex daily life. Apart from that, this research is also expected to provide new insights regarding the potential for using Artificial Intelligence, especially Perplexity, in improving the quality of understanding Islamic religious texts through artificial intelligence applications.

Research Method

This research is a type of field research with qualitative methods using a phenomenological approach. Data collection methods that can be used in a phenomenological approach include interviews with several sources who are Islamic Religious Education students at the Muhammadiyah University of Surakarta. as well as documentation. The data analysis technique uses interactive analysis with stages of data collection, reduction and drawing conclusions.

Result and Discussion

1. Perplexity AI Technology Concept

Perplexity AI is an internet search engine that is operated like a chatbot based on artificial intelligence (AI) technology and can be accessed via a website or application. Perplexity AI users will provide answers to their users according to the instructions given. Perplexity AI combines its language model with an artificial intelligence algorithm (Large Language Processing). However, the algorithm used by Perplexity AI is Natural Language Processing (NLP). Which can provide accurate answers and information for its users. Perplexity AI uses a combination of indexing and LLM methods when a user conveys instructions to the machine. When someone wants to know information related to a certain topic, this perplexity will immediately carry out a search to answer the instructions given by the user by diving into the search index and diving into internet pages in the form of journals or websites that are relevant to the thing being ordered or asked. After conducting interviews with several PAI students at Muhammadiyah University of Surakarta, Perplexity offers several features for its users, namely a search engine, question editor, research

focus, threads, source curation, and chrome extension.

Perplexity AI can be said to be able to become a digital literacy tool for Islamic religious education students to search for information related to lecture materials about the Islamic religion. With the many features offered, Perplexity AI is able to present information from valid and trusted sources in a fast and flexible way because digital literacy using Perplexity AI can be used anywhere and at any time without being bound by time. The phenomenon of using Perplexity AI among PAI students at Muhammadiyah University of Surakarta shows that using Perplexity as a means of digital literacy provides significant benefits starting from time efficiency and accurate data results. It is important to note that the use of Artificial Intelligence in education also raises ethical considerations. Students must adhere to academic principles and maintain integrity in the use of this technology. Perplexity is not only the latest technology but also something that will change the way we learn and our literacy process. However, with wise use, it is hoped that this perplexity will be able to increase PAI students' digital literacy activities in understanding matters related to Islamic religious education.

2. Digital Literacy Process with Perplexity Support in Islamic Student Learning

This discussion will explain the process and steps taken by PAI students in searching for literature in PAI learning by utilizing Perplexity AI. First, Perplexity AI provides a search engine that is used to write commands or anything related to information that students want to know, where there are no language requirements for writing. Then Perplexity will immediately respond by displaying short text containing search results including trusted sources and displaying results that are relevant to the information the user is looking for. Not only text and articles appear on the search homepage, but Perplexity will also include images and videos related to the information students are looking for. This is the main function of Perplexity AI, namely providing answers from the internet directly and accurately. The developer designed Perplexity to answer citations like an academic manuscript. Interestingly, Perplexity AI will only provide answers that have a clear source (citation). This technology has been trained not to provide information that does not come from a valid source.

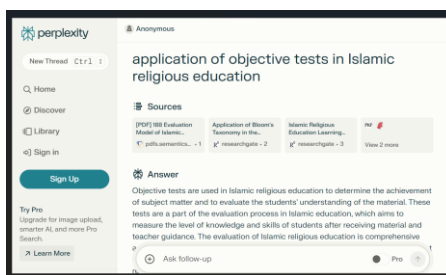


Figure 1. Perplexity Search Engine Image

Second, Perplexity has a rewrite feature, where students can edit questions or commands written in the search engine if the first search results obtained are not satisfactory. This rewrite feature has no special restrictions, meaning that students can edit their questions freely without any number or time limits. So that the literature search carried out by PAI students can be carried out optimally and is able to provide flexibility and improve the quality of digital literacy. The results of searching for information on Perplexity will automatically be saved in the user's collection.

Third, students interact with other Perplexity users through the thread feature. In this feature, students collect information related to Islamic religious education that they have explored on search engines, then they create a kind of thread containing related information and sources and can share it with other users so that other people can read the information. or pages that we have searched for and read. This thread feature does not automatically connect to other users, but rather the user will determine whether they want to share the information with other people or not. According to PAI students at Muhammadiyah University of Surakarta, this is what makes their digital literacy broader and more diverse because they can interact with other perplexity users who may have expertise and needs in the same field, thus being able to deepen the process of searching for the literature needed.

According to several PAI students at Muhammadiyah University of Surakarta, perplexity makes their digital literacy easier because it is able to take them to pages containing journals or articles that they need just by writing keywords or commands in a search engine without having to search manually which takes a lot of time. time because they have to select which articles or journals are suitable and related to the information they are looking for. For Chrome browser users, Perplexity AI provides an extension that makes it easier to use. With this extension students can easily access and operate Perplexity AI via a browser.

3. Obstacles to Using Perplexity as a Means of Digital Literacy in PAI Student Learning

Even though Perplexity AI has great potential in supporting the digital literacy of PAI Muhammadiyah University Surakarta students, there are several problems that need to be addressed. The challenge faced by PAI Muhammadiyah University Surakarta students in using Perplexity as the first digital literacy tool is excessive dependence. Students tend to rely too much on Perplexity AI, thereby weakening their desire for non-digital literacy, such as being lazy to read books and being lazy about coming to the library to look for literary sources. Because students are used to getting literature sources instantly, this reduces students' skills related to analyzing data. Students tend to be fixated and satisfied with the results obtained from Perplexity AI regarding understanding of the Islamic religion, even though the information obtained from Perplexity AI should be balanced with knowledge obtained from experts such as lecturers or religious experts. So the desire to ask directly to the party concerned is slowly starting to fade because they rely on information obtained from the perplexity.

The second challenge is limitations in content analysis. Perplexity AI may have limitations in content analysis and argumentation logic. Even though the answers and information results searched using Perplexity AI can be said to be quite accurate, this does not eliminate the possibility that the answers provided are sometimes inconsistent. When students ask or search for something for the first time and write it in the search engine, then students ask the same question a second time, the results displayed by this perplexity are often different from the previous results. So from this it can be said that the level of consistency of answers in the use of Perplexity still requires improvement. The third challenge is in terms of developing literacy skills. Although Perplexity AI can help in finding literature sources instantly, students need to develop literacy skills independently. The use of perplexity AI is not far from internet access. Without adequate internet access, we cannot run the Perplexity application as a means of digital literacy. Therefore, it is necessary to pay attention to developing self-literacy skills and not continue to rely on Perplexity as self-anticipation when the time comes when limited internet access arrives.

The use of Perplexity AI for Islamic Religious Education students at Muhammadiyah University of Surakarta has achieved increased efficiency in carrying out digital literacy, but it is important to remember that this technology should only be used as a tool, not as a substitute for understanding and developing true academic skills. The use of Artificial Intelligence (AI) technology in education will continue to grow, it is important for students and educators to understand the potential and limitations of this technology. In this case, Perplexity AI is a clear example of how technology can make a positive contribution to Islamic religious education, helping students meet greater academic needs. With wise use, Islamic Religious Education students at the Muhammadiyah University of Surakarta and students throughout the world can continue to utilize the potential of perplexity technology to strengthen their academic achievements for the better.

Table 1. Mapping The Result Of Interview

Informant	Interview Questions		
	In your opinion, is the use of perplexity able to increase students' understanding of Islamic religious education material?	Is the use of artificial intelligence perplexity able to make it easier for students to carry out digital literacy related to Islamic religious education?	What are the challenges that occur during the use of artificial intelligence?
Source Interview Results			
3rd semester Islamic religious education student	The resource person stated that by using perplexity, understanding and insight regarding Islamic religious education	The interviewee stated that with perplexity, digital literacy becomes easier and more flexible.	The interviewee stated that there are rarely any challenges

	material becomes broader.		es that occur when using perplexity, perhaps because perplexity uses an internet network so sometimes signal speed is hampered.
5th semester Islamic religious education student	The interviewee stated that by using Perplexity, their understanding of Islamic religious education material was better because by exploring Perplexity they could easily find out the information they wanted to ask about through the search feature.	The interviewee stated that the use of perplexity can make digital literacy very easy and practical. Perplexity provides a feature that will take him to the journals or articles on the internet that he needs from trusted sources.	The interviewee stated that one of the challenges in using perplexity is the lack of consistency in the answers given. Even though it is accurate, sometimes

			es Perplexit y provides slightly different answers even though the user is asking the same question.
7th semester Islamic religious education student	The interviewee stated that perplexity helps students' understanding of theoretical Islamic religious education lecture materials such as learning planning and evaluating Islamic religious education learning. In purely religious material, it is better to ask religious experts.	The interviewee stated that Perplexity helped make it easier to search for articles or journals that were needed, because by simply writing keywords in the search box, Perplexity was able to take users to the journals or articles that the user needed. Perplexity is very helpful in working on journal assignments or articles because it is able to provide research references from clear and valid sources.	The interviewee stated that the challenge he often faces is the lack of content. Even though it is enough, the journals or articles provided are not as many as Google Scholar

			or Scribd.
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Conclusion

Perplexity AI is an internet search engine that is operated like a chatbot based on artificial intelligence (AI) technology and can be accessed via a website or application. Perplexity AI provides a search engine that is used to write commands or anything related to information that students want to know, where there are no language requirements for writing it. Students can edit the commands or questions they write in the search column via the rewrite feature, so that students are able to get satisfactory answers or literary sources. With Perplexity, students can interact with other Perplexity users through the thread feature and share the information they have with other users. So in short, the search history of students using Perplexity can be organized and tidied into one folder and then shared via the thread feature. Not only that, students can interact with other Perplexity users through this thread feature. They can share Islamic knowledge and knowledge with people who are connected to them in the same field of knowledge. So that way, students can utilize this perplexity as a means of broad digital literacy.

Despite the many benefits offered by perplexity AI, students must also not be careless about the obstacles they face, such as dependence on the use of this technology, thereby weakening non-digital literacy skills. Another obstacle is limitations in content analysis. Perplexity AI may have limitations in content analysis and argumentation logic. Even though the answers and information results searched using Perplexity AI can be said to be quite accurate, this does not eliminate the possibility that the answers provided are sometimes inconsistent. It could be said to be inconsistent because if students ask or order the same thing at different times, the answers produced by perplexity sometimes change. This is one of the obstacles experienced by students when utilizing perplexity in learning Islamic religion. We all have to realize that the world of education will continue to develop and even change. The case studies presented in this article provide inspiration for all students to be able to integrate existing technological developments in academic learning. Of course, use technology wisely, and still pay attention to academic ethics with the aim of being able to become the main actors in shaping a smarter and more innovative educational future. In this way, Artificial Intelligence technology can become a useful tool in achieving higher academic goals.

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