

The ChatGPT Application Polemic Viewed from Scientific Perspective

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Abstract

This study aims to determine the contribution and impact of the ChatGPT application polemic from the scientific point of view of Islamic studies, education, and law in the academic realm. This research uses a descriptive qualitative research method with literature study. The results of this study indicate that Islam supports technological progress, especially for those who can use it for good. However, do not commit fraud through the ChatGPT application as stated in the Qur'an and hadith. ChatGPT also helps in the world of education to find and answer questions. On the other hand, there are other series of immoral actions that can harm the continuity of human ethical power in creating a work. Likewise, the law views that as long as there is no law in force, fraudulent use of ChatGPT cannot be carried out in accordance with the principle of legality. However, this can be a breakthrough so that a regulation is formed as a legal umbrella which is a preventive action in abusing the ChatGPT application.

Keywords: Polemic, ChatGPT Application, Science

INTRODUCTION

Changing times cannot be avoided where in the previous era various human activities were still conventional and in the current era entering a transformative, digital and increasingly sophisticated era. This is marked by the emergence of sophisticated human-made products, both software and hardware. Among these human products, the ChatGPT application is currently infatuated as a search engine that helps with various jobs. In addition to its emergence that helps human work, not a few problems are also found. Based on the literature it is known that ChatGPT has limitations in its use and cannot guarantee the perfect answers it produces (Supriyadi, t.t.). Then the bad effects of other ChatGPT applications quoting from Hutson, Kim, and Else (Rizky & Nandyatama, t.t.) stated that there were acts of plagiarism carried out by individual students in completing

assignments, the occurrence of incorrect data in scientific texts by researchers so that they got away with it. Even more emphatically, (Misnawati, 2023) points out the risks that occur in other uses of ChatGPT, including there is no guarantee that all the data that we have is safe, unclear results as part of the resulting algorithm, and misinterpretation. In more detail (Mampuono, 2023) describes the negative impacts arising from ChatGPT as follows:

1. Generating unethical content;
2. The information generated is also potentially fake (hoax);
3. Privacy violation;
4. Replacing human work power;
5. High dependence on the use of applications.

Seeing the urgency of ethics in using ChatGPT,

Likewise, from a legal point of view, in Indonesia there are no specific and clear regulations related to AI. This allows for legal problems to occur one day if there is an illegal act in the use of AI (Haris & Tantimin, 2022, p. 309). Finally, the use of ChatGPT must also be seen from the point of view of Islamic studies because technology in the 4.0 and 5.0 eras is still growing, besides religion undergoing changes that are quite passive. So that the use of technology should not be the cause of disharmony between science and religion (Budianto et al., 2021, p. 55).

RESEARCH METHODS

This research is a descriptive qualitative research with literature study. The primary data sources refer to books, books, and journals, while secondary data quotes from the internet.

RESULTS AND DISCUSSION

Aplikasi ChatGPT

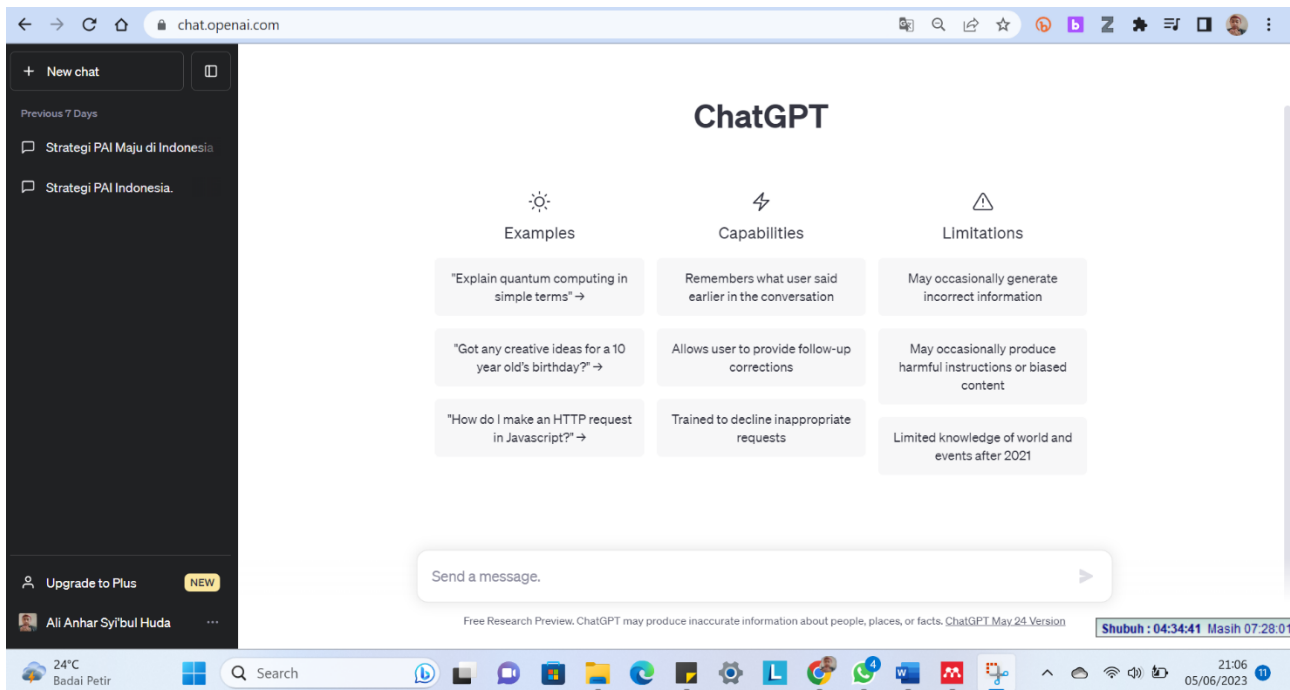


Figure 1. Screenshot of the ChatGPT Application

Officially ChatGPT is an artificial intelligence-based Chatbot launched in November 2022 with the ability to respond like a human and can provide informative answers to the input entered (Lo, 2023). According to (Hassani & Silva, 2023) explained that ChatGPT is a transformative model that can produce new words based on the input it receives. Meanwhile, other sources state that ChatGPT and various AI applications are designed using web-based information with the technique of receiving feedback from humans (Singh, 2023). It can be concluded that the ChatGPT application is a digital product that can be given orders to search for what we want to search for through typing in the form of text so that we can produce answers quickly and don't have to wait long.


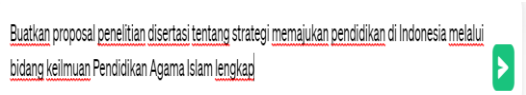
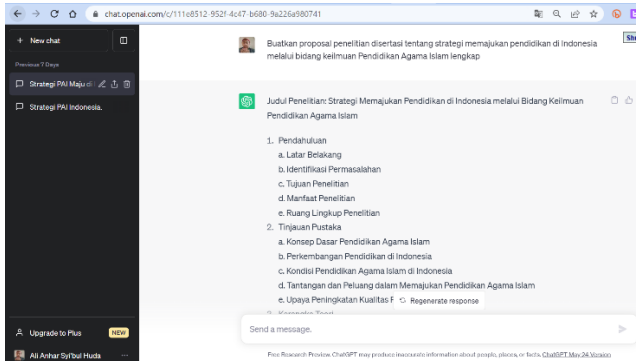
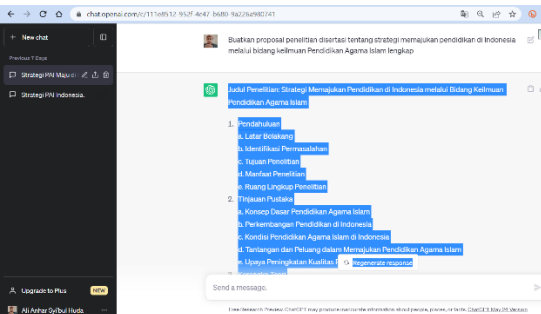
Meanwhile, Rio Sanjaya (Sanjaya, 2023) in his blog article clefhui.id shares the steps for using ChatGPT as follows:

1. Visit the site openai.com/blog/ChatGPT;
2. Then log-in

3. Press Chat or Start Chat;
4. Next, in the input menu, type a topic or question and talk to ChatGPT;
5. Type Enter or Send;
6. ChatGPT will automatically process input and produce answers in a short time.

To see a real picture of these steps, the following is the application that the author has done in using ChatGPT as an experimental medium in this article:

Table 1. Steps to use the ChatGPT application

Step 1	Step 2
	
Opens the OpenAI link	Type in the topic to search for
Step 3	Step 4
	

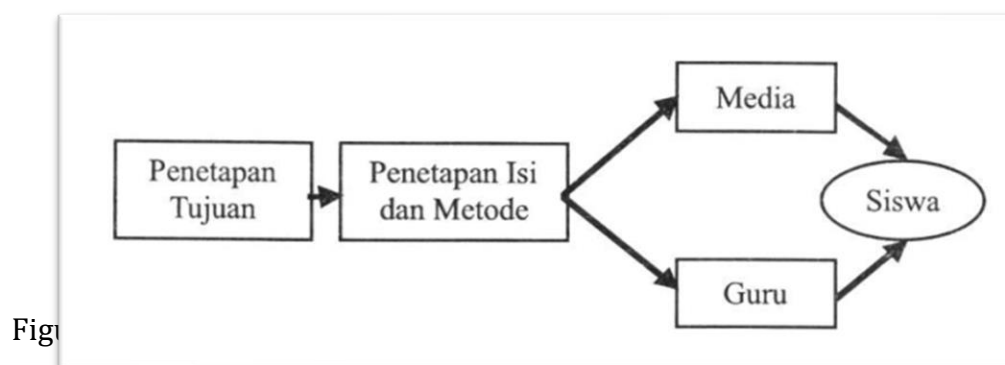
Hasil tampilan dari topik yang dicari	Menyalin hasil jawaban kepada lembar kerja lainnya
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ChatGPT in Education Overview

ChatGPT as Learning Media

In the view of education science, ChatGPT has a position as a learning media because of its function as a tool. Then, judging from the prerequisites for a learning media that Gerlac & Ely cited Arsyad (Hasan et al., 2021) has met the requirements because it has fixative characteristics, namely being able to record, store, preserve, and rebuild an object or event. Apart from that, it also fulfills the requirements because it has manipulative characteristics, namely being able to re-describe actual events as if they were real. Apart from that, it also fulfills the distributive requirements because ChatGPT is able to simultaneously transform an engineered real picture through space and time together.

The urgency of the media in the educational process can be illustrated through the following illustration:



Referring to the classification of learning media and also seeing its existence which is classified as very new because it has gone through step by step until the current refinement, ChatGPT is classified as sophisticated technology-based media because it mixes and matches between the written results typed with sound frequencies, therefore it is proper and appropriate for it to be classified as learning media.

One that has proven this is that it was carried out by Adi Setiawan and Ulfah Khairiyah (Setiawan & Luthfiyani, 2023) when both of them conducted experiments with ChatGPT in order to improve students' writing skills where the results of their research showed that the use of ChatGPT was able to produce 693 words with written output from the ChatGPT results which can be used as scientific works such as books with a prompt model.

Ethics in the Use of ChatGPT

In addition to the convenience offered by ChatGPT, its presence has also continuously grown, bringing various problems and polemics, where in this article we raise this issue as well as responses and views according to each scientific field. Several attempts have been made by many groups to regulate the use of ChatGPT in daily life activities, for example, Universiti Putra Malaysia (UPM) in an article by the Indonesian Institute of Technology explains that:

1. Students are allowed to use ChatGPT in accordance with established academic regulations;
2. Ensuring students understand the lecture material so that the assessment process is based on remembering a certain time, a certain subject, or past events, as well as evaluating the references used;
3. Increased discussion activities and collaborative assignments;
4. Utilizing ChatGPT which subsequently students criticize and examine the correctness of the data produced;
5. For lecturers, ChatGPT is used to produce unique case studies for each student;
6. And provide space for students to provide feedback to lecturers in order to improve the learning process through assignments to criticize ChatGPT earlier.

(Cotton et al., 2023) shared their understanding of the importance and wisdom of using ChatGPT, including:

1. Educate students about the dangers of plagiarism so they can avoid doing it;
2. It is mandatory for students before articles/writings will be published, first proofreading the academic staff to check for authenticity;
3. Implement plagiarism detection tools

4. Establish clear standards and guidelines for using ChatGPT;
5. Finally, there is monitoring and evaluation of the work that students have produced through the help of the ChatGPT application.

Then (Faiz & Kurniawaty, 2023a) argues that no matter how sophisticated the ChatGPT application is, it cannot absolutely replace the role of humans, because artificial intelligence (AI-ChatGPT) has no conscience and therefore a wise attitude is needed in using it.

Meanwhile, UNESCO (Firdhausi, 2023) launched a guidebook and recommendations on using artificial intelligence (AI) where it is necessary to ensure an AI system to improve information, knowledge, and meet academic requirements. Ensure that AI respects freedom of expression and access to information regarding the creation, moderation and curation of content automatically. AI should strive for its use to increase digital and information literacy capabilities, strengthen critical thinking, and create an environment that allows the media to own news items and resources regarding the benefits and harms of AI.

It is fitting that as part of the intellectual community, it is necessary to use ChatGPT wisely in the academic realm. Based on previous studies, we can more or less know that ChatGPT itself is not one hundred percent perfect. What must be done by us as knowledgeable people is to prioritize the process through the right way of thinking, the right way of acting, and implementing the knowledge we have according to their respective fields, not just wanting to finish it instantly.

The Education World's Response to the ChatGPT Application

One of the many areas where the ChatGPT application can be applied also occurs in the world of education, then how does education view the ChatGPT application? Based on the results of research conducted by Zen et al revealed that the ChatGPT application is useful in writing scientific articles where it is able to summarize the process of writing and reviewing, organizing material, drafting, and getting nearly accurate data.

Whereas in research conducted by (Putra et al., 2023) explained that the ChatGPT application can provide sufficient answers in increasing civic competence, especially at the cognitive (intellectual) level.

Then in the academic realm, the ChatGPT application is very useful in helping students at the Faculty of Engineering at Medan State University as a result of research conducted by (Waluyo et al., 2023) with a sample focus of 17 students who do not yet have a thesis topic after using the ChatGPT application as a tool help in the end they found it and the other benefits felt from the ChatGPT application in helping them search for their thesis topics have a novelty value from previous studies.

In addition to the convenience that ChatGPT provides in educational activities, (Maritsa et al., 2021) warns of the negative impacts that arise if the educational work activities continuously depend on the ChatGPT application, including misuse of its actual functions, such as spreading false information. , access to content with vulgar nuances, and the most dangerous is cybercrime.

ChatGPT in Legal Review

ChatGPT Dialectics in Law and Policy

In the era of the industrial revolution 4.0 and society 5.0, law and technology play an urgent role in shaping human life. Life in this era seems very dependent on the role of technology in facilitating all their work and daily activities. Francis Lim stated that technological development has limits, in the sense that human welfare due to technological developments is significantly fast and is not matched by moral development. Human experience and culture change due to the implementation of technology that is in some sense foreign and cultural. Finally, this tends to be a warning to realize the impact that technology brings (Lim, 2008, p. 198).

Don Ihde is a philosopher from the United States who wants to show that there are various kinds of human experiences with technology and thus will give people awareness of how powerful the influence of technology is in their lives. One of what Ihde discussed about technology is that technology changes human perspective. Technology changes

perspectives regarding time, space, even technology changes language. By discussing various relations between humans and technology, Ihde shows that relations with technology are non-neutral. However, according to Ihde, the relationship with technology, which is non-neutral in nature, is still weak; what dominates it is the relationship between humans and technology, which tends to be existential. This means that the direction and orientation of humans has been intervened by technology, although not completely because the relationship between humans and technology is never total. The world of human life can still be experienced without technology. Because it is not total, the relationship between humans and technology raises variations (Ramadhan, 2022, p. 108).

Today's technology is developing and moving so fast, the presence of technology in human life can make their daily work easier. One of the technologies that is moving fast at the moment is ChatGPT conversation which has the function of helping humans to search for information and make writing activities quickly, ChatGPT was released on November 30, 2022. ChatGPT was founded by Open AI, the Open AI laboratory has made rapid progress in the development of AI technology and has sparked a number of machine learning products for the general public, as they are known, namely DALL-E and ChatGPT (Maulana et al., 2023, p. 59)

The rapid and significant progress and development of AI artificial intelligence has formed a new habit, people are currently using AI to facilitate their daily activities (Faiz & Kurniawaty, 2023, p. 457). This feeling of anxiety arises because the rapid development of AI is not matched by sufficient knowledge regarding the use of AI. In order to overcome the problems that arise, it is urgent for the public to understand what AI has done. Furthermore, the activity of using AI in this academic area could potentially replace works that were previously frequently used, such as books and scientific journals.

The presence of a ChatGPT-based chatbot has a positive contribution in assisting human activities, such as solving a problem, assisting in formulating an idea in a relatively short time and other conveniences offered by the ChatGPT-based chatbot. ChatGPT is a program that is processed to make their job easier for users, the program provides feedback regarding questions made by users and produces a response to that question.

Therefore, with ChatGPT service users are able to interact, ask questions and get answers quickly (Maulana et al., 2023, p. 61).

AI and ChatGPT is a technology that has changed the way of interacting with computers and opened up new opportunities that are called today, namely artificial intelligence. However, like earlier technologies, they present a legal question about how they are regulated and monitored. Indonesia itself, if one looks at it, there may have to be legal aspects that are urgent to be seriously considered in the use of this ChatGPT (Revealing the Legal Side of Open AI and GPT Chat, Data Protection, Legal Responsibility and Aspects in Indonesia - Kompasiana.com, t.t.). This relates to the principle of legality that "No act can be punished if the act is not regulated in a regulation first." So that it is necessary to have special regulations in anticipating crime in the use of ChatGPT in the form of regulations that are made.

Of course, when viewing this, you need to consider copyright because ChatGPT uses natural language processing technology and machine learning to generate new text and content. So, there is a fundamental question about this, who actually owns the copyright of the text and content generated from ChatGPT. In Indonesia, regarding copyright, the normative law has been clearly regulated in Law Number 28 of 2014 concerning Copyright.

The next consideration is related to privacy and data protection because with so many users all data from users will definitely be collected which in the end a question arises again how user data must be managed and protected. Meanwhile in Indonesia, related to data protection has been regulated in Law Number 11 of 2008 concerning Information and Electronic Transactions. This means that when ChatGPT collects data from users, it must comply with the provisions of data protection, all of which are regulated by the state through law.

Likewise what has been explained by Prof. Stefan Koos said that apart from seeing the benefits of ChatGPT, the legal consequences are also seen, considering that ChatGPT is a development of Artificial Intelligence (AI) which is not specifically regulated in Indonesia. Conceptually, products from AI are subject to users or creators from AI itself which in its regulations are subject to copyright as stipulated in Law Number 28 of 2014

concerning Copyright. Given that AI in its formal legality is not clearly known regarding its legal protection and regarding the electronic system the regulation is Law Number 19 of 2016 concerning Electronic Information and Transactions (ITE) it can be said that it still cannot accommodate the presence of AI (<https://www.facebook.com/law.unair>, 2023).

In short, ChatGPT a technology that is so innovative and helps with the development of technology. However, as with any other new technology, it creates a question and concern that can be considered intensely. As in Indonesia, aspects of legal regulation that really need to be considered in the use of ChatGPT, namely regarding copyright, data protection, and privacy. This was voiced in order to create legal certainty and legal protection and avoid a legal problem to ensure that ChatGPT is a good, ethical and responsible technology.

ChatGPT in Islamic Studies Overview

Currently, the development of technology is rife that can assist in completing human tasks, even without interacting with fellow human beings, work can be easily completed because in essence humans always need help in doing a job, on the one hand we must pay attention to the urgency of substitute roles, especially if the role it is replaced by robots created by humans themselves because in essence humans are the best creation of Allah, and ChatGPT cannot compete with humans' role because technology only helps humans in completing their tasks.

Islam itself does not limit the ijthad of a human being in creating and developing technology, even earlier scholars found ideas and knowledge because they did tadabbur from verses of the Qur'an which we enjoy to this day. This indicates that the religion of Islam opens up opportunities to develop knowledge as wide as possible, as explained in the Qur'an surah at-Thaha verse 98 which reads:

إِنَّمَا إِلَهُكُمُ اللَّهُ الَّذِي لَا إِلَهَ إِلَّا هُوَ ۚ وَسِعَ كُلَّ شَيْءٍ عِلْمًا

Meaning: "Indeed, your God is only Allah, there is no god but Him. His knowledge encompasses all things."

According to the interpretation of al-Azhar, it is stated that whatever humans do can be known by Allah SWT, the meaning of this verse explains that there is no attempt to hide or cover up the knowledge that Allah SWT has without exception because Allah is alive and not something that is dead because Allah has power in rule the entire earth so that we must always believe in Allah and not associate partners with Him. So that Allah swt tells people to continue.

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So that it is humans who play a role in the process of using technology because humans created it, ChatGPT is only a warehousing in facilitating the completion of a job, not only providing benefits in completing work ChatGPT also has a negative impact if we cannot choose and sort information, news, knowledge, and others, because not a few also use ChatGPT in carrying out actions that are not good and detrimental, for example the circulation of information that is not properly fit for circulation, the occurrence of academic fraud.

AI has experienced extraordinary developments that provide efficiency values and reduce manufacturing costs. However, on the one hand there is anxiety and concern about the ability to account for decisions and responsible AI (RAI) behavior. Even though AI helps solve human, societal, and environmental tasks, it does not rule out the possibility of negative factors arising from the use of AI. There are 16 risk frameworks from AI that exist for industry, government, and non-governmental organizations, one of which is the existing system in AI can create something that is biased and leads to discriminatory matters, collects sensitive data that is influential and risks violating the ITE law. So that AI is seen as having a vulnerable side in the information accountability system (Xia et al., 2023).

To address these negative effects, The US National Institute of Standards and Technology (NIST) conducts a risk review on adverse events that impede and undermine the development of AI. NIST released the AI RMF document version 1.0 in January 2023 and provided official guidelines that AI users should follow (Barrett et al., 2023) whose aim is none other than to avoid and mitigate the negative risks of AI. Because lately AI has been widely used by applications in development and also used by various important sectors.

With the disruption in a number of sectors which is worrying, vigilance arises in their use in everyday life, but on the one hand as Muslims we must compete and keep abreast of technological developments which must remain adhered to the teachings of Islam (SAIHU, 2022). However, as a Muslim, you will also wonder what is the attitude of a Muslim if AI can help and even divert human performance in carrying out daily activities as reported by data from the Gartner Research Firm that in 2020 AI is able to create 2.3 million workers by eliminating 1.8 million workers.

CONCLUSION

Judging from the studies that have been described by the authors, it can be concluded that ChatGPT is an artificial intelligence application that can capture responses from humans to be transmitted to become a source of information sought according to the topic and needs of the seeker, then the ChatGPT application also belongs to learning media because it is able to manipulate abstract nature to be described, besides that it is necessary to have ethics in using ChatGPT that is not origin and arbitrary, prioritizing aspects of morals, academic ethics, and a critical attitude towards the answers produced. The response from the world of education is very permissive towards these technological advances so that they can be utilized in educational activities. Then, there needs to be legal regulations that really need to be considered in using ChatGPT, namely regarding copyright, data protection, and privacy. As well as Islam considers that ChatGPT is only a warehousing in facilitating the completion of a job, not only providing benefits in completing work.

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