ChatGPT in Learning: The Case Study of Motives and Implications for Islamic School Educators in Indonesia

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Abstract

The development of Artificial Intelligence (AI) technology has seen significant progress and has become an attractive platform for improving the quality of education. In recent years, interest in AI-based applications has been very high among academics, including Islamic school educators in Indonesia. This paper aims to highlight the motives and implications of Islamic school educators in using ChatGPT in learning. This article uses qualitative research with a field research design. Primary data sources are derived from interviews, where the main data were obtained through interviews with Islamic school educators at the Madrasah Aliyah (MA) and Madrasah Tsanawiyah (MTs) levels in Indonesia. Secondary data were obtained from scientific articles (journals), books, websites, and other relevant literature related to the research object. Data collection techniques included interviews and documentation. Data analysis techniques were based on Miles et al., namely data condensation, data presentation, and conclusion drawing. The results of this study indicate that ChatGPT offers numerous benefits for educators, including enhancing and facilitating access to information, searching for teaching materials, and accessing learning resources. However, despite its many advantages, the use of ChatGPT in education also presents several challenges, such as dependence on technology, potential ethical violations, and privacy concerns. These negative impacts, if not addressed, could have adverse effects on educators in schools.

Keywords: *Motives and Implications, Islamic School Educators, ChatGPT, Learning, Indonesia*

Abstrak

Perkembangan teknologi Artificial Intelligence (AI) mengalami perkembangan yang signifikan dan telah menjadi platform yang menarik dalam pengembangan kualitas pendidikan. Beberapa tahun terakhir, minat terhadap aplikasi berbasis AI sangat tinggi di kalangan akademisi, termasuk pendidik sekolah Islam di Indonesia. Tulisan ini bertujuan menyoroti motif dan implikasi pendidik sekolah Islam dalam menggunakan ChatGPT dalam pembelajaran. Artikel ini menggunakan jenis penelitian kualitatif yang berjenis penelitian lapangan. Sumber data primer berasal dari data wawancara,

dimana data utama diperoleh melalui wawancara dengan pendidik sekolah Islam setingkat Madrasah Aliyah (MA) dan Madrasah Tsanawiyah (MTs) di Indonesia. Sementara data sekunder berasal dari artikel ilmiah (jurnal), buku-buku, website internet, dan bahan pustaka lainnya yang berkaitan dengan objek penelitian. Teknik pengumpulan data dilakukan dengan wawancara dan dokumentasi. Teknik analisis data Miles et al. yaitu kondensasi data, penyajian data, dan penarikan kesimpulan. Hasil penelitian ini menunjukkan bahwa ChatGPT memiliki banyak manfaat bagi pendidik yaitu meningkatkan dan memudahkan akses informasi, mencari bahan ajar, dan sumber rujukan belajar. Disamping banyaknya manfaat penggunaan ChatGPT dalam pembelajaran juga menimbulkan beberapa tantangan, seperti ketergantungan terhadap teknologi, potensi pelanggaran etika, dan keterbukaan privasi. Tentu dampak negatif tersebut jika tidak diwaspadai akan berdampak pada pendidik di Sekolah.

Kata Kunci: *Motif dan Implikasi, Pendidik Sekolah Islam, ChatGPT, Pembelajaran, Indonesia*

INTRODUCTION

Artificial Intelligence (AI) can change the way of life of humans who experience dependence that prioritises machines and automation, which has adverse implications, one of which is in the field of education (Kirkpatrick et al., 2024). The development of AI technology has mushroomed and become a platform that has good potential in improving the quality of education. AI is an important tool in education because it can help in learning (Sifat, 2023). According to Harfouche et al. in Samuel Fosso Wamba et al., in recent years, interest in AI tools and applications is very high among academics and educators (Fosso Wamba et al., 2024), so it has the potential to revolutionise manufacturing by increasing productivity, efficiency, and automation (Gabsi, 2024).

Westman in Md. Abdus Shabur argues that AI, such as ChatGPT, is able to provide insights to the user according to the commands uttered so as to receive feedback on the AI's answers (Shabur, 2024). ChatGPT's integration in education fundamentally changes the dynamics of the traditional classroom. Through personalised learning algorithms, the ChatGPT system analyses individual learning patterns, preferences, and areas of improvement, tailoring educational content to suit the needs of each learner (Sultana & Faruk, 2024). The use of ChatGPT cannot be avoided by Islamic school educators in Indonesia in their learning. ChatGPT can provide convenience and concrete implications, both in finding appropriate learning methods, learning materials, and others that are appropriate to the context.

Several studies have been conducted on AI in education. First, research that revealed the application of AI in career planning education in the context of Bangladesh. This research goes on to explain the artificial intelligence (AI) methods used in the early career planning programme in Bangladesh. Although similar initiatives are already widespread in developed countries, this is a new development in Bangladesh. (Shabur, 2024). Second, studies investigating the implications of artificial intelligence (AI) on learner retention in higher education. The findings of this study support the hypothesis that adaptive learning, personalised learning, and teaching methods positively contribute to the sustainability of students' education. On the other hand, this study rejects the positive impact of virtual classrooms and administrative tasks on the sustainability of education, highlighting the complex effects of AI technology in education (Sultana & Faruk, 2024).

Third, research that identifies development trends and ethical issues of intelligence-era educational data. Furthermore, this study explains that educational data ethics, as an important obstacle, is a common dilemma faced by researchers in related fields. Using bibliometric analysis and an in-depth literature review, this study analyses research hotspots, evolutionary processes, and development trends in the field of educational data ethics. It confirms that issues related to educational data ethics are important factors influencing informatisation, intelligence, and educational development (Guan et al., 2023). Fourth, in this research, the author attempts to show how an Islamic perspective can contribute to the discourse on the ethics of AI-mediated work. Specifically, the author focuses on three key components of the moral world of work in the Islamic tradition and analyses how these components relate to the modern context of AI-mediated work. First, the author explains the widely accepted position among various Islamic disciplines that work has inherent value for human beings. Second, the author explains the consensus among Muslim scholars that a person should only engage in work or professions that are religiously permissible (*halal*). Moreover, third, the author examines how the moral positions of stakeholders involved in labour relations will influence the set of rights, obligations, and ethics associated with them (Ghaly, 2023), and the fifth study aims to uncover blind spots in educational ethics based on a literature review on artificial intelligence in education (Mouta et al., 2023).

Departing from the previous research above, this research aims to refine

and specify with a focus on AI, namely ChatGPT, on Educators in Islamic Schools in the Indonesian context. Thus, this research seeks to complement existing research that focuses on the motives and implications of Islamic school educators in using ChatGPT in Indonesia.

RESEARCH METHOD

This article uses qualitative research with a field research design. This research focuses on the motives and implications of Islamic school educators using ChatGPT in learning in the Indonesian context. To find out that, the researcher used a type of qualitative research. Qualitative research is research conducted to explore a problem and develop a detailed understanding of a phenomenon, stating research objectives and questions in an open-ended way to capture participants' experiences, collecting data based on words (Creswell & Guetterman, 2019). Primary data sources come from interview data, where the main data is obtained through interviews with Islamic school educators at the Madrasah Aliyah (MA) and Madrasah Tsanawiyah (MTs) levels in Indonesia. At the same time, secondary data comes from scientific articles (journals), books, internet websites, and other library materials related to the research issue. Data collection techniques were conducted by interview and documentation. After the data were collected, they were analysed using the Miles et al. data analysis technique, namely data condensation, data presentation, and conclusion drawing. Data condensation is done to summarise, sort out data, and focus on important data to be taken from the research results. Data that has been reduced can provide a clear picture. Then, the data is presented in the form of narratives and descriptions. Finally, conclusion drawing and verification (Miles et al., 2014; Miles & Huberman, 1984).

RESEARCH FINDINGS AND DISCUSSION
Motives of Islamic School Educators for Using ChatGPT in Learning

The use of ChatGPT by educators in Islamic schools at the level of Madrasah Aliyah (MA) and Madrasah Tsanawiyah (MTs) in learning is increasing along with technological developments and the need for more effective and interesting teaching methods. The main motivation for educators in using ChatGPT in the teaching and learning process is to utilise AI technology to improve the quality of education and overcome various challenges faced in the world of education today (Murtiningsih et al., 2024). One of the main reasons is

ChatGPT's ability to provide quick and accurate answers and explanations related to various subject matters, which helps save educators' time and effort in providing detailed and comprehensive explanations to students (Humas.FKU, 2023; Quintans-Júnior et al., 2023).

Firstly, ChatGPT provides additional support for educators in delivering complex subject matter (Faisal Pardomuan Siregar et al., 2024). For example, in subjects such as maths, physics, or Arabic, the explanations provided by ChatGPT can help students understand difficult concepts in a simpler and easier-to-understand way. With this technology, educators can provide additional explanations that may not be explained in detail in class, thus helping students to overcome their learning difficulties. In addition, the use of ChatGPT also provides an opportunity for educators to implement more interactive and engaging learning methods. In today's digital era, students are more interested in learning that involves technology. With ChatGPT, educators can design various learning activities that involve direct interaction with AI (Powell & Courchesne, 2024), such as question and answer sessions, group discussions, or even technology-based educational games (H.I.A, 2023). This not only makes the learning process more enjoyable but also increases students' engagement in learning, which in turn can improve their learning outcomes.

Another motivation is ChatGPT's ability to provide access to extensive and diverse information. Educators can utilise ChatGPT to find additional references, supporting materials, or even sample questions relevant to the material being taught (Setiawan & Luthfiyani, 2023). This is due to the results of interviews with informants of educators at the MA/ MTs level, among others:

Informant 1, one of the educators at the MTs level in Indonesia and Informant 2, one of the educators at the MTs level in Indonesia, stated that the main motivation for using ChatGPT in learning is so that students are more familiar with the latest technology in an increasingly modern era, so that students can recognize the difference in learning delivered by teachers with answers given by the system/ ChatGPT. The way to integrate ChatGPT with learning is that students are given the freedom to argue by developing and identify material, the sources taken can be found from the ChatGPT application, but must be developed again by students from the source of the explanation taken. With that step, the use of ChatGPT in learning has the main benefit that students can find out for themselves about some questions they do not know,

and it helps the teacher in explaining to students. Nevertheless, it must remain under the supervision of the educator himself. Thus, the use of ChatGPT in learning is to make it easier for educators and students to find sources/references for learning, especially when currently using the independent curriculum (Informan 1, 2024; Informan 2, 2024).

Informant 3, one of the educators at the MA level in Indonesia and Informant 4, one of the educators at the MA level in Indonesia stated that the main motivation for using ChatGPT in learning is to find teaching materials and materials that are more comprehensive and make it easier to create questions for exams, quizzes or daily exercises. The way to integrate ChatGPT with learning is by combining and compiling the material or ideas we have with creative ideas from ChatGPT, then focusing on which ones are suitable and suitable. With that step, the use of ChatGPT in learning has the main benefit of making it easier to find deeper information, both in terms of material, practice, and other creative ideas (Informan 3, 2024; Informan 4, 2024).

Informant 5, one of the educators at the MA level in Indonesia, stated that the main motivation for using ChatGPT in learning is to be an additional reference in learning, because it is often confused to find a learning framework. The way to integrate ChatGPT with learning is to adjust to the learning material being studied. If the gang reference sources used have not been able to answer properly, then ChatGPT can be used as additional information. With this step, the use of ChatGPT in learning has the main benefit of being one of the additional reference sources in learning (Informan 5, 2024).

Table 1. Motivation of Educators to Use ChatGPT in Learning

No.	Name of Educators	School Level	Motivation for Using ChatGPT
1.	Informant 1	MTs	Introducing Technology
2.	Informant 2	MTs	Introducing Technology
3.	Informant 3	MA	Searching for teaching materials
4.	Informant 4	MA	Searching for teaching materials
5.	Informant 5	MA	Searching Additional References

Source**:** Results of Interviews with Informants

The use of ChatGPT in this learning is very helpful in enriching learning materials and providing variety in the delivery of materials, so that students do not feel bored with monotonous teaching methods. In addition, ChatGPT can also be used to check the accuracy of information delivered in class, so that

educators can ensure that they provide correct and up-to-date information to students. On the other hand, the use of ChatGPT also helps educators in managing their time and workload. With the help of AI, educators can save time in preparing lesson materials, creating questions, or giving feedback to students. This allows them to focus on other aspects of learning, such as providing guidance and emotional support to students, which is also very important in the educational process. In addition, educators can also utilise their time more efficiently to develop themselves and improve their competencies through training or further studies. With the help of AI, educators can identify the learning needs of each student and provide materials or assignments that match their ability levels and interests. ChatGPT can assist in analysing student learning data and provide recommendations that are specific to each student, making learning more effective and efficient. This is crucial in ensuring that each student gets the appropriate attention and can reach their full potential. Another important motivation is the effort to integrate technology in learning in preparation for the future (Fricticarani et al., 2023). In the era of the Industrial Revolution 4.0, the ability to use and adapt to technology is very important (Islam & Greenwood, 2024). By using ChatGPT, educators are not only teaching subject matter but also equipping students with technology skills relevant to the needs of the future workforce. These include skills in using AI, critical thinking, and solving complex problems, all of which can be honed through interaction with technology.

However, despite its many benefits, the use of ChatGPT in learning also poses some challenges that educators must overcome. One of them is ensuring that the use of technology does not reduce human interaction in the learning process (Faiz & Kurniawaty, 2023). Educators need to maintain a balance between the use of technology and direct interaction with students, as emotional connection and personalised support from teachers remain important factors in student learning success. In addition, educators must also ensure that technology is used ethically and does not lead to over-reliance on AI. There are also challenges in terms of infrastructure readiness and accessibility. Not all schools or students have adequate access to technology and the internet (Oktavia & Suseno, 2024), which can be an obstacle in the implementation of ChatGPT in learning (Alshahrani & Qureshi, 2024). Therefore, there is a need for support from the government and related parties to provide adequate facilities and

infrastructure, so that all students can enjoy the benefits of this technology. Training and professional development for educators is also crucial to ensure that they have the necessary skills and knowledge to utilise ChatGPT effectively.

Overall, the motivation of Islamic school educators at the MA and MTs level in using ChatGPT in learning is very diverse and driven by the desire to improve the quality of education, enrich students' learning experience, and prepare them for future challenges. By utilising AI technology, educators can provide more effective, interactive, and personalised learning, which can help students reach their full potential. However, educators need to maintain a balance between technology and human interaction and ensure that the use of technology is ethical and inclusive. Thus, the use of ChatGPT can provide maximum benefits to the world of education and help create a smart, skilled, and noble generation.

Implications of Using ChatGPT in Learning

The use of AI in learning has brought significant implications in the world of education (Indrawati, 2023), offering many benefits but also posing some challenges. ChatGPT, as an artificial intelligence-based language model developed by OpenAI, is able to interact with users through text, provide explanations, answer questions, and even assist in the creation of learning content. The main implications of using ChatGPT in learning can be seen from various perspectives, including increased accessibility of information, personalisation of learning, time efficiency, as well as ethical challenges and reliance on technology (Setiawan & Luthfiyani, 2023).

One of the main positive implications of using ChatGPT in learning is the increased accessibility of information (Faisal Pardomuan Siregar et al., 2024). ChatGPT can provide fast and accurate information on a wide range of topics, which is of great benefit to both students and teachers. With the ability to answer questions and provide in-depth explanations, ChatGPT helps students access knowledge that may not be available in traditional learning environments. This is especially important in areas with limited educational resources, where teachers and textbooks may not always be adequate. ChatGPT can serve as an additional tutor, providing learning assistance anytime and anywhere. It is as the results of interviews with the interviewees indicate that the implications of using ChatGPT in learning include:

Informant 1, one of the educators at the MTs level in Indonesia, and Informant 2, one of the educators at the MTs level in Indonesia, stated that the implication of using ChatGPT in learning is that it can increase access to broad information in learning. However, the ease of accessing information should not dull the thoughts and ideas of the students. Therefore, students are allowed to look for references from ChatGPT as long as they are accompanied by the source of the retrieval, to train honesty, and so that the teacher can know which quotes are taken from ChatGPT and which arguments are developed by the students themselves. Seeing that, the use of ChatGPT in learning has many benefits that students can feel, but not a few students are indeed dependent on the presence of ChatGPT to complete their assignments. The technology also does not necessarily justify the argument accurately, so students still have to be under the supervision of the teacher to reinforce the correct argument or refute the wrong argument. Thus, it is hoped that the use of ChatGPT in future learning can be given more attention to its accuracy and truthfulness, lest students follow what technology appears to be but do not pay attention to the negative implications that result afterwards. Education must continue to develop and be able to keep up with the times, because good education is education that maintains the authenticity of the science itself, but the teaching methods develop according to the times (Informan 1, 2024; Informan 2, 2024).

Informant 3, one of the educators at the MA level in Indonesia, and Informant 4, one of the educators at the MA level in Indonesia, stated that the implication of using ChatGPT in learning is that it makes it easier to access information, that must still be under the strict supervision of gadget use. Therefore, the ease of accessing information can be added to several sources for the results displayed by ChatGPT, and the feature to copy to Microsoft Office. It would be great if the results from ChatGPT could be downloaded like journal articles. Thus, it is hoped that the use of ChatGPT in learning can be developed positively and facilitate easy and effective learning. Innovation in learning through the use of digitalisation of developing technology must continue to be developed for the convenience and advancement of the quality of Indonesian education in the future (Informan 3, 2024; Informan 4, 2024).

Informant 5, one of the educators at the MA level in Indonesia, stated that the implication of using ChatGPT in learning is to explain to people that ChatGPT can be one of the references for learning resources, but not the only one,

so we need to look for other references for better learning. Therefore, the purpose of ChatGPT is to make it easier for someone to find additional references in learning. Of course, its role is very useful for educators, students, and others. Thus, it is hoped that the use of ChatGPT in learning can help improve the quality of Indonesian education. ChatGPT is very useful in education, so that it can be used as one of the references in learning, but maybe we need to add other references so that we learn many points of view (Informan 5, 2024).

Table 2. Implications of Using ChatGPT in Learning

No.	Name of Educators	School Level	Implications of Using ChatGPT
1.	Informant 1	MTs	Improving Access to Information
2.	Informant 2	MTs	Improving Access to Information
3.	Informant 3	MA	Improving Access to Information
4.	Informant 4	MA	Improving Access to Information
5.	Informant 5	MA	Learning Resources

Source: Results of Interviews with Informants

Based on the data above, the implication of using ChatGPT in learning is to improve and facilitate access to information in learning and make it a reference source. As each student has different learning needs and speeds, ChatGPT can adjust its response based on individual needs. This allows students to learn in the way and at the pace that is most effective for them. For example, if a student is struggling to understand a particular concept in maths, they can request further explanation or additional examples from ChatGPT until they understand the material. This capability helps to reduce the learning gap and ensure that every student gets the attention they need.

The use of ChatGPT also increases time efficiency for teachers. Teachers can use ChatGPT to assist in lesson preparation, question generation, and providing feedback to students. This allows them to allocate more time for other aspects of learning, such as providing guidance and emotional support to students. With the help of AI, teachers can save time on administrative tasks and focus on direct interaction with students, which is crucial for effective learning. In addition, ChatGPT can also be used to evaluate assignments and provide prompt feedback, helping students understand their mistakes and learn from them.(Setiawan & Luthfiyani, 2023)

However, despite its many benefits, the use of ChatGPT in learning also poses some challenges. One of the main challenges is the potential dependence

on the technology. Over-reliance on ChatGPT may reduce students' critical and analytical thinking skills. They may tend to accept the answers provided by the AI without questioning or analysing further. To address this, it is important for teachers to teach digital literacy skills and encourage students always to verify the information they receive from ChatGPT. Another challenge that arises is ethical and privacy concerns. The use of ChatGPT involves data collection and analysis, which may raise concerns about student privacy. It is important for educational institutions to ensure that student data is managed securely and in accordance with applicable privacy regulations (Rochmawati et al., 2023). In addition, there are also concerns about bias in AI. Although ChatGPT is designed to provide neutral information, biases in the training data may affect the responses given. Therefore, it is important to continuously monitor and improve the AI model to reduce potential bias. Human interaction in the learning process is also an important aspect to consider. Although ChatGPT can provide information and learning assistance, direct interaction with teachers remains an important component in education (Pardos & Bhandari, 2024). Teachers not only impart knowledge, but also mould character and provide emotional support to students. Therefore, the use of ChatGPT should be done wisely and not replace the important role of human interaction in learning. In addition, infrastructure readiness and technology accessibility are also challenges that need to be addressed. Not all students have equal access to technology and the internet. In some areas, limited internet access and hardware can be an obstacle in utilising ChatGPT to its full potential (Oktavia & Suseno, 2024). Therefore, there is a need for efforts from the government and relevant institutions to provide adequate technology facilities and ensure that all students have equal access to educational technology.

Overall, the use of ChatGPT in learning has broad and diverse implications. By utilising AI technology, education can become more inclusive, personalised, and efficient. However, it is important to manage and address the challenges that arise sensibly. Teachers need to be trained to use ChatGPT effectively and ethically, and there must be ongoing efforts to ensure that this technology is used to support, not replace, the important role of human interaction in education. With the right approach, ChatGPT can be an invaluable tool in improving the quality of education and helping students reach their full potential.

CONCLUSION

Based on the description above, it can be understood that the motivation of Islamic school educators at the MA and MTs levels in using ChatGPT in learning is very diverse and driven by the desire to improve the quality of education, enrich students' learning experience, and prepare them for future challenges. By utilising AI technology, educators can provide more effective, interactive, and personalised learning, which can help students reach their full potential. The use of ChatGPT in learning has wide and varied implications. By leveraging AI technology, education can become more inclusive, personalised, and efficient. However, it is important to manage and address the challenges that arise wisely and ensure that these technologies support, not replace, the important role of human interaction in education. With the right approach, ChatGPT can be a valuable tool in improving the quality of education and helping students reach their full potential.

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