


Training on the Use of Artificial Intelligence (AI) Technology to Support the Learning and Teaching Process

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INFORMASI ARTIKEL	ABSTRAK
Kata Kunci: Training Pemanfaatan Teknologi Penggunaan Kecerdasan Buatan (AI) Pengabdian Kepada Masyarakat Belajar dan Pembelajaran	Kegiatan pengabdian masyarakat ini dilaksanakan oleh tim Prodi Pendidikan Agama Islam UIN Sultan Thaha Saifuddin Jambi di IAI Al-Mujaddid Sabak Kota Jambi dengan tujuan untuk mengenalkan dan melatih penggunaan teknologi kecerdasan buatan (AI) dalam proses pembelajaran. Pelatihan ini dihadiri oleh 20 mahasiswa dan 15 dosen yang berasal dari berbagai latar belakang pendidikan. Dalam kegiatan ini, peserta diberikan pemahaman dasar tentang konsep dan manfaat AI, serta aplikasinya dalam pendidikan, terutama dalam konteks Pendidikan Agama Islam. Meskipun sebagian peserta sudah mengenal teknologi AI, mereka masih belum terbiasa menggunakannya secara praktis dalam pembelajaran. Oleh karena itu, pelatihan ini bertujuan untuk meningkatkan kesadaran, pengetahuan, dan keterampilan peserta dalam memanfaatkan AI sebagai alat bantu dalam mengoptimalkan proses pembelajaran. Hasil dari pelatihan ini menunjukkan bahwa peserta sangat antusias dan aktif berpartisipasi, meskipun terdapat tantangan terkait akses terhadap perangkat yang memadai. Kegiatan ini diharapkan dapat memberikan dampak positif dalam meningkatkan kualitas pendidikan, dengan mendorong integrasi teknologi AI dalam kurikulum Pendidikan Agama Islam di masa depan.
Keywords: Training Utilization of Technology Use of Artificial Intelligence (AI) Community Service Teaching and Learning	This community service activity was carried out by the Islamic Religious Education Study Program team of UIN Sultan Thaha Saifuddin Jambi at IAI Al-Mujaddid Sabak, Jambi City with the aim of introducing and training the use of artificial intelligence (AI) technology in the learning process. This training was attended by 20 students and 15 lecturers from various educational backgrounds. In this activity, participants were given a basic understanding of the concept and benefits of AI, as well as its application in education, especially in the context of Islamic Religious Education. Although some participants were already familiar with AI technology, they were still not used to using it practically in learning. Therefore, this training aims to increase participants' awareness, knowledge, and skills in utilizing AI as a tool to optimize the learning process. The results of this training showed that participants were very enthusiastic and actively participated, despite challenges related to access to adequate devices. This activity is expected to have a positive impact on improving the quality of education, by encouraging the integration of AI technology in the Islamic Religious Education curriculum in the future.
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I. INTRODUCTION

With the integration of artificial intelligence (AI) into our daily lives, technological advancements have become an integral element of our society's character (Isotta Mac Fadden, 2024). Artificial Intelligence (AI) is a branch of computer science that focuses on developing systems that can perform tasks that normally require human intelligence. These systems are designed to mimic the ability to think, learn, adapt, and solve problems automatically. AI seeks to create machines that can "think" and "behave" like humans (Ali, 2018). Overall, AI continues to develop and has the potential to bring about major changes in various aspects of human life, both in terms of efficiency, innovation, and ethical challenges that must be faced. Artificial Intelligence (AI) in Education can bring about a major revolution in the way we teach and learn. By utilizing AI technology, education can become more personal, effective, and inclusive. AI enables more personalized learning according to the abilities and learning styles of each

student. AI systems can analyze a student's learning progress and provide materials or exercises tailored to their needs (Haristiani, 2019).

Artificial intelligence (AI) has the potential to improve access to education by making learning easier, automating administrative and management tasks in educational institutions, and enhancing the efficacy of teaching and learning (Danny Manongga, Untung Rahardja, Irwan Sembiring, 2022). Artificial intelligence (AI) is a subfield of computer science that aims to create machines with the ability to think and act like humans in a variety of contexts (Russel, 2016). Learning data analysis, virtual tutoring, adaptive teaching, and automated assessment are some of the ways artificial intelligence (AI) can be applied to the field of education (Stefan Popenici & Sharon Kerr, 2017).

In education, AI can help improve learning and teaching. AI in education has many advantages. First, AI can improve learning efficiency with personalization. Second, AI can analyze student data holistically to better understand student needs and interests, allowing teachers and learning systems to provide materials tailored to students' interests and understanding (Komarudin, 2024). With a careful approach to these challenges and suggestions, AI integration in education can provide maximum benefits while maintaining fairness, privacy, and essential human engagement in the educational process (R, 2023).

To summarize, artificial intelligence (AI) is the subfield of computer science concerned with teaching computers to act intelligently, both in imitation of and, ideally, an improvement over, human beings (Greenhow., 2022). From several previous literature studies it was found that the training material was well-received, and the results demonstrate that participants' comprehension of AI principles and its applications in the classroom improved. When introducing new technology to educators, these results stress the significance of hands-on methods (Lekatompessy., 2024). Another research also found that in the field of language acquisition, artificial intelligence provides a plethora of resources that can improve teaching methods. Learn a new language with the use of AI-generated material, chatbots, speech recognition, virtual assistants, and machine translation for more individualized, dynamic, and adaptable solutions. Individualized instruction, dynamic participation, progress monitoring, and easily available learning environments are among capabilities that these tools offer to language learners (Patty, 2024).

Even though AI is widely used today, there are still many teachers who do not understand the use and benefits of AI in supporting learning and teaching (Elen Instefjord & Elaine Munthe., 2017). At Al Mujaddid Sabak Islamic Institution, Jambi Province. There are still many lecturers who have not taught using AI such as lecturers who teach English courses. Even though currently there are many AIs that can support English learning. For example, the use of dualingo and chatbox. This is the background for the community service team from the Islamic religious education study program, UIN Sultan Thaha Saifuddin Jambi to help provide a more detailed understanding of the use of AI to support learning.

II. PROBLEM

Based on initial observations by the community service team of the Islamic Religious Education Study Program of UIN Sultan Thaha Saifuddin Jambi, several main problems were found related to the lack of utilization of AI in learning. These problems include: lack of understanding and training regarding AI among teachers, limited access to technological infrastructure, and minimal use of AI-based applications in learning. In addition, other challenges include difficulties in integrating AI into the Islamic Religious Education curriculum and concerns about ethical and security issues. Therefore, efforts are needed to improve understanding, training, and curriculum development that integrates AI into the learning process. The research location is as follows:

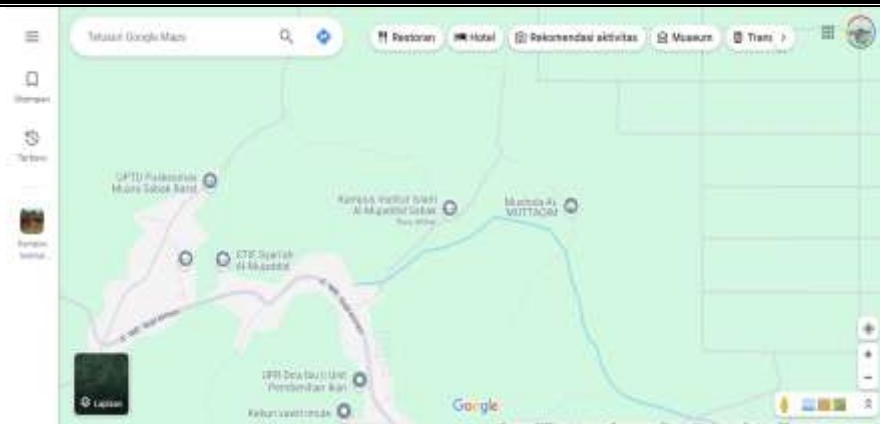


Figure 1. IAI Al Mujaddid Sabak

III. METHOD

There is an iterative process to address and resolve issues that arise throughout the implementation of training activities. This procedure is referred to as preparation as it begins. Administrative preparations, such as finding appropriate locations and acquiring activity instruments, are carried out during this phase. Training and mentorship programs are put in place to assist those who are involved in community service during the following phase, Implementation. After the training was over, we asked the instructors and students who took part in the activities for their thoughts on the experience. Last but not least, there is an evaluation and closing step. This phase entails doing an exhaustive evaluation of the activities' execution and then writing up a final report on them.

Training session, At the community service training stage conducted at the IAI Al-Mujaddid Sabak Hall, Jambi City, this activity was attended by 20 students and 15 lecturers. This training aims to provide a deeper understanding of artificial intelligence (AI) technology and the benefits of its use in the learning process. The description of the activities is as follows:

1. Introduction to AI: The speaker began the session by providing a basic explanation of what AI is, including the definition, concept, and working principles of AI. The speaker also explained the various types of AI that are often used in education, such as machine learning, natural language processing, and recommendation systems. This aims to provide training participants with a clear picture of this technology.
2. Benefits of Using AI in Learning: Next, the speaker outlined the various benefits of using AI in education. Among them are its ability to personalize learning, increase the efficiency of class management, and provide wider and more flexible access to education. The speaker also provided examples of AI applications that can be used in the context of Islamic Religious Education, such as applications that support Arabic language learning, religious understanding, and interactive quiz-based learning.
3. Interaction with Students and Lecturers: This session was very interactive, with many questions and discussions involving students and lecturers. Students seemed enthusiastic, especially because some of them were already familiar with AI, although they were not yet used to using it to its full potential. Many expressed curiosity about how AI could be integrated into the daily learning process, especially in the field of Islamic Religious Education. Lecturers also actively participated in the discussion, showing their interest in learning how this technology can improve the quality of their teaching.
4. Practice Using AI: After the theoretical presentation, participants were given the opportunity to do practical exercises. The presenters showed several AI-based applications that are relevant to learning, such as learning platforms that can personalize teaching materials according to students' abilities or applications that use AI to help teach language and religious skills. Students and lecturers tried out several of these applications directly, although some initially still had difficulty operating them.

This training provides an important basic understanding of AI, and shows the benefits and ways of implementing AI in learning. Although participants, especially students, are already familiar with AI, they

still need further guidance to be able to use this technology effectively. This training is a good first step in educating lecturers and students about the great potential of AI in improving the quality of education.

IV. RESULTS AND DISCUSSION

The stages of Community Service (PKM) carried out by the Islamic Religious Education Study Program team of UIN Sultan Thaha Saifuddin Jambi in the AI training at IAI Al-Mujaddid Sabak, Jambi City can be explained through the following stages:

1. Preparation

Identification of Problems: The initial stage carried out was to conduct observations and identify problems in the field. Based on the results of the team's observations, it was found that there was a lack of use of technology, especially artificial intelligence (AI), in learning among students and lecturers of Islamic Religious Education.

Program Planning: After the problems were identified, the team prepared a training program plan on AI to be held at the IAI Al-Mujaddid Sabak Hall. This program aims to improve understanding and skills in using AI in the learning process.

Preparation of Materials and Presenters: The team also prepared relevant training materials, including a basic introduction to AI, AI applications in education, and the benefits of using AI in learning. Competent presenters in this field were also selected to provide in-depth understanding.

2. Training Implementation

Participant Socialization and Invitation: Before the training began, the community service team invited 20 students and 15 lecturers to participate. Information about the training was disseminated through various communication channels, such as class announcements or campus social media.

AI Introduction Session: The speaker provided an introduction to what AI is, its types, and the benefits of AI in various fields, especially in education. The speaker also emphasized the importance of adapting to this technology to improve the quality of learning, especially in the context of Islamic Religious Education.



Figure 2. presentation by the speaker

Discussion and Interaction: This session also involved active interaction between training participants and the speaker. Students and lecturers were given the opportunity to ask questions and discuss AI applications that can be applied in religious learning. This was also an opportunity for participants to share their experiences and challenges in utilizing AI.

AI Use Practice: After the theory session, participants were given the opportunity to try out AI-based applications that were relevant to their fields of study. Several applications introduced can help with language teaching, managing teaching materials, and evaluating learning.

3. Evaluation and Reflection

Training Evaluation: At the end of the training, an evaluation was carried out on participants' understanding of the material that had been presented. This evaluation can be in the form of quizzes, group

discussions, or direct Q&A sessions to determine the extent of participants' understanding of AI and its applications in education.

Reflection and Feedback: Participants are asked to provide feedback on this training. This feedback is very important to evaluate the success of the training and also to identify areas that need to be improved in the future. Most participants gave positive responses, but also said that they needed more time to practice and understand the use of AI in depth.

4. Follow-up

Mentoring and Guidance: Given that many participants are new to the use of AI in learning, the next step is to provide regular mentoring. The service team can provide follow-up mentoring sessions to ensure that students and lecturers can utilize this technology in their academic activities.

Implementation Monitoring: After the training, the service team can monitor how participants implement the knowledge gained in their learning process. This mentoring aims to help participants overcome obstacles that may arise during the use of AI.

Curriculum Development: One of the long-term follow-ups is to integrate the use of AI into the Islamic Religious Education curriculum, so that it can be applied more widely in the future.

5. Closing

Documentation and Report: In the final stage, this training activity will be documented in the form of a community service report. This report includes the entire series of activities, evaluation results, and recommendations for the development of future training programs.

Overall, this PKM stage aims to improve the knowledge and skills of lecturers and students in utilizing AI technology, so that they can integrate the technology into a more effective learning process, especially in the context of Islamic Religious Education.

In the community service activity carried out by the Islamic Religious Education Study Program team of UIN Sultan Thaha Saifuddin Jambi, which focuses on training the use of artificial intelligence (AI) in learning, an evaluation questionnaire was given to 20 participants who attended. This questionnaire aims to measure the effectiveness of the training and to obtain input and responses from participants regarding the implementation of the activity.

The results of the questionnaire showed a positive response from most participants. Most participants considered that the material presented was very clear and easy to understand, with 60% of participants stating that the material provided was very clear and 35% considered the material quite clear. In addition, almost 90% of participants felt that this training was very useful or useful in improving their understanding of AI, especially in the context of Islamic religious education.

The training also succeeded in increasing participants' confidence in using AI to support learning activities. As many as 40% of participants felt very confident and 45% felt confident enough to start using AI technology in their teaching after taking this training.

In terms of the application of AI in Islamic religious learning, 95% of participants felt that the training was very helpful or helped them understand how AI can be used in the context of Islamic religious education. Many participants also expressed interest in exploring the use of AI in learning further after attending the session.

Overall, the results of the questionnaire showed that the training was very successful and had a positive impact, with the majority of participants stating that they felt more prepared and motivated to integrate AI into their learning process. The questionnaire also provided an overview that the training had achieved its main objective of improving participants' understanding and skills in utilizing AI technology for Islamic religious education.

V. CONCLUSIONS

Community service activities carried out by the Islamic Religious Education Study Program team of UIN Sultan Thaha Saifuddin Jambi at IAI Al-Mujaddid Sabak, Jambi City, which aims to introduce and train the use of artificial intelligence (AI) technology in learning, went smoothly and successfully. This training was attended by 20 students and 15 lecturers who were very enthusiastic in participating in the session.

Overall, this activity provided a deeper understanding of the basic concepts of AI, the benefits of its use in education, and applications that can support the learning process, especially in the field of Islamic

Religious Education. Although some participants were already familiar with AI, they still needed further guidance to make maximum use of this technology in the context of education.

The community service activity conducted by the Islamic Religious Education Study Program team at UIN Sultan Thaha Saifuddin Jambi, focused on training participants in using artificial intelligence (AI) in learning, received positive feedback through an evaluation questionnaire from 20 attendees. The majority of participants found the training material clear and easy to understand, with 60% rating it as very clear and 35% as quite clear. Nearly 90% felt the training enhanced their understanding of AI, particularly in the context of Islamic religious education, and 85% reported feeling confident in using AI for their teaching. Furthermore, 95% found the training helpful in applying AI to Islamic religious learning, and many expressed interest in further exploring AI in education. Overall, the training successfully achieved its goal of improving participants' knowledge and skills in integrating AI into their educational practices.

This training proved to be very useful for increasing participants' awareness and skills in using AI. Many participants actively asked questions and discussed, indicating that they were interested and wanted to continue to develop their understanding of the application of AI in learning. In addition, the main challenges faced were the lack of habits in using AI practically in learning, as well as limited access to adequate devices.

This activity is not only useful for improving technological skills among students and lecturers, but also provides a strong foundation for the development of the use of AI in the future in the Islamic Religious Education curriculum. As a follow-up, further assistance and guidance are needed, as well as the integration of AI in the curriculum to ensure the wider and more effective application of this technology in learning. Thus, this community service activity provides a positive contribution in developing the potential of technology in education, and is expected to continue to improve the quality of teaching in the field of Islamic Religious Education.

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