



Development of Artificial Intelligence in Building Creativity and Innovation Values of Islamic Education

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Abstrak: Artificial intelligence has a negative impact on students who lack control in using their gadgets. This study aims to utilize artificial intelligence that affects the world of education especially Islamic education. This research method uses a SWOT analysis developed through a qualitative descriptive approach; the aim is to explain the strengths, weaknesses, opportunities and challenges of artificial intelligence in building the values of creativity and innovation in Islamic education. Data collection techniques use observation, documentation and interviews. Interviews were conducted with 45 students and 9 teachers in the SMP N 1 Pontang environment. The interview technique uses a purposive sampling technique. The results of this study illustrate that artificial intelligence has been applied at SMPN 1 Pontang. The strength aspect of the use of artificial intelligence can improve teachers in terms of their professionalism, can access broader and more varied materials. Weakness aspect; Uncertainty in understanding the context of culture and spirituality. Opportunity aspect; having a lot of access in the digital world to sail to find materials. Challenge aspect; having limitations in understanding the context of Islamic culture, lack of direct touch from teachers, and increasingly limited moral education. The use of artificial intelligence at SMPN 1 Pontang is still relatively early, but its existence has succeeded in attracting students and teachers. Artificial intelligence tools such as grammar, jasper.ai, photomath, beautiful.ai, khan academy are widely used by students to support the educational process towards education that has high creativity and innovation values.

Abstrak: Kecerdasan buatan memberikan dampak negative pada siswa yang kurang mendapatkan control dalam penggunaan gawainya. Tujuan penelitian ini yaitu menganalisis penggunaan kecerdasan buatan yang mempengaruhi dunia pendidikan; khususnya pendidikan Islam. Metode penelitian ini menggunakan analisis SWOT yang dikembangkan melalui pendekatan kualitatif deskriptif; tujuannya untuk menjelaskan tentang kekuatan, kelemahan, peluang dan tantangan kecerdasan buatan dalam membangun nilai kreatifitas dan inovasi pendidikan

Islam. Teknik pengumpulan data menggunakan observasi, dokumentasi dan wawancara. Wawancara dilakukan kepada 45 siswa dan 9 guru dilingkungan SMP N 1 Pontang. Teknik wawancara menggunakan teknik purpose sampling. Hasil penelitian ini menggambarkan bahwa kecerdasan buatan telah diterapkan di SMPN 1 Pontang. Aspek kekuatan penggunaan kecerdasan buatan dapat meningkatkan guru dalam aspek profesionalitasnya, dapat mengakses materi lebih luas dan variatif. Aspek kelemahan; ketidakmampuan memahami konteks kultural dan spiritualitas. Aspek peluang; memiliki banyak akses dalam dunia digital untuk berselancar mencari materi. Aspek tantangan; memiliki keterbatasan dalam memahami konteks budaya Islami, kurangnya sentuhan langsung peran dari guru, serta pendidikan moral yang semakin terbatas. Pemanfaatan kecerdasan buatan di SMPN 1 Pontang terbilang masih awal, namun keberadaannya berhasil memikat siswa dan guru. Perangkat kecerdasan buatan seperti grammarly, jasper.ai, photomath, beautiful.ai, khan academy banyak digunakan oleh siswa guna menunjang proses pendidikan menuju pendidikan yang memiliki nilai kreatifitas dan inovasi tinggi.

Keywords : Artificial Intelligence, Creativity, Innovation, Islamic Education.

INTRODUCTION

Advances in artificial intelligence technology have brought significant changes in various fields (Górriz, J. M., Ramírez, J., Ortiz, A., Martínez-Murcia, F. J., Segovia, F., Suckling, J., ... & Ferrandez, 2020), including in the education sector (Dwivedi, Y. K., Hughes, L., Ismagilova, E., Aarts, G., Coombs, C., Crick, T., ... & Williams, 2021). Artificial intelligence offers convenience in providing learning materials, managing data, and personalizing learning to suit students' needs (Sianturi, R. A. M., Tada, K. H., & Djami, 2024). in the context of Islamic education it does not only focus on the transfer of knowledge (Azizah, M., & Fauzi, 2022) but also in the formation of morals, spirituality and moral values (Tolchah, M., & Mu'ammam, 2019). Therefore, the role of artificial intelligence has its own challenges.

The birth of artificial intelligence is in line with the rapid progress of information and communication technology; has succeeded in shifting scientific habits on a massive scale (Theo, 2024). Education practitioners and

students have shifted their thinking to relying on artificial intelligence. Data obtained; As many as 65% of students have made extensive use of artificial intelligence to meet their scientific needs (Purnama, F., Silvia, R., & Satria, 2024). 94,4% teachers have utilized artificial intelligence-based learning media (Siregar, 2023;).

Artificial intelligence in the world of education is increasingly developing (Knox, 2020). Its existence is increasingly accepted by many educational circles (Andersdotter, 2023). Artificial intelligence can improve the quality of learning (Altinay, Z., Altinay, F., Sharma, R. C., Dagli, G., Shadiev, R., Yikici, B., & Altinay, 2024). This type of technology is considered to have great potential in supporting creativity and innovation in various fields, including Islamic education. Artificial intelligence not only helps in presenting interactive and personalized learning materials (Castro, G. P. B., Chiappe, A., Rodríguez, D. F. B., & Sepulveda, 2024), but can also be used to support the development of a more adaptive and dynamic curriculum (Davis, C.,

Bush, T., & Wood, 2024) according to the needs of the times.

In Islamic education, artificial intelligence can be a means of presenting religious material that is relevant to technological developments (Alamin, 2023; Allal-Chérif, 2022). As an example; Artificial intelligence can be used to develop applications that provide digital religious literature so that it can be easily accessed by all parties, including students, teachers and society at large.

The application of artificial intelligence in the educational process produces a more interesting and effective teaching and learning process (Fitria, 2021); because it allows for in-depth data management, increasing students' interest and level of understanding. This technology allows a teacher to design more creative and innovative learning strategies (Kim, J., Lee, H., & Cho, 2022); such as through adaptive learning that is tailored to students' individual abilities.

Artificial intelligence can encourage the birth of new innovations in Islamic education (Taufik, 2020); such as data analysis that can help understand students' spiritual and intellectual needs more accurately. Spiritual values have a big influence on children's growth (Anshori, I., & Wasehudin, 2024). This has the potential to increase the effectiveness of the Islamic education curriculum in instilling Islamic values and building the character of the people who are competitive and have noble morals. Innovations such as a smart tutor system, Islamic chatbot and video lecture analysis (Wasehudin, W., Aslihah, A., Sirojudin, R., & Yuttana, 2024) automatically filtering religious content could be an example of using artificial intelligence to enrich Islamic learning methods.

In a broader aspect, advances in artificial intelligence technology have brought many changes in various fields (Lu, 2019). However, on the other hand, the role of artificial intelligence has its own challenges (Herwanis, D., Zakaria, R., Rusmiati, R., &

Wahyuningsih, 2024). One of the main challenges is how artificial intelligence can support the values of creativity and innovation which are important aspects in the development of Islamic education. The aim of Islamic education is to produce people who have a balance of knowledge and faith values (Padila, C., Amanah, T. R., Safni, P., Zulmuqim, Z., & Masyhudi, 2024). Therefore, this process requires a humanist, contextual and empathetic approach.

Artificial intelligence often lacks the ability to understand cultural, social and spiritual contexts (Garg, 2024) which is typical in Islamic education (Burlacu, 2024). For example, the process of interpreting the Qur'an or hadith requires creativity in understanding the meaning contained, as well as innovation in maintaining the needs of the times, without deviating from sharia principles. However, artificial intelligence is only able to offer solutions based on the data entered without considering the moral dimensions and deep wisdom.

Dependence on artificial intelligence technology has the potential to reduce human interaction in the teaching and learning process (Zhai, C., Wibowo, S., & Li, 2024). However, on the other hand, Islamic education emphasizes the importance of personal relationships between teachers and students (Fatoni, M. H., & Subando, 2024) in building character and instilling Islamic values (Riaz, M., Baloch, F., Siddiqui, M., Ejaz, R., & Bashir, 2023). The lack of emotional and empathetic elements in artificial intelligence can hinder student creativity (Lin, H., & Chen, 2024) which often emerges through interactive dialogue and direct guidance.

Therefore, it is important to examine the weaknesses of artificial intelligence in supporting creativity and innovation in Islamic education; karena pendidikan Islam tidak harus dilakukan dengan pola tekstual tetapi harus dengan penerapan inovasi pendidikan yang dapat mendukung nilai-nilai kreatifitas

siswa. (dapus). The application of artificial intelligence in the world of Islamic education is not only able to increase the creativity of teachers and students (Annisa, N., Nurdin, N., & Syahid, 2024), but also encourages the creation of a more inclusive and adaptive educational ecosystem (Abulibdeh, A., Zaidan, E., & Abulibdeh, 2024) to developments over time.

The aim of using artificial intelligence is to support the achievement of Islamic education goals which not only focus on the transfer of knowledge, but also on character formation and increasing creativity. The integration of artificial intelligence in Islamic education needs to be designed wisely so that it is always in line with sharia principles, so that it makes a real contribution in building a generation of Muslims who are superior, innovative and have noble morals.

The problem to be answered in this study is about the understanding that artificial intelligence can give negative values to students because it has an impact of addiction to gadgets; especially in education in rural areas. On the other hand, its use must be monitored carefully, ethically and contextually so as not to damage the essence of Islamic education.

This studi aims to examine and analyze the aspects of artificial intelligence from the perspective of a SWOT analysis of Islamic education at SMP N 1 Pontang. Previous studies have explained descriptively about the development of artificial intelligence which contains many negative values; especially the problem of students who are inseparable from gadgets without looking at the time. (Bimantara, A. A., Rahmansyah, A., Aldika, M. R., & Rahmadhani, 2024). This study will discuss how the existence of artificial intelligence can have a positive impact on the educational process at SMP N 1 Pontang.

On the other hand, many previous studies have discussed artificial intelligence integrated with education in general, but only a few

studies have focused and explored its role in Islamic education, especially at the first level in rural areas. This study will broadly address this gap with a pattern of artificial intelligence application that analyzes with a SWOT analysis approach at SMP N 1 Pontang. In this study, the novelty is shown in the analysis of the implications of cultural and moral values of artificial intelligence in the context of a religious-based educational environment.

METHOD

Overall, the presence of artificial intelligence is entering all sectors; including education will be analyzed in this research. The aim of this research is to confirm that the development of artificial intelligence can influence the pace of a more advanced world of Islamic education. Its increasingly rapid existence can provide color to the educational aspect in increasing the value of educational creativity and innovation. This research was conducted at a State Middle School in the Serang Regency area. This type of research is qualitative research using SWOT analysis. Analisis SWOT memberikan kerangka berpikir strategis dalam melihat kondisi nyata pendidikan Islam, baik dari sisi internal maupun eksternal, sehingga perencanaan dan pengambilan keputusan menjadi lebih efektif dan relevan (Rus, 2023). SWOT analysis is used to find out and explain descriptively what are the strengths, weaknesses, obstacles and opportunities use of artificial intelligence in the school environment; especially in Islamic education.

The data collection technique used is the researcher using observation, interviews and careful documentation of documents that are considered relevant to this study. Interviews were conducted in depth involving students, teachers and education personnel at SMP Negeri 1 Pontang. Interviews were conducted with students using purposive sampling techniques. From the total of 135 students, 25% were taken to be interviewed. A total of

45 students were selected to be interviewed, 9 teachers and education personnel at SMP Negeri 1 Pontang were also selected as sources of informants. If the number of respondents is more than 100, then 10%, 20%, 25% can be taken as a sample interview for a study (Arikunto, 2021). All respondents are trusted respondents in providing data for the completeness of this study. All respondents have agreed to be interviewed and used as argumentation reinforcement in supporting this study.

In order to support more in-depth research, researchers formulated detailed interview instruments:

Table 1. Interview Instrument

Theme	Indicator
Artificial Intelligence in Building Creativity and Innovation Values	Strength of artificial intelligence in Islamic education
	Weaknesses of artificial intelligence in Islamic education
	Opportunities of artificial intelligence in Islamic education
	Threats of artificial intelligence in Islamic education

Table 2. Question Instrument

No	Question
1	How is artificial intelligence used in the SMP N 1 Pontang environment?
2	How can the strength of artificial intelligence provide innovation and creative values for students?
3	What are the weaknesses of using artificial intelligence in schools?
4	What are the opportunities for students and teachers to utilize artificial intelligence in schools?
5	What threats do teachers and students encounter in leveraging the use of artificial intelligence in schools?
6	What artificial intelligence devices are used by teachers and students at SMPN 1 Pontang?

Data analysis carried out by researchers was by reducing interview data and documents, presenting them descriptively until they entered the analysis stage. The data obtained from informants is valid data, which

supports this research. Informants who complete this research data are considered credible and suitable for completing this research. The data obtained from the interview results were then discussed in the discussion section, reinforced by using previous research, which has correlation with this research. By strengthening it using existing theories or research, its differentiating value is studied, and compared with existing research, thus creating research that is different from other research. As an example; about the power of artificial intelligence; the interview results show that the use of artificial intelligence in building students' innovation and creativity values is very good and the learning pattern is structured. On the other hand; in other studies; shows that the application of artificial intelligence in the learning process can attract students' responsive responses; thus producing good learning quality.

RESULTS AND DISCUSSION

The application of artificial intelligence in building innovation and creativity in Islamic education within SMP Negeri 1 Pontang shows significant potential in developing more effective and efficient learning methods, as well as expanding access to education in the Islamic world. In this context, artificial intelligence is not only seen as a technological tool, but also as a factor capable of improving the quality of education, speeding up the learning process, and supporting the development of a curriculum that is more relevant to the needs of the times..

SWOT Analysis of Artificial Intelligence in Building Creativity and Innovation in Islamic Education

The strength aspect in the use of artificial intelligence refers to two points; namely the power of using artificial intelligence for students and teachers at SMP Negeri 1

Pontang in building the value of creativity and innovation in Islamic education.

Table 3. Strength of Artificial Intelligence in Islamic Education

For Teachers	For Students
Development of more creative learning materials	Deep Personal Learning
Personalize learning for each student	Access broad and varied material
Increase classroom management efficiency	Increasing creativity in Islamic education projects
Automation and fast feedback	Interactive and interesting learning
Development of collaborative learning	Development of language skills
Helping the development of Islamic moral learning	Facilitate collaboration and discussion
Improving teacher professionalism so that they develop	Guidance and independent learning

Table 4. Weaknesses of Artificial Intelligence in Islamic Education

No.	Weaknesses
1	Lack of humanistic touch in education
2	Dependence on technology
3	Inability to understand cultural context and spirituality
4	Bias in artificial intelligence algorithms
5	Limitations in teaching transcendent Islam
6	Lack of social interaction

Table 5. Opportunities for Artificial Intelligence in Islamic Education

No.	Opportunities
1	Improved teaching with interactive learning
2	Access to digital learning resources
3	Use of chatbots for learning
4	Development of adaptive learning content
5	Increase the accessibility and reach of learning

Table 6. Threats of Artificial Intelligence in Islamic Education

No.	Threats
1	Dependence on technology
2	Technology access gap
3	Ethics and mental health
4	The teacher's role is reduced
5	Limitations of the Islamic cultural context
6	Limitations teach morals

Table 7. Artificial Intelligence Tools Used by Students SMP N 1 Pontang

AI Tool Name	Utility
Grammarly	Helps in correcting grammar, spelling, punctuation.
QuillBot	Helps in summarizing sentences.
Jasper.ai	Assist in producing writing drafts, looking for content ideas.
Photomath	Understand mathematical formulas concisely.
Beautiful.ai	Helps in creating professional presentations.
Qira'at	To help with procedures for reading the Koran
Khan Academy	Search for Islamic materials in video and text form.

One of the teachers at SMP Negeri 1 Pontang; in his interview explained that artificial intelligence allows teachers to develop more creative and interesting learning materials. With the help of technology such as game-based learning, interactive applications, and multimedia, teachers can convey Islamic education material, such as Islamic history, moral values in a more visual and dynamic way. For example, teachers can use virtual reality technology to bring students into the experience of Islamic history or explore important sites in Islam.

Artificial intelligence which is utilized in the school environment, especially at SMP Negeri 1 Pontang, is a new stimulus which aims to increase educational creativity and innovation; especially Islamic education. In its existence, the use of artificial intelligence is able to help students at SMP Negeri 1 Pontang to understand materials from the Koran, hadith, fiqh at a speed and pattern that suits their abilities. As experienced by class VIII students who utilize artificial intelligence to provide additional material and practice questions that support a more effective and creative learning process.

Apart from being able to help students by providing materials and practice questions; The development of artificial intelligence in SMP Negeri 1 Pontang is used to explore various Islamic learning resources, either in

the form of text, video or interactive media. Students can use artificial intelligence technology to explore Islamic history, previous Islamic stories and Islamic learning patterns during the time of the Prophet (Karimullah, 2023) in an easier and more interesting way. This technology facilitates deeper, interest-based learning for students.

The government with the P5 regulation is certainly considered very relevant to the presence of artificial intelligence. The project to strengthen the profile of Pancasila students, which is part of the learning program in the independent curriculum, is able to run hand in hand with the pace of artificial intelligence. P5 requires students to produce projects and be able to develop potential and creativity in line with the presence of artificial intelligence (Pransista, N., Mardhia, A. R., Wahyurini, E., & Asvio, 2024). Artificial intelligence can encourage students to create technology-based projects related to Islamic values (Hafiz, A., & Mu'ti, 2024). For example, students can develop artificial intelligence-based applications that help people understand Islamic teachings, such as applications for learning daily prayers, prayer time reminders, or other digital platforms. This not only increases students' creativity in utilizing technology, but also introduces them to new ways of applying Islamic teachings in everyday life.

Curriculum development section at SMP Negeri 1 Pontang; in his interview explained that although artificial intelligence has the potential to bring creativity and innovation to Islamic education, there are many weaknesses that need to be taken into account. Artificial intelligence cannot replace the human and spiritual dimensions which are very important in religious education.

One of the main weaknesses of artificial intelligence is; Even though this technology can manage data and provide fast feedback, artificial intelligence cannot replace the role of teachers in providing a humanistic touch in

Islamic education. Islamic religious education always relies on Islamic values (Abdullah, 2022) such as compassion, empathy, and better spiritual guidance provided by teachers. Artificial intelligence cannot fully understand or perceive the emotional and spiritual dimensions of Islamic education, which are very important in building students' character and morals.

Apart from being weak in the emotional and spiritual dimensions; Artificial intelligence is also considered to have a negative side if consumed excessively. Reliance on artificial intelligence technology is completely unjustified and is considered very dangerous (Harris, 2024). One of the Islamic Religious Education teachers at SMP Negeri 1 Pontang; in his interview explained that excessive use of artificial intelligence technology in Islamic education can lead to unhealthy dependence on technology. This can reduce students' ability to think critically or develop social skills directly, such as discussing or talking directly with other people. In the context of Islamic education, this can affect students' ability to explore religious teachings in a deeper way through human interaction, such as discussions with teachers or clerics.

On the other hand, the use of artificial intelligence has serious problems regarding aspects of understanding faith. Artificial intelligence relies on data for the learning process, but if the data used to train the algorithm contains biases such as bias towards certain views in tafsir or hadith, then artificial intelligence can produce unfair recommendations or assessments. In the context of Islamic education; this can influence the way religious teachings are presented and understood by students, which may not reflect the diversity of views within Islam. Therefore, a teacher must be more specific in choosing what materials and subjects are suitable when applied using artificial intelligence.

In another aspect, artificial intelligence cannot replace the role of teachers in providing direct examples to students in implementing Islamic teachings practically in everyday life. Islamic education is not only about religious knowledge, but also about forming character and morals (Guna, B. W. K., & Yuwantiningrum, 2024). Teaching Islamic spiritual values, such as faith, piety and sincerity, requires in-depth training that cannot be completely done by machines or algorithms. The real role played by teachers in the SMP Negeri 1 Pontang environment is by directly involving students in educating, directing and forming morals, morals and Islamic values; to give birth to a generation of students who have an Islamic foundation.

The Islamic foundation possessed by students of SMP Negeri 1 Pontang is the result of the efforts of teachers in the school environment. The efforts made to create a human being based on Islamic teachings include many aspects; social aspects such as interacting with peers or with teachers at SMP Negeri 1 Pontang, working together in groups, and learning together in scientific discussions. Artificial intelligence; Even though it is sophisticated, it cannot replace the importance of direct social interactions that occur in the classroom or in religious activities such as discussions, recitations, or charity activities. This can limit students' ability to develop social skills that are important in the context of religious life.

Deputy principal of SMP Negeri 1 Pontang; in his interview explained that; The use of artificial intelligence in the learning process has many significant opportunities; such as being able to help improve the quality of teaching, enrich learning experiences, and support the development of creative and innovative ideas in the context of Islamic religious education.

Through artificial intelligence-based applications, an educator can create a more interactive and interesting learning experience;

such as artificial intelligence can be used to create text-based chatbots that are able to answer questions related to Islamic religious studies, helping students understand difficult concepts in a more interesting way.

It should be noted that the use of artificial intelligence in the form of a chatbot only produces basic answers without being equipped with appropriate reference sources (Clark, 2023). Therefore, the Islamic religious education teacher at SMP Negeri 1 Pontang always gives advice to students not to depend completely on artificial intelligence. It is much better to complete their knowledge needs by doing a lot of literacy in scientific writings that have clear reference sources. This proves that the role of artificial intelligence has a place in the teaching and learning process, but it does not necessarily involve artificial intelligence.

Another opportunity is that artificial intelligence can help teachers in administrative aspects. Development and distribution of digital learning resources, such as e-books, mobile applications, and online platforms that provide comprehensive Islamic religious material. With the right algorithms, artificial intelligence can suggest relevant learning materials for each student based on their interests and progress, thereby increasing creativity in learning.

Apart from being able to make administration easier for teachers; The role of artificial intelligence can also give rise to innovation in learning; The content created by artificial intelligence is very much conditioned to the needs of SMPN 1 Pontang students. As has been applied in the learning process, namely by using learning videos or podcasts that are relevant to the topic being studied. This gives students more flexibility to study Islamic religious material through various formats to suit student preferences.

From a broader aspect; With the help of artificial intelligence, Islamic religious education can be more easily accessed by people in various parts of the world. Artificial

intelligence-based learning platforms can provide teaching materials in multiple languages, giving more people access to learn about Islam from anywhere. This is very important to overcome limitations of geography or physical facilities.

Principal of SMP Negeri 1 Pontang; in his interview explained that several points that become challenges along with the widespread use of artificial intelligence in the school environment include social, moral, ethical and technological aspects. The social aspect results in low interaction between students and other students or interaction between students and their teachers. Moral and ethical aspects result in low student morality making them vulnerable to potential religious values that are in line with the vision and mission of Islamic religious education in schools.

Technological aspects produce gaps in the use of artificial intelligence; considering the use of artificial intelligence accessed through gadgets; not all students at SMP Negeri 1 Pontang have gadgets.

The use of artificial intelligence in Islamic education needs to be monitored so that it is not used for detrimental purposes or to spread false information or conflict with religious teachings. Careful solutions are needed in monitoring; including wise integration of technology and training for teachers in the development of artificial intelligence. Islamic education must adapt the use of artificial intelligence to Islamic values, ensuring that technology supports, not replaces, the important role of moral and spiritual education (Nikitina, I., & Ishchenko, 2024). Teachers need to be given training in using artificial intelligence as an aid in teaching, not as a substitute for human interaction which is essential in Islamic education. In the context of Islamic education, artificial intelligence can be an invaluable tool for innovation and creativity, as long as it is used wisely, while maintaining a balance between technology and

artificial intelligence as well as aspects of morality.

The use of artificial intelligence in the scope of education makes the education sector more humanistic. The existence of artificial intelligence helps teachers and students in the learning process. By utilizing artificial intelligence, students can interact more in the world of technology to support learning such as searching for digital reference sources, doing digital exercises and can provide broad understanding in the national arena. The impacts generated for the students above can also be felt by teachers. One of the impacts for teachers is that they make a teacher have a lot of access to complete learning materials. On the other hand, the use of artificial intelligence must be in line with existing regulations. Do not rely too much on the advancement of this technology because basically humans have social aspects that must always be fulfilled.

The Use of Artificial Intelligence in SMP Negeri 1 Pontang

The use of artificial intelligence at SMP Negeri 1 Pontang is still in its early stages, but it has great potential to transform the learning process. Artificial intelligence offers shared solutions to increase efficiency, personalization and accessibility of education at SMP Negeri 1 Pontang. One potential area is personalization of learning. can analyze student data, such as learning styles, speed of comprehension, and areas of difficulty, to individually tailor materials and teaching methods.

The supported adaptive learning system can provide different practice questions, relevant content recommendations, and even learning paths that suit each student's needs. This allows students at SMP Negeri 1 Pontang to learn at the speed and in the most effective way for them, increasing understanding and motivation to learn.

Artificial intelligence can also help teachers improve work efficiency

(Vinichenko, M. V., Melnichuk, A. V., & Karácsony, 2020). Time-consuming administrative tasks, such as routine tasks, can be automated with artificial intelligence. This frees up teachers' time to focus on more meaningful interactions with students, providing individualized guidance, and developing more creative learning strategies. Artificial intelligence can also help teachers analyze student learning data as a whole, identify trends and areas where students are experiencing difficulties, so teachers can adapt artificial intelligence to teaching methods and provide appropriate interventions.

Access to information and learning resources can also be improved with artificial intelligence. Supported digital learning platforms can provide access to a variety of interactive learning resources, such as learning videos, simulations, and interactive exercises. Artificial intelligence can also facilitate the search for relevant and accurate information from various sources on the internet, helping students develop research skills and information literacy. In fact, artificial intelligence can help students who have language barriers with automatic translation features (Muñoz-Basols, J., Neville, C., Lafford, B. A., & Godev, 2023).

The implementation of artificial intelligence at SMP Negeri 1 Pontang also faces challenges. The availability of infrastructure and internet access that is evenly distributed throughout Indonesia is the main obstacle. Teachers' readiness to use artificial intelligence technology effectively also needs to be improved through training and mentoring. The costs of implementing and maintaining artificial intelligence technology also need to be considered.

Ethical and privacy issues of student data need to be anticipated and addressed with appropriate policies. However, with careful planning and implementation, artificial intelligence has great potential to improve the quality of education at SMP Negeri 1 Pontang

to create a more personalized, efficient and inclusive learning environment. Some examples of applications that emerge include the use of online learning platforms with simple adaptive features, applications to help teachers create questions, and introducing coding concepts to students through extracurricular programs. Further development and collaboration between government, schools and parties is needed to maximize the potential of artificial intelligence in the world of education, especially at SMP Negeri 1 Pontang.

The use of artificial intelligence in the SMP Negeri 1 Pontang environment has been widely consumed by students; Many artificial intelligence tools are now available and often used by students for various purposes, from helping with assignments to improving understanding of subject matter. Ahmad Taufiq Hariri, class VII students of SMP Negeri 1 Pontang; in his interview explained that the use of artificial intelligence is often used to meet learning needs; starting from looking for literary sources, looking for formulas, looking for basic religious understanding to looking for verses from the Koran along with their translations.

Artificial intelligence tools are very useful, it is important for students to use them wisely. Don't just rely on artificial intelligence to complete tasks without trying to understand the material. The use artificial intelligence tools as an aid to learning and improve the quality of learning, not to replace one's own efforts (Rad, H. S., Alipour, R., & Jafarpour, 2024). Apart from that, also pay attention to ethics and avoid plagiarism. Make sure personal data and important information is protected by paying attention to the privacy policy of each artificial intelligence tool used.

Building Innovation and Creativity in Islamic Education with Artificial Intelligence

In the 21st century, artificial intelligence is developing rapidly and influencing various sectors of life, including education. In the context of Islamic education, the use of artificial intelligence technology can be an important breakthrough to create innovation and increase creativity in the teaching and learning process. By introducing artificial intelligence in the Islamic education system of SMP Negeri 1 Pontang, we can overcome various existing challenges, as well as create new opportunities in delivering material, managing education, and interacting with students.

Principal of SMP Negeri 1 Pontang; in his interview explained that the development of artificial intelligence has developed rapidly. It is massive development has brought about changes in the individual order in various aspects, including educational aspects. The spread of artificial intelligence within SMP Negeri 1 Pontang is fully supported by the school's internal policy makers. Teachers and students are very enthusiastic about using and utilizing artificial intelligence to support learning in schools as a form of increasing the value of creativity and innovation in learning.

In increasing the value of creativity and innovation in Islamic education using artificial intelligence in the SMP Negeri 1 Pontang environment, one of them is utilizing the digital Al-Qur'an application. By utilizing the digital Al-Qur'an, students can analyze their respective readings, know the rules of recitation of the verses they read, and provide clear meaning to the verses they read. Even though by using artificial intelligence students can access the digital Koran and are able to learn using this artificial intelligence; but on the other hand it must also involve a real teacher; not all of them rely on the development of artificial intelligence.

One of the teachers at SMP Negeri 1 Pontang; the part of the curriculum that fully implements policies in the student learning process conveys that the development of

artificial intelligence in the school environment is a real manifestation of educational development in the alpha generation era. The learning process that takes place by utilizing artificial intelligence has changed students' habits to become more productive. Student productivity at SMP Negeri 1 Pontang is characterized by increasing students' understanding of Islamic values, Islamic history and generating positive ideas in Islamic aspects; such as ideas in formulating Islamic studies in schools, ideas in building communication with teachers and others.

In the realization of building Islamic education that is rich with the values of creativity and innovation through artificial intelligence; SMP Negeri 1 Pontang legalized the use of artificial intelligence to support student learning at school. By implementing these rules, students appear more enthusiastic about learning and are able to collaborate with their colleagues, supported by the wise use of technology according to their needs.

The pattern of building Islamic education that is rich with high creativity and innovation at SMP Negeri 1 Pontang requires a holistic approach, integrating religious values, utilizing technological developments, applying modern teaching methodologies and creating a collaborative learning environment.

CONCLUSION

The value of Islamic education is reflected in progress along with the application of artificial intelligence in Islamic education activities in schools. However, there are many aspects that need to be considered along with the use of artificial intelligence in the school environment. From the strength aspect, for example, it can develop more creative learning materials; from aspects of weakness such as dependence on technology, lack of a humanistic touch in education and low social interaction; from the aspect of opportunities such as improving teaching with interactive

learning, wide range of learning resources; from aspects of challenges such as gaps in access to technology, the reduced role of teachers, limitations in moral teaching. In utilizing artificial intelligence in education today, most students choose to use various tools available in artificial intelligence such as grammar, Khan Academy, Photomath; This illustrates that developing artificial intelligence has a major influence on the national education sector in advancing education towards education that has creative and innovative value.

In future research, it is recommended to raise discussion topics that correlate with this research; such as research that focuses on the development of artificial intelligence which influences students' spiritual intelligence.

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